Project No. 169511557 **02 October 2012**

PREPARED FOR:

LIBERTY MINES INC.

Hart Project
Preliminary Economic Assessment

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DATE AND SIGNATURE PAGE

This report titled "Hart Project Preliminary Economic Assessment for Liberty Mines Inc. and dated 02 October 2012 was reviewed and signed by the following authors.

Dated at Sudbury, Ontario
02 October 2012

Mark Hatton, P. Eng.
Stantec Consulting Ltd.
Signed and Sealed

Dated at Toronto, Ontario
02 October 2012

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02 October 2012

Keyvan Salehi, P. Eng.
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CAUTIONARY STATEMENT

This Preliminary Economic Assessment is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to hem that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

CERTIFICATES OF QUALIFIED PERSONS

Certificate of Qualified Person
Mark Hatton, P. Eng.
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I, Mark Hatton, have been employed as a Senior Engineer with Stantec Consulting Ltd.

This certificate applies to the technical report entitled "National Instrument 43-101 Technical Report" (NI 43-101) and dated 02 October 2012.

I am a member of the Professional Engineers of Ontario. I graduated from Queen's University in 1994 with a degree in Mining Engineering.

I have practiced my profession for 18 years.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

I visited the Hart Mine property on 28 July 2011.

I am responsible for review and assessment of the following sections of the report: Items 16.0, 17.0, 18.0, and 21.0.

I am independent of Liberty Mines Inc. as independence is described by Section 1.4 of NI 43-101.

I have read the above sections of NI 43-101 compliant technical report, and they have been prepared in compliance with that instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the NI 43-101 report contains all scientific and technical information that is required to be disclosed to make the NI 43-101 report not misleading.

Signed and Sealed

Dated at Sudbury, Ontario
02 October 2012

Mark Hatton, P. Eng.
Stantec Consulting Ltd.

Certificate of Qualified Person

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I, Keyvan Salehi, have been employed as VP of Technical Services and Corporate Development.

This certificate applies to the technical report entitled "National Instrument 43-101 Technical Report" (NI 43-101) and dated 02 October 2012.

I am a member of the Professional Engineers of Ontario. I graduated from University of Toronto in 2003 with a degree in Mining Engineering.

My experience in mining extends to operations, project development, technical services, and business development.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

I have reviewed and been involved with the Hart Project over the last 12 months while employed with Liberty Mines and have visited the site and surrounding infrastructure.

I am responsible for review and assessment of Items 16, 17, 18, 19, 20, 21, 22, 25.2.2, 25.2.3, 26.1.2, and 26.1.3.

I have read the above sections of NI 43-101 compliant technical report, and they have been prepared in compliance with that instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the NI 43-101 report contains all scientific and technical information that is required to be disclosed to make the NI 43-101 report not misleading.

Signed and Sealed

Dated at Toronto, Ontario
02 October 2012

Keyvan Salehi, P. Eng, MBA
Liberty Mines Inc.

Certificate of Qualified Person

Glen Cole, P. Geo.

To accompany the report entitled: Hart Project Preliminary Economic Assessment

Dated 02 October 2012

I, Glen Cole, residing at 15 Langmaid Court, Whitby, Ontario do hereby certify that:

I am a Principal Resource Geologist with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 2100, 25 Adelaide Street East, Toronto, Ontario, Canada;

I am a graduate of the University of Cape Town in South Africa with a B.Sc. (Hons) in Geology in 1983; I obtained an M.Sc. (Geology) from the University of Johannesburg in South Africa in 1995 and an M.Eng. in Mineral Economics from the University of the Witwatersrand in South Africa in 1999. I have practiced my profession continuously since 1986. I am an expert in geostatistical techniques and geological and resource modelling. Since 2006, I have estimated and audited mineral resources for a variety of early and advanced base and precious metals projects in Africa, Canada, Chile and Mexico. Between 1989 and 2005 I have worked for Goldfields Ltd at several underground and open pit mining operations in Africa and held positions of Mineral Resources Manager, Chief Mine Geologist and Chief Evaluation Geologist, with the responsibility for estimation of mineral resources and mineral reserves for development projects and operating mines. Between 1986 and 1989 I worked as a staff geologist on various Anglo American mines;

I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the province of Ontario (APGO#1416) and am also registered as a Professional Natural Scientist with the South African Council for Scientific Professions (Reg#400070/02);

I have personally inspected the Hart Project and surrounding areas on 14 January 2008;

I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

I, as a qualified person, I am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;

I am a co- author of this technical report and accept professional responsibility for the following sections of this technical report: Items 5.0, 6.0, 7.0, 8.0, 11.0, 12.0, 13.0, 14.0, and 23.0;

This assignment was completed using CIM “Best Practices” and Canadian Securities Administrators National Instrument 43-101 Guidelines.

I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Hart Project or securities of Liberty Mines Inc.

That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;

I consent to the filing of the technical report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the technical report.

Signed and Sealed

Toronto, Canada
October 02, 2012

Glen Cole, P.Geo.
Principal Resource Geologist

Certificate of Qualified Person

Heather Miree, P. Geo.
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I, Heather Miree, have been employed as Vice President, Exploration with Liberty Mines Inc. since May 2012.

This certificate applies to the Ni 43-101 technical report entitled “Hart Project, Preliminary Economic Assessment “dated 02 October 2012.

I am a member of the Association of Professional Geoscientists of Ontario, License number 1046 and a member of the Association of Professional Engineers and Geoscientists of Alberta, License number 71291.

I graduated from the University of Waterloo in 1986 with a Bachelor of Science in Applied Earth Science (Honours) and have practiced my profession continuously since that time.

As a result of my education, experience qualifications, and membership in a professional affiliation, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

I have visited the Hart Mine property on many occasions since the start of my employment with Liberty Mines Inc. in May 2012 and have reviewed extensively past geological work which has taken place with respect to this property and in addition I am currently responsible for the geological work performed on the property as Vice President Exploration for the Company.

I am responsible for review, assessment, and updates of Items 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 20.0, and 23.0 of the report:

I am not independent of Liberty Mines Inc. as independence is described by Section 1.4 of NI 43-101 as I am an employee of the Company.

I have read the above sections of NI 43-101 compliant technical report, and they have been prepared in compliance with that instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the NI 43-101 report contains all scientific and technical information that is required to be disclosed to make the NI 43-101 report not misleading.

Signed and Sealed

Heather Miree, P. Geo.
Liberty Mines Inc.

Dated at Toronto, Ontario
02 October 2012

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1.0 SUMMARY

1.1 Introduction

The assets of Liberty Mines Inc. (Liberty) include the Hart Project (Hart). Considerable recent drilling activity has occurred over this property which has delineated significant Kambalda-style nickel sulphide mineralization.

Liberty engaged SRK Consulting (Canada) Inc. (SRK) in the spring of 2009 to prepare a Preliminary Economic Assessment (Scoping Study) and compile a technical report for Hart. That technical report was published as "Preliminary Economic Assessment for the Hart Project, Ontario, Canada, 26 February 2010 in a filing completed on Sedar on 04 March 2010 (the SRK Technical Report). In April 2012, Liberty engaged Stantec Consulting Ltd. (Stantec) to update certain technical portions of the SRK Technical Report concerning mining operations and, along with Liberty's senior technical staff, to prepare updated economic analysis for the project that are more closely aligned with the current operational status of Liberty as well as current economic conditions. The report being filed at this time includes several sections which are unchanged from the previous SRK Technical Report as well as sections that have been recently prepared by Stantec and Liberty's senior personnel, forming this updated technical report, dated 02 October 2012. This updated technical report was prepared following the guidelines of the Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1, and in conformity with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines".

The sections of this report (and included subsections) which are unchanged from the previously filed SKR Technical Report include the following:

- Item 5: Accessibility, Climate, Local Resources, Infrastructure, and Physiography
- Item 6: History
- Item 7: Geological Setting and Mineralization
- Item 8: Deposit Types
- Item 11: Sample Preparation, Analysis, and Security
- Item 12: Data Verification
- Item 13: Mineral Processing, Mineralogy and Mineral Testing
- Item 14: Mineral Resource Estimates
- Item 23: Adjacent Properties

There have been no changes with might materially impact the above listed sections; hence it was considered that the inclusion of these sections verbatim from the SRK Technical Report is appropriate.

Sections of this report which have been recently updated and are published in this report include:

- Item 1: Summary
- Item 2: Introduction*
- Item 3: Reliance on Other Experts*
- Item 4: Property Description and Location
- Item 9: Exploration*
- Item 10: Drilling
- Item 15: Mineral Reserve Estimates
- Item 16: Mining Methods
- Item 17: Recovery Methods
- Item 18: Project Infrastructure
- Item 19: Market Studies and Contracts
- Item 20: Environmental Studies, Permitting, and Social or Community Impact
- Item 21: Capital and Operating Costs
- Item 22: Economic Analysis
- Item 24: Other Relevant Data and Information
- Item 25: Interpretation and Conclusions
- Item 26: Recommendations
- Item 27: References*

A portion of the content of the sections noted above (Introduction, Reliance on Other Experts, Property Description and Location, Exploration, Drilling, Environmental Studies, Permitting, and Social or Community Impact, and References) remains unchanged from the March 2010 filed SRK Technical Report where that content remained relevant and not materially changed from the March 2010 publication while portions of those sections where updates have taken place, were updated with the up-to-date information.

The sections “Exploration and “Drilling”, include information concerning the number of drill holes completed within the Hart mineralized zone and constitute the sole changes to those sections. The number and mineral content of the holes completed since the time of the SRK Technical Report are not considered materially relevant to the mineral resource and mineral reserve estimates prepared and presented in the SRK Technical Report as the majority of the recently completed holes are not located within or in proximity to the Hart mineral resources; those estimates remain unchanged since

publication in March 2010. The portions of this report from Item 15 through 19 and Item 21 onwards in this report are entirely changed and updated from the March 2010 SRK Technical Report.

This current Independent Technical Report describes the status of all aspects of project and presents the Life of Mine plan.

1.2 Property Description and Agreements

The Hart Project consists of 21 contiguous unpatented mining claims currently held in one mining lease by Liberty Mines Inc. The claims cover approximately 928 hectares. The claims which comprise the Hart property were brought to lease in Lease number 108569 which was granted on 01 January 2011 for a term of 21 years. Annual lease rental payments are $2,783.78 per year. The property was acquired from Canadian Arrow Mines Ltd. (Canadian Arrow) by way of an option agreement. Liberty satisfied the option agreement and earned 100 percent ownership on 18 January 2008.

SRK visited the Hart Project on 14 January 2008 and again in September 2009. Stantec Consulting Ltd. (Stantec) visited the property on 28 July 2011.

1.3 Location, Access, and Physiography

The Hart Project is located approximately 26 kilometres southeast of the city of Timmins, Ontario. The property is accessed from the city of Timmins by a series of gravel roads. The access roads are used in all seasons, and are winter safe.

The Hart deposit is located in an area that is relatively flat with poor drainage. The topography is generally flat with a few local rock outcrops and ranges in elevation from 290 to 330 metres above sea level. This area of northeast Ontario is characterized by climate typical of northern boreal forest areas, with extended periods of sub-zero temperatures in the winter months from November through to March. Moderate temperatures prevail during the summer months with temperatures in the range of 10 to 30 degrees Celsius accompanied by moderate precipitation.

The Hart Project surface area is large enough to accommodate all future mining related infrastructures. It is located in close proximity to other Liberty assets including the active Redstone and McWatters Mines.

1.4 History

Minor trenching was completed by L.N. Hart on surface iron formation exposures in the period 1960 to 1964. Between 1964 and 1969, Norlex Mines Ltd. completed 1,854

metres of drilling in thirteen holes on the property. Eight of the Norlex drill holes intersected the nickel mineralization. Paramaque Mines Ltd. drilled 1,950 metres of core in six diamond drill holes in 1968 and 1969 that intersected the nickel mineralization. McWatters Gold Mines Limited acquired the property from Paramaque in 1969 and completed 2,440 metres of drilling in eight holes.

Starfire Minerals Inc. (Starfire) drilled a total of six very shallow holes in the immediate area of the surface nickel showing in 2002. Canadian Arrow acquired the property in 2004 and drilled five drill holes, totaling 306 metres. Liberty optioned the property in 2006 and subsequently drilled 104 core boreholes (31,277 metres) in 2007 and 2008.

On 18 January 2008 Liberty met all obligations to Canadian Arrow Mines as set out under the options agreement, so that now Liberty owns 100 percent of the Hart property with no subsidiary involved.

1.5 Geology and Mineralization

The Hart deposit is hosted by ultramafic rocks that form part of, or intrude, the Tisdale assemblage that flank the Shaw Dome and form part of the Abitibi Greenstone Belt. To date, five nickel-copper platinum group metals deposits have been discovered in the Shaw Dome (including the Hart deposit) and numerous showings have been identified. These five deposits occur in komatiitic rocks found within the Deloro assemblage near the base of the Tisdale assemblage.

Five main rock types have been identified from Hart diamond drill core and surface mapping; footwall intermediate to felsic volcanics, banded iron formation, ultramafic flows, felsic dikes, and mafic dikes. The Hart deposit sulphide zone can be subdivided in three distinct zones: an upper zone of nickel-enriched banded iron formation, a basal lower zone consisting of massive to semi-massive sulphides and an interstitial zone of disseminated sulphides.

The komatiitic rocks, which host the nickel mineralization are serpentinized and locally altered to talc, chlorite, and carbonate. The main sulphide zone that comprises the majority of the mineral resource consists of komatiite hosted massive to semi-massive sulphides lying conformably on dacitic pyroclastic flows. Typical sulphide concentrations range from 60 to 80 percent pyrrhotite and 10 to 30 percent pentlandite. Other sulphide minerals include minor pyrite and chalcopyrite.

1.6 Mineral Resource Estimation

The mineral resources presented herein are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" Guidelines.

The database used for resource estimation includes drilling data collected during three exploration programs conducted during the period 2005 to 2008. The total database comprises 115 boreholes and five surface trenches.

Three 3D wireframes (iron formation, massive sulphide and disseminated sulphide) were constructed from the drilling information and a 0.3 percent nickel threshold to constrain grade estimation. The massive and disseminated sulphide wireframes were subdivided into two subdomains (lower and upper).

Assay intervals in each wireframe were composited to 1.0 metre and extracted for statistical analyses and grade interpolation. After review of probability plots, nickel and copper composites were capped at 4.86 and 0.33 percent, respectively.

Isatis software was used to model traditional experimental variograms from the capped composites for the various mineralization domains for nickel and copper in all three principle directions. A single spherical structure variogram was fitted for each direction coinciding with geological features of the nickel mineralization. A Datamine sub-block routine was used to fill the mineralization wireframes with un-rotated blocks. Parent block size was set at 2.5 x 2.5 x 2.5 metres in the easting, northing, and elevation directions respectively. An average specific gravity was assigned to each domain based on 231 pycnometry measurements obtained from the various sulphide mineralization types.

Block grades were estimated using inverse distance squared estimator because it was found to appropriately reflect general grade trends. Block grade estimation was completed in a single pass using the search ellipse ranges defined by variography.

Mineral resources were classified on the basis of variography and the confidence in geological interpretation. An Indicated Mineral Resource classification was assigned to blocks within the primary variography range from sample points. An Inferred Mineral Resource classification was assigned to blocks within twice the primary variography range from informing data.

Mineral resources for the Hart deposit have been estimated according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines" (December

2005) by Glen Cole, P. Geo. an independent Qualified Person as defined by NI 43-101. The mineral resources for the Hart nickel deposit are reported at a single cut-off of 0.46 percent nickel, that is considered by Liberty management to be achievable by a future underground mine, considering the nature of the nickel mineralization, its geometry, and the projected underground extraction scenario. This cut-off is primarily based on current mining experience at the comparable McWatters and Redstone Mines. The Mineral Resource Statement for the Hart Project is presented in Table 1.1.

Table 1.1: Mineral Resource Statement, Hart Nickel Project Timmins, Ontario SRK Consulting 01 January 2010

Sulphide Zone	Classification	Tonnes (000's)	Nickel (%)	Copper (%)	Contained Nickel (lbs 000's)
IF Zone					
	Indicated	120	0.70	0.06	1,850
	Inferred	12	0.86	0.07	225
Massive Zone					
Lower	Indicated	999	1.56	0.11	34,352
	Inferred	228	1.40	0.09	7,044
Upper	Indicated	353	1.36	0.09	10,588
	Inferred	59	1.12	0.08	1,466
Disseminated Zone					
Lower	Indicated	60	0.63	0.04	838
	Inferred	22	0.52	0.02	255
Upper	Indicated	14	0.50	0.03	152
	Inferred				
Total	**Indicated**	**1,546**	**1.40**	**0.10**	**47,779**
	Inferred	**322**	**1.27**	**0.08**	**8,990**

Note: Reported at 0.46% nickel cut-off. All figures have been rounded to reflect the accuracy of the estimate. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

1.7 Exploration and Drilling

The relevant exploration drilling information considered for resource estimation was collected during three exploration programs conducted during the period 2005 to 2008. The total database comprises 115 boreholes and five surface trenches.

The drilling database includes 11 core boreholes drilled by Starfire Minerals Inc. (Starfire) and Canadian Arrow Mines (Canadian Arrow) as well as 104 NQ caliber core boreholes drilled by Bradly Bros. using industry best practices.

1.8 Sampling Method, Approach, and Analyses

Liberty used industry best practices to sample, handle, and assay core samples collected on the Hart Project. Core samples were collected from half core split mechanically lengthwise. Sampling intervals honour geological boundaries.

Liberty submitted core samples to the accredited ALS-Chemex Laboratory for preparation in Timmins, Ontario, and assaying in the North Vancouver, British Columbia Laboratory. Each sample was assayed for nickel and copper by aqua regia digestion and atomic absorption spectrometry and occasionally for gold, platinum and palladium by conventional ICP-AES.

Liberty implemented adequate analytical quality control measures to monitor the reliability of assay results delivered by the primary laboratory. This includes the use of quality control samples and blanks, and check assaying at umpire laboratories.

1.9 Data Verification

SRK visited the Hart Project on 18 January 2008 during active drilling. SRK inspected active and recent drilling sites, and reviewed with Liberty personnel field and drilling procedures. Drill core from five recent boreholes was examined to ascertain the geological setting of the nickel mineralization and to verify logging information.

SRK reviewed the analytical quality control data produced by Liberty and summarized the data on a bias chart to ascertain the reliability of assay data delivered by the primary laboratory.

SRK collected seven core samples replicating the original sampling intervals for independent verification. The verification samples were specifically collected to attest to the existence of nickel and copper mineralization on the Hart property.

In the opinion of SRK, exploration data collected by Liberty generally meets “industry best practices” and is sufficiently reliable for the purpose of resource estimation.

1.10 Mineral Processing and Metallurgical Testing

Liberty operates the Redstone Mill located at the Redstone Mine approximately six kilometres by road from the Hart Project. This 2,000 tonne per day capacity mill has been specifically built to process nickel sulphide ore with a high MgO content.

The mill uses conventional flotation and a laser induced plasma spectrometer online analyzer to measure the magnesium and nickel contents of the ground ore entering the

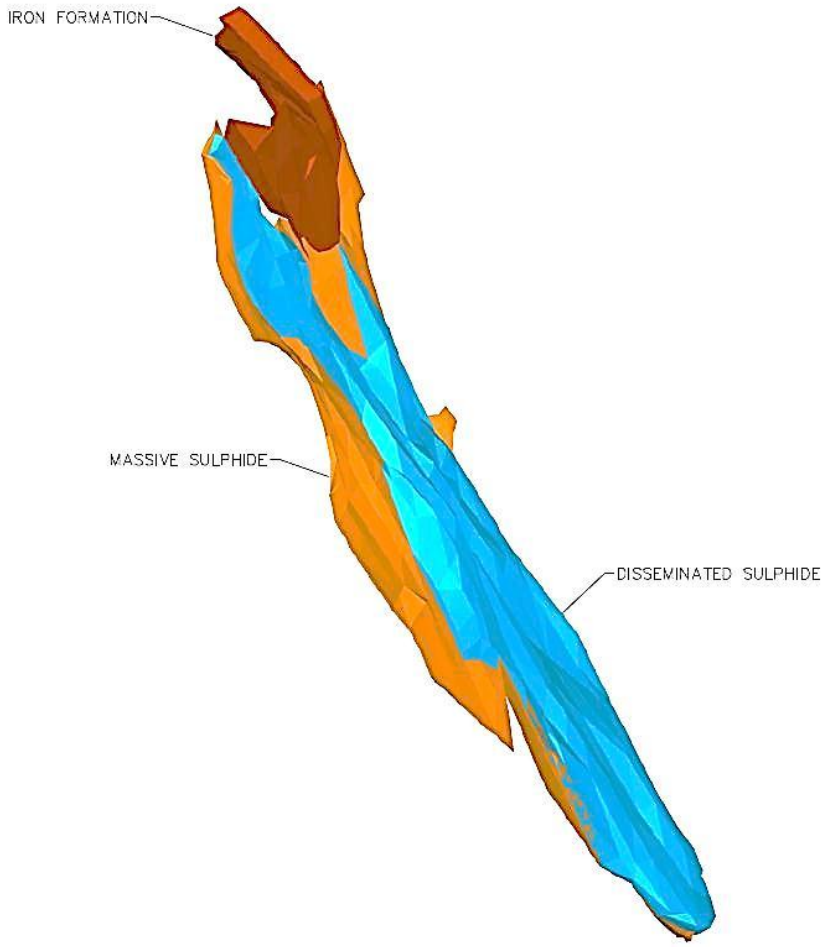
flotation circuit. During the third and fourth quarter of 2009, the mill achieved an average nickel recovery of 95 percent with a monthly throughput between 4,000 and 10,000 tonnes. Mill feed head grade varied between 0.8 and 2.2 percent nickel.

1.11 Mine Plan

Stantec's assessment of the mineral resources with respect to the Mine Plan is as follows:

- The resource for the Hart Project consists of three separate zones; iron formation, disseminated sulphide, and massive sulphide (refer to Figure 1.1). The deposits are hosted by ultramafic rocks. A cut-off grade of 0.46% Ni was used to identify the potential mineable resource. At this cut-off grade the disseminated zone becomes inconsistent, with small pockets of mineralization scattered throughout the resource. The disseminated resource is not included in the mine plan.
- The resource is fairly steeply dipping (between 60 to 75 degrees), with the mineable resource located predominately within the massive sulphides. Challenges with respect to mining the orebody include:
  - Narrow areas of the resource, potentially resulting in excess dilution. Areas of the resource with width less than two metres have not been included in the production plan;
  - Although the grades in the massive sulphide resource are fairly consistent, there are areas of the resource that have relatively low nickel grade. For this study, areas below the cut-off grade of 0.46% Ni were excluded from the mine plan.

Figure 1.1: In-situ Resource Wireframes



The Hart Project is presented as a stand-alone option for the extraction of ore from the underground. The opportunity to share common site facilities, services, and personnel with the other Liberty properties has been limited in this study, and there may be opportunities to further utilize existing facilities and personnel.

The Hart resource is located in an area that is relatively flat and ranges in elevation from 290 to 330 metres above sea level.

The Hart resource extends from surface to below the 1720 Elevation (580 Level). A 40 metre crown pillar is required (refer to the Geotechnical Assessment of Crown Pillar Stability included in Appendix D), with the first production mining horizon located at the 45 Level (2255 Elevation). Currently there are no plans to recover the crown pillar.

Access to the underground mine will be via ramp from surface (ramp portal located near Liberty is private haulage road at 2300 Elevation).

The Hart Project will include:

- All surface facilities directly related to the underground mine construction and operation including:
  - Ramp portal and portal area;
  - Temporary contractor facilities for early surface construction;
  - Permanent office/dry facilities for the contractor and operations personnel;
  - Surface maintenance facilities for underground equipment and a small fleet of surface equipment;
  - Materials storage and handling areas on surface (including warehouse, ballast pad, fuel storage, etc.);
  - An ore stockpile and two waste stockpiles (one for clean waste and one for Potential Acid Generating (PAG) waste), to be located near the access ramp portal. A contract package will be tendered for surface transport of ore and waste rock from these stockpiles to the final destinations on surface;
  - Mine ventilation facilities including a fresh air raise collar complete with heating plants and fans, and a temporary portal raise complete with a fan and heater (which will eventually be relocated to the fresh air raise for permanent use);
  - Mine water discharge pipeline (designed and costed by others) to the Redstone Mill approximately five kilometres away; and
  - A paste backfill plant facility (design and plant cost estimate by others – refer to Appendix F).
- All services to/from the underground mine including:
  - Electrical power distribution from an existing 27.6 kV power line;
  - Process water distribution. Process water will be pumped from the Redstone Mine to a water storage tank to provide surge capacity and a reservoir for the fire protection system. Potable water will be provided as bottled water;
  - Compressed air (from a compressor plant to be located near the ramp portal); and
  - Sewage and grey water disposal systems for the surface facilities consisting of septic systems located near the main surface facilities (office/dry, maintenance shop, paste backfill plant). Underground washroom facilities will consist of portable units (Rezplast or similar).
- All underground mine capital and operating requirements.
- Underground mine direct and indirect operating personnel up to and including the underground mine superintendent. This includes the provision of maintenance, safety/training, and technical staff.

Underground production will be primarily via blasthole mining. Completed production stopes will be backfilled using paste fill (designed by others) directed to the completed stopes by means of boreholes and pipelines.

To enable early production and to provide the capacity to achieve the target production rate of 750 tonnes per day, the resource will be divided into four Mining Blocks (80, 270, 410, and 550 Blocks). The dimensions, level spacing, and the production rates will vary for each block.

Ore will be transported to surface using diesel haulage trucks. In order to minimize the truck haulage and associated ventilation demands, waste rock may be disposed into available open secondary stopes where practicable. However, for the purposes of this study mine operating activities and costs are based on the assumption that all waste tonnes will be hauled to surface. The underground mine is expected to produce 750 ore tonnes per day and an average of 100 tonnes per day of waste rock during the mine operating period. In the event that mining is continued below the 580 Level, production rates/haulage fleet/ventilation will need to be reviewed due to capacity limitations of the current truck haulage system.

Personnel

Experienced surface construction personnel and tradesmen are considered available locally. Surface construction at the mine site will be completed using local contractors and local hires to the maximum extent practical.

Early underground mine development and construction will be completed using a qualified contractor. A company workforce will be hired to complete the off ramp lateral development and production.

Management and supervisory, lead tradesmen, senior administrative, and technical personnel will be hired by Liberty to supervise the operations of the project. With the Redstone Mill and the McWatters Mine in near proximity to the Hart Project, there is an opportunity to share staff between the operations.

Table 1.2: Liberty Mines Annual Total Personnel – On Payroll

Employer	Year									
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Liberty	10	47	72	89	104	107	99	87	81	72
Contractor	2	37	66	57	51	9	5	5	5	5
Total	**12**	**83**	**138**	**146**	**155**	**116**	**103**	**92**	**85**	**76**

Mine Development Strategy

On approval to proceed with the project, earthwork and facilities construction in the area of the portal will begin immediately. This work will be completed using contractors and will include:

- Site clearing and stripping;
- Removal of the overburden above the portal area. The total construction area will be covered with a layer of clean gravel to form a suitable surface for road traffic;
- Excavation of the surface cut in rock to establish the portal face;
- Construction of the electrical substation and distribution switchgear building at the portal area;
- Construction of the fuel storage and fuel dispensing facility at the portal area;
- Construction of the permanent office/dry buildings;
- Construction of the surface maintenance facility and washbay; and
- Construction of the compressor plant.

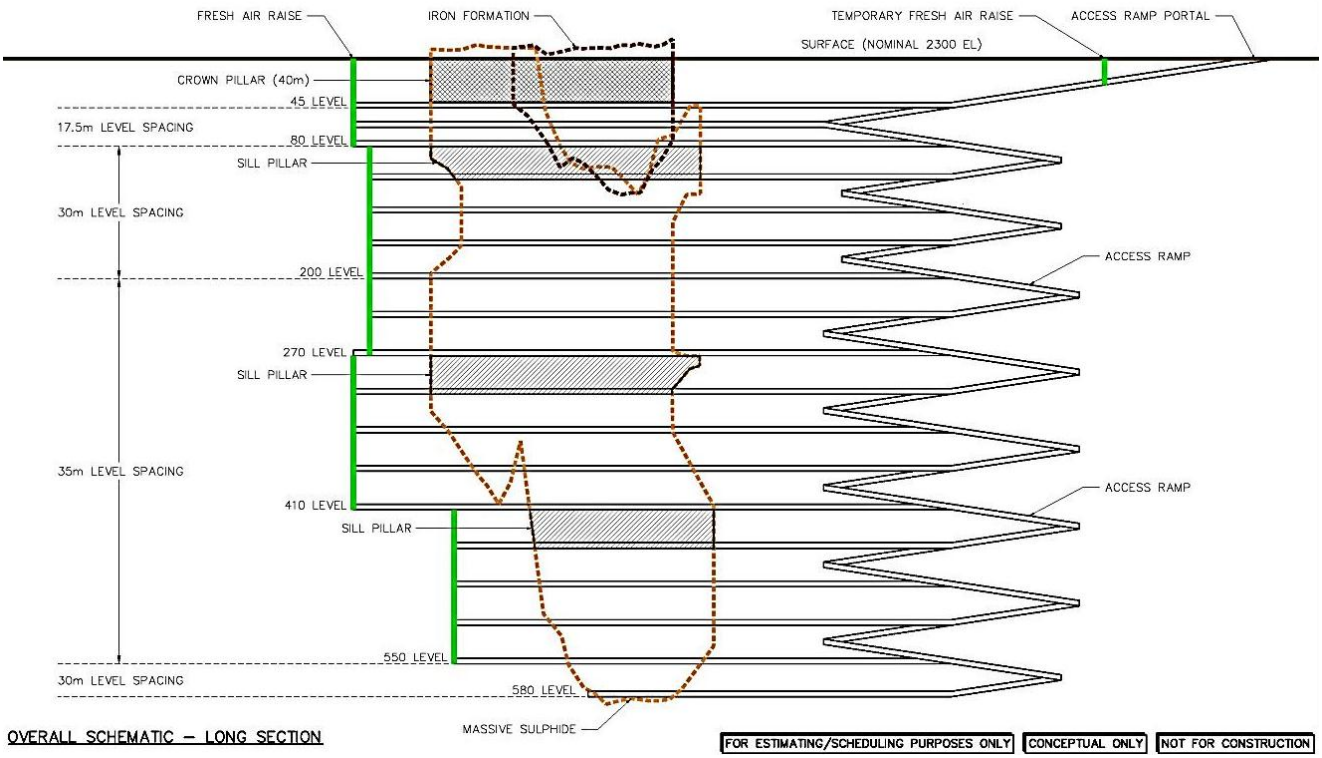
The main access ramps and some off ramp development will be completed using a mine development contractor. Liberty will provide equipment for the contractor to utilize, but the contractor will be responsible for maintaining the equipment (costs included) to develop the mine and personnel to complete the project in a safe and productive manner. The contractor will also be required to provide temporary office and dry facilities, as well as a portable generator and compressor for early development and construction. As the permanent electrical substation, and power distribution, permanent office/dry, maintenance shop facilities, and compressor plant construction are completed, the temporary facilities/equipment will be demobilized.

Initial site work by the contractor will include:

- Mobilization and set-up of the contractor's temporary site facilities;
- Portal excavation;
- Start of ramp development; and
- Installation of the portal structure (Armco multi-plate or similar culvert) as well as backfilling around and over the structure to the original ground surface elevation (installation of portal cover may be delayed until the completion of the ramp).

A single development crew (contractor) will complete the portal construction and development of the ramp to the 80 Level, including 20 metre access stubs on the 45 and 65 Levels.

Figure 1.2: Liberty Mines Overall Long Section



On the 80 Level, the contractor will excavate to the fresh air raise (FAR), and then continue in the ramp down to the 170 Level. Once the 80 Level FAR access drift is complete and the contractor returns to the ramp, a raisebore development contractor and equipment will be brought to site, and the fresh air ventilation raise developed from the 80 Level to surface. The fresh air raise will be equipped with an escape-way to provide a second means of egress from the mine. On completion of the raise and installation of fans on surface, a second crew (company) will complete the remaining development on the 80 Level including the undercut development in ore, and then move to the 65 Level and repeat the process. This will establish the first mining block (80 Block).

The ramp crew will continue down to the 170 Level, cutting 20 metre stubs at each level intersection, and excavate to the fresh air raise location. The raise crew will move down to develop the fresh air raise from 170 Level to the 80 Level and install the escapeway.

Once this leg of the fresh air raise is complete, a third crew will mobilize on the 170 Level, completing the remaining waste development and undercut development in ore. For the purpose of this study, it is assumed that the third crew will be a contractor due to the limited duration (approximately one year), and to assist with establishing the mining

blocks. The owner will be responsible for providing the gear for this limited scope of work (assumed available from existing Liberty operations).

The ramp crew will continue to the 580 Level, excavating 20 metre stubs at each level intersection, and excavating to the fresh air raise on the 270 Level, 410 Level, and 550 Level.

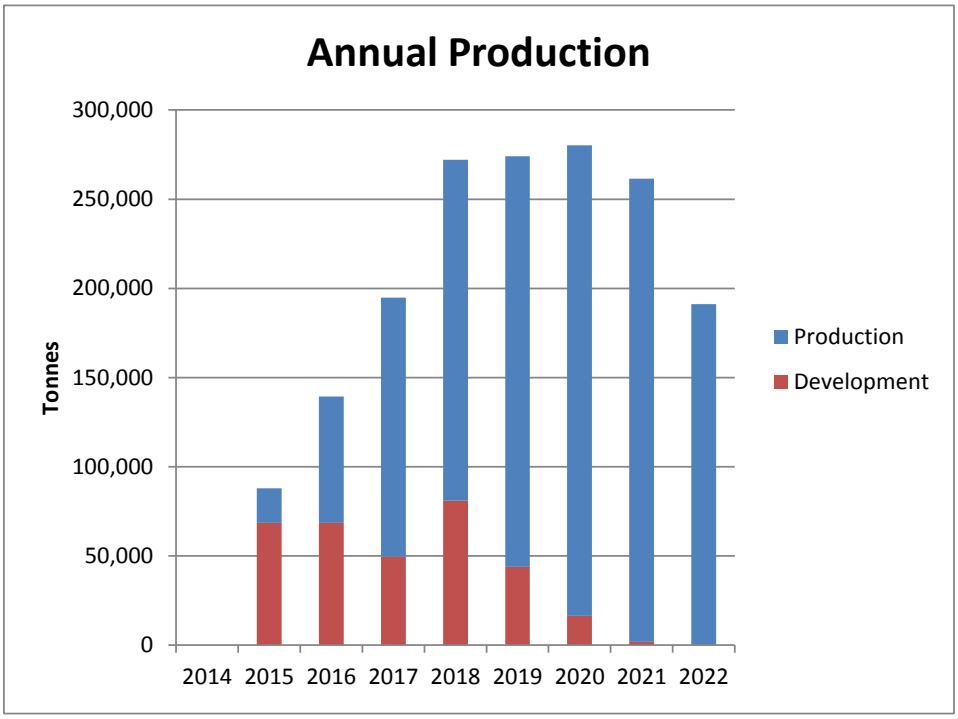
As development is completed on the 65 Level and 80 Level, the first set of production equipment will be delivered to site and the first production stopes established.

After a three year ramp-up period, steady state production will have been achieved and the major construction projects will be completed. This will mark the end of the project period. The remaining capital for level development, raising, and establishment of mine infrastructure and facilities will be completed as sustaining capital.

At the start of the mine operating period, the development contractor will have completed the ramp excavation and any related development. Production drilling and all ongoing raise development will continue to be completed by contractor.

The mine is targeted to commence production in 2013, reaching steady state production of 750 tonnes per day in the last quarter of 2017. Figure 1.3 illustrates the production plan.

Figure 1.3: Mine Production Schedule – Life of Mine



Mine Operating Strategy

The mine will be operated using Liberty's staff, technical support, operating, and maintenance personnel. A contractor will be retained for blasthole drilling in the production stopes.

Production will be via blasthole mining with paste fill.

The mine will operate on two 10.5-hour shifts per day, seven days per week, 355 days per year.

With the proximity to Timmins and South Porcupine all personnel will be responsible for lodging and transportation to and from site.

Capital Cost

The total annual capital cost estimate for the project is shown in Table 1.3.

Table 1.3: Underground Annual Capital Costs

Area	Area Total	Project Phase					Operating Period		
		2013	2014	2015	2016	2017	2018	2019	2020
Capital Total	**$100,750,793**	**$5,913,292**	**$28,029,637**	**$20,657,051**	**$19,918,552**	**$18,993,182**	**$5,508,175**	**$1,500,428**	**$230,476**
Surface Construction	$8,625,420	$4,058,982	$4,208,234	$358,204	$0	$0	$0	$0	$0
Underground Construction	$8,943,041		$2,352,957	$2,329,752	$1,500,611	$1,740,438	$979,807	$39,476	$0
Ramp	$20,701,800		$4,123,548	$5,497,196	$6,033,088	$5,047,968	$0	$0	$0
Lateral Waste Development	$8,750,752		$355,354	$1,513,066	$1,352,888	$3,549,648	$1,198,368	$550,952	$230,476
Raises	$4,092,421		$725,938	$615,933	$1,406,680	$1,343,870	$0	$0	$0
Boreholes	$1,035,000		$10,500	$271,500	$249,000	$231,000	$273,000	$0	$0
Indirects	$29,588,860	$1,854,310	$8,843,107	$6,552,901	$6,485,285	$5,853,257	$0	$0	$0
Equipment Purchase	$19,013,500		$7,410,000	$3,518,500	$2,891,000	$1,227,000	$3,057,000	$910,000	$0

The project period will be considered complete when steady state production can be achieved for three consecutive months and the majority of the capital construction is complete. For the Hart Project this occurs at the end of 2017. The total cost of the project is approximately $93.5 million, and is summarized in Table 1.4. During this period there is approximately 4,300 tonnes of nickel produced which is approximately $70 million in revenue (at $7.50 per pound nickel price).

Table 1.4: Underground Capital and Operating During the Project Period

Area	Area Total	Project Period				
		2013	2014	2015	2016	2017
Project Period Total	**$125,048,478**	**$5,913,292**	**$28,280,025**	**$28,613,226**	**$30,726,828**	**$31,515,107**
Capital Total	**$93,511,714**	**$5,913,292**	**$28,029,637**	**$20,657,051**	**$19,918,552**	**$18,993,182**
Surface Construction	$8,625,420	$4,058,982	$4,208,234	$358,204	$0	$0
Underground Construction	$7,923,758		$2,352,957	$2,329,752	$1,500,611	$1,740,438
Ramp	$20,701,800		$4,123,548	$5,497,196	$6,033,088	$5,047,968
Lateral Waste Development	$6,770,956		$355,354	$1,513,066	$1,352,888	$3,549,648
Raises	$4,092,421		$725,938	$615,933	$1,406,680	$1,343,870
Boreholes	$762,000		$10,500	$271,500	$249,000	$231,000
Indirects	$29,588,860	$1,854,310	$8,843,107	$6,552,901	$6,485,285	$5,853,257
Equipment Purchase	$15,046,500		$7,410,000	$3,518,500	$2,891,000	$1,227,000
Operating Total	**$31,536,764**	**$0**	**$250,388**	**$7,956,175**	**$10,808,275**	**$12,521,926**
Development in Waste	$998,732	$0	$69,916	$452,859	$188,375	$287,581
Development in Ore	$6,393,088	$0	$0	$2,639,709	$2,328,377	$1,425,002
Production	$7,447,468	$0	$0	$674,048	$2,305,106	$4,468,313
Indirects	$16,697,476	$0	$180,472	$4,189,559	$5,986,416	$6,341,029

Operating Cost

The annual operating costs for the project are shown in Table 1.5.

Table 1.5: Underground Annual Operating Costs

Year	Operating Costs			Operating Cost per Tonne		
	Direct	Indirect	Total	Direct	Indirect	Total
Project Period						
2013	$0	$0	$0	$0.00	$0.00	$0.00
2014	$69,916	$180,472	$250,388	$0.00	$0.00	$0.00
2015	$3,766,616	$4,189,559	$7,956,175	$42.89	$47.71	$90.60
2016	$4,821,859	$5,986,416	$10,808,275	$34.61	$42.97	$77.57
2017	$6,180,897	$6,341,029	$12,521,926	$31.72	$32.54	$64.26
Operating Period						
2018	$7,572,187	$9,911,476	$17,483,663	$27.83	$36.43	$64.27
2019	$7,746,075	$9,304,979	$17,051,054	$28.26	$33.95	$62.21
2020	$7,752,522	$9,097,466	$16,849,988	$27.67	$32.47	$60.14
2021	$7,173,004	$8,526,370	$15,699,374	$27.42	$32.59	$60.02
2022	$5,201,532	$5,780,457	$10,981,988	$27.22	$30.25	$57.47
Total	**$50,284,607**	**$59,318,224**	**$109,602,831**	**$29.56**	**$34.87**	**$64.43**

1.12 Environmental

Liberty has conducted the necessary environmental studies and obtained the necessary permits to be able to conduct mining operations for Hart. These permits include a Closure Plan, Certificate of Approval - Air, and Amended Permit to Take Water (along with McWatters site). An application to allow use of the McWatters containment pond for mine water discharge from the Hart site continues to be under review with the Ontario Ministry of the Environment (MOE) since early 2012. When approved, this permit will be a Certificate of Approval – Industrial Sewage and the final permit required to operate the mine development project.

The Hart Project will benefit from the environmental programs and plans already developed by Liberty at its other mining operations that can be amended to address the Hart Project. These plans include “Spill Prevention and Emergency Response”.

Mine dewatering effects need to be studied by Liberty does not expect to adversely impact any other water users, surface water features, or sensitive areas.

Hart’s main rock types, assumed to be similar to those at the nearby McWatters Mine, are expected to show that, on aggregate, they are unlikely to be acid generating.

1.13 Project Risks and Opportunities

1.13.1 Risks

The most significant project risk is the economic viability of the Hart Project if the nickel price or exchange rate experience significant and prolonged negative variances from the values used in the economic assessment.

The underground geotechnical conditions at Hart have been assumed to be similar to the neighbouring mines operated by Liberty. There is a risk that future geotechnical assessment based on underground development exposures will lead to less favourable estimates of stope dimensioning and external dilution, resulting in a negative impact on project economics.

1.13.2 Opportunities

SKR believes that there is a strong potential to increase the inferred resources at Hart particularly by drilling the depth extensions of the sulphide zones. It is most likely that additional infill drilling will upgrade the current inferred mineral resources to an indicated classification.

The project is most sensitive to the nickel price and any increase in the nickel price will have a positive effect on the project cash flow.

1.14 Economic Analyses

The economic assessment of the Hart Project was evaluated using a discounted cash flow model. The capital and operating costs of the model were based on the Stantec cost estimates of this report highlighted in Item 21 of this report. Nickel price of $10 per pound and 8% discount rate are two key assumptions of the model constructed. The results of the evaluation, using the above mentioned assumptions resulted in a positive NPV calculation of $35.8 million for the Hart Project. A sensitivity analyses on the price of nickel shows that the breakeven price for the Hart project is $8.43 per pound of nickel produced.

1.15 Conclusion and Recommendations

The Hart nickel property shows potentially mineable tonnage which can be extracted using proven mining methods, productivities, and costs.

Of the total estimated tonnage, 83% is Indicated Resources and 17% Inferred Resources.

SRK recommends:

- Increasing the drill density at depth between 450 to 600 metres below surface;
- Undertake structural investigations to improve the quality of the 3D geological model;
- Continue to model the intrusive dikes and attempt to identify portions of the disseminated sulphide and ironstone hosted zones exhibiting higher nickel grades; and
- Update the resource model once the geological model has been updated.

The results of the study herein enclosed demonstrate that the Hart project is economically and technically viable. The proximity of the ore body to surface and surrounding infrastructure at Liberty's Redstone Mine and Mill, in addition to the findings of this report indicate that the Hart Project is a great mining asset with lots of potential. The economic viability of the project, as is the case with all mining assets, is heavily contingent of the price of the commodity; nickel in this case. The average life of mine price assumption in this study is $10 per pound of nickel which produces a positive NPV calculation of $35.8 million discounted at the rate of 8%.

The recommendations for the next phase of this project are as follows:

- Conduct a detailed backfill study for the Hart Project. The estimated cost for this work is $75K.
- The mine plan outlined in this study includes the use of inferred resources. It is recommended that the mine plan and production schedule is re-constructed excluding the inferred resources.

2.0 INTRODUCTION

2.1 Background

The assets of Liberty Mines Inc. (Liberty) include a 100 percent interest in the Hart Nickel Resource (Hart), located approximately 27 kilometres southeast of Timmins, Ontario, Canada in Langmuir Township, approximately six kilometres east of the Redstone Mine.

Hart is a multi-million pound intermediate nickel grade discovery at the advanced exploration stage that has excellent potential.

Considerable recent drilling activity has occurred over this property between 2005 and 2008, which has delineated significant Kambalda-style nickel-copper massive sulphides preserved locally in paleo-topographic depressions.

Liberty approached SRK Consulting (Canada) Inc. (SRK) in January 2008 to commission an initial mineral resource estimate for the Hart nickel project. During the ensuing months SRK and Liberty worked together to compile a validated database and model the geology of the deposit to be used for resource estimation. A mineral resource statement was issued to Liberty on 22 June 2008. It formed the basis for a press release issued by Liberty on 23 July 2008 to disclose publically the initial mineral resource estimate for the Hart nickel project.

In early 2009 Liberty approached SRK to develop a Preliminary Economic Assessment (PEA) of that resource. That work was published in a Technical Report in accordance with NI 43-101 filed on Sedar on 04 March 2010, entitled: “Preliminary Economic Assessment for the Hart Project, Ontario, Canada, 26 February 2010” (the SRK Technical Report).

In April 2012, Liberty approached Stantec to develop an updated Preliminary Economic Assessment (PEA) of the Hart resource, reflecting updated operational and economic parameters. As much of the information in the March 2010 SRK Technical Report remains unchanged principally in the portions concerning project description, geology, exploration, and mineral resource estimates; those portions are re-iterated unchanged in this report. Sections which contain minor updates, such as in completed drilling and environmental permitting have updates made in this report. Sections which are wholly changed from those in the SRK Technical Report concerning mining operations and economic analysis are presented as prepared by Stantec with contributions of Liberty staff in this report, dated 02 October 2012 (the Stantec PEA).

Economic analyses includes forecast mine production rates that contain capital costs to develop and sustain the mining operation as well as operating costs, and projected cash flows.

This PEA was prepared following the guidelines of the Canadian Securities Administrators national Instrument 43-101 and Form 43-101F1, and in conformity with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines".

2.2 Scope of Work

For the Hart Project, the technical report will be a Preliminary Economic Assessment (PEA) that will include the mine development and production plan, and an estimate of mineable tonnage that will include Inferred mineral Resources. No changes are needed to the resource block model – the existing model will be used.

The report will benefit from SRK's previous involvement in previous resource work completed to date. Besides site meeting and discussions with Liberty personnel SRK will prepare a capital cost estimate as a basis for the Hart site infrastructure and mine services.

If a cost estimate is needed for special containment of iron formation waste rock, SRK will solicit help on a factored estimate from the SRK our Geo-environmental group in Vancouver.

2.3 Basis of the Work

This report is based on information provided to SRK and Stantec by Liberty as well as information collected during the site visit.

SRK conducted certain verifications of exploration data from the Liberty drilling program from drill core, files, and records maintained by Liberty. SRK has no reason to doubt the reliability of the information provided by Liberty. This technical report is based on the following sources of information:

- Discussions with Liberty personnel;
- Datasets provided by Liberty;
- Field data verifications derived from the site visits; and
- Additional information obtained from the public domain sources.

2.4 Qualification of SRK

SRK is an independent, international consulting company providing focused advice and problem solving. SRK provides specialist services to mining and exploration companies for the entire life cycle of a mining project, from exploration through to mine closure. Among SRK's 1,500 clients are most of the world's major and medium-sized metal and industrial mineral mining houses, exploration companies, banks, petroleum exploration companies, agribusiness companies, construction firms, and government departments.

Formed in Johannesburg, South Africa in 1974 as Steffen, Robertson and Kirsten, SRK now employs more than 750 professionals internationally in 30 permanent offices on six continents. A broad range of internationally recognized associate consultants complement the core staff.

SRK employs leading specialists in each field of science and engineering related to the minerals sector. Its seamless integration of services and global base have both made the company the world's leading practice in due diligence, feasibility studies, and confidential internal reviews.

The SRK group's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This permits the SRK group to provide its clients with conflict-free and objective recommendations on crucial judgment issues.

2.5 Qualifications of Stantec

Stantec provides professional consulting services in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics for infrastructure and facilities projects. They support public and private sector clients in a diverse range of markets in the infrastructure and facilities sector at every stage, from initial concept and financial feasibility to project completion and beyond.

At Stantec the vision is to become and remain a top 10 global design firm. To do this they need to expand both the depth and breadth of professional services to achieve the ability to serve global clients. Stantec believes continued growth will increase shareholder value and give their employees the opportunity to work with the best clients on the best projects and to provide the best services.

The Stantec Mining group has offices in North Bay and Sudbury, Ontario, as well as an office in Tempe Arizona. Each office employs specialists in the field of mining with a vast array of experience related to underground hard rock mining. Stantec's mining

background originated within the contracting world, thus providing clients with an excellent estimating and scheduling background with practical operations experience to benchmark against.

Stantec is a public traded company and thus has an obligation to their shareholders, clients, employees, and suppliers, and to the communities where they do business to govern the Company in their best interests. Stantec recognizes this obligation and takes it very seriously.

2.6 Project Team

The portions of this independent technical report including project description, geology, exploration, drilling, data verification, mineral resource estimates were compiled by Mr. Glen Cole, P. Geo. (APGO) Principal Resource Geologist with SRK Consulting (Canada) Inc. with assistance from Mr. William Randall, P. Geo., of Liberty Mines Inc. on geology modelling and resource estimations. Mr. Cole was a principal author of the SRK Technical Report

Mr. Cole, P. Geo. is a Principal Resource Geologist with SRK. He has been practicing his profession continuously since 1986 and has extensive experience in estimating mineral resources for base and precious metals projects in North America as well as in Southern and West Africa. Mr. Cole visited the project on two occasions; initially on 17 August 2006 and then again during the period 4-6 June 2007. By virtue of his education, relevant work experience and affiliation to a recognized professional association Mr. Cole is an independent qualified person as this term is defined by National Instrument 43-101.

Subsequent to the completion and publication of the SRK Technical Report on 04 March 2010, updates to the sections Summary, Introduction, Project Description, Exploration, Drilling, Environmental Studies, Permitting and Social or Community Impact, Interpretations, Conclusions, and Recommendations were made with the contributions from Ms. Heather Miree, P. Geo., V.P. Exploration for Liberty Mines Inc. By virtue of education, relevant work experience, and affiliation to a recognized professional association, Ms. Miree is a Qualified Person as this term is defined by National Instrument 43-101. Ms. Miree is not independent of Liberty as she is an employee of Liberty.

Portions of the report related to Mineral Reserves, an updated mine plan, infrastructure, and capital and operating costs were prepared by Mr. Mark Hatton, P. Eng. (PEO), Senior Engineer with Stantec Consulting Ltd. with the contributions, particularly in the section Economic Analysis from Mr. Keyvan Salehi, P. Eng., V.P. Technical Services and Business Development for Liberty Mines Inc. Updates to the sections Summary,

Introduction, Conclusions, and Recommendations were also made with contributions from Mr. Hatton and Mr. Salehi.

Mr. Hatton, P. Eng. is a Senior Engineer with Stantec Consulting Ltd. He has been practicing his profession continuously since 1994 and has extensive experience in mine design, planning, and scheduling. By virtue of his education, relevant work experience, and affiliation to a recognized professional association Mr. Hatton is an Independent Qualified Person as this term is defined by National Instrument 43-101.

Mr. Salehi, P. Eng., is V.P Technical Services and Business Development for Liberty Mines Inc. By virtue of education, relevant work experience, and affiliation to a recognized professional association, Mr. Salehi is a Qualified Person as this term is defined by National Instrument 43-101. Mr. Salehi is not independent of Liberty as she is an employee of the Liberty.

Mrs. William Randall, P. Geo. is a former employee of Liberty. Mr. Randall was previously the Vice-president of Exploration for Liberty Mines Inc. and assisted SRK during the early stage of SRK's commission.

The SRK Technical Report dated 26 February 2010 and published on 04 March 2010 was report was reviewed by Mr. Ken Reipas, P. Eng. SRK Principal Mining Engineer.

2.7 Site Visit

In compliance with NI 43-101 guidelines, each of the qualified persons responsible for this report visited the Hart site.

Mr. Glen Cole visited the Hart site on 14 January 2008 accompanied by Mr. Randall.

The visits main purpose was to conduct geological investigations, validations, and inspections of available diamond drill core from the Liberty drilling programs. Validation samples of split core were taken by SRK. SRK also visited active drilling sites. The nickel mineralization does not outcrop.

Mr. Hatton visited the Hart site in July 2011 accompanied by Liberty representatives. The purpose of the visit was to confirm site location, topography, and accessibility.

Mr. Ken Reipas visited the Hart site and the Redstone Mill site on 10-11 June 2009.

SRK was given full access to all relevant data and held discussions with Liberty exploration personnel to obtain information on the current exploration work, understand field procedures used to collect, record, store, and analyze exploration data.

Stantec was provided with information concerning mineral resources as presented in the SRK Technical Report as well as costing as available to Liberty.

2.8 Acknowledgements

SRK would like to acknowledge the support and input provided by Liberty exploration, operations, and executive personnel for the preparation of this report. Mr. William Randall in particular provided all the validated and formatted data and geological models, and provided valuable technical insight and suggestions that enhanced the resource modeling process. Mr. Tyron Breytenbach supervised much of the Hart exploration program.

Mr. Gary Nash, Bill Rogers, Tony Linton, and Mike Kernick accompanied SRK on various visits and provided answers to questions and/or validated conceptual designs.

Stantec would like to acknowledge the assistance of Mr. Keyvan Salehi and Ms. Heather Miree in the preparation of this updated technical report.

3.0 RELIANCE ON OTHER EXPERTS

Sections of this report were prepared by SRK Consulting (Canada) Ltd. (SRK) for Liberty Mines Inc. (Liberty) and were previously published in a technical report "Preliminary Economic Assessment for the Hart Project, Ontario, Canada (the SRK Technical Report) dated 26 February 2010 and filed on Sedar 04 March 2010.

The sections of this report which are unchanged from the previously filed SKR Technical Report include the following:

- Item 5: Accessibility, Climate, Local Resources, Infrastructure, and Physiography
- Item 6: History
- Item 7: Geological Setting and Mineralization
- Item 8: Deposit Types
- Item 11: Sample Preparation, Analysis, and Security
- Item 12: Data Verification
- Item 13: Mineral Processing, Mineralogy and Mineral Testing
- Item 14: Mineral Resource Estimates
- Item 23: Adjacent Properties

Sections of this report which have been recently updated and are published in this report include:

- Item 1: Summary
- Item 2: Introduction*
- Time 3: Reliance on Other Experts*
- Item 4: Property Description and Location *
- Item 9: Exploration*
- Item 10: Drilling *
- Item 15: Mineral Reserve Estimates
- Item 16: Mining Methods
- Item 17: Recovery Methods
- Item 18: Project Infrastructure
- Item 19: Market Studies and Contracts
- Item 20: Environmental Studies, Permitting, and Social or Community Impact *
- Item 21: Capital and Operating Costs
- Item 22: Economic Analysis
- Item 24: Other Relevant Data and Information
- Item 25: Interpretation and Conclusions
- Item 26: Recommendations
- Item 27: References*

A portion of the content of the sections noted above (Introduction, Reliance on Other Experts, Property Description and Location, Exploration, Drilling, Environmental Studies, Permitting, and Social or Community Impact, and References) remains unchanged from the March 2010 filed SRK Technical Report where that content remained relevant and not materially changed from the March 2010 publication with updates made to these sections with contributions from Liberty staff.

Sections of this report concerning the mine plan, operating and capital costs, conclusions and recommendations have been prepared by Stantec for Liberty Mines Inc. (Liberty) with contributions from Liberty staff. The information, conclusions, opinions, and estimates contained therein are based on information available to Stantec at the time of preparation of this report.

For the purpose of this study, Stantec has relied on Liberty for guidance on royalty agreement and ore processing agreement aspects applicable to revenues or income to be generated by the Hart Mine Project.

Other experts to the study included Mike Yao for interpretation of the existing geotechnical information and Jake Jodouin for the ventilation modelling.

Environmental, geotechnical and hydrological considerations were based on information provided by Liberty Mines.

As the Hart Mine operator, Liberty assistance to Stantec for the preparation of the underground mine design and production schedule, as well as other related underground mining activities, project schedule, and capital/operating cost estimates.

The opinion expressed by Stantec is this report is based on information and data partially provided by Liberty and is current at the time of writing. The report reflects the technical and economic conditions valid at that time. Given the nature of the mining business, these conditions may change over a relatively short period of time. As a consequence, actual results may be significantly more or less favourable than those projected herein.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Introduction

The general location of the Hart Project is presented in is shown in Figure 4.3.

It is located approximately 27 kilometres southeast of the city of Timmins, Ontario. The property is within the boundaries of the city of Timmins and is centered at approximately UTM (NAD83 Z17) coordinates 5,350,230 mN and 493,900 mE. The property is located in Eldorado Township, within the Porcupine Mining Division, and is accessed from the city of Timmins/South Porcupine by a series of all-weather gravel roads. A detailed location map of the Hart Project in relation to the City of Timmins is shown in Figure 4.3.

Figure 4.1: Location of the Hart Project in Central Ontario, Canada

4.2 Land Tenure

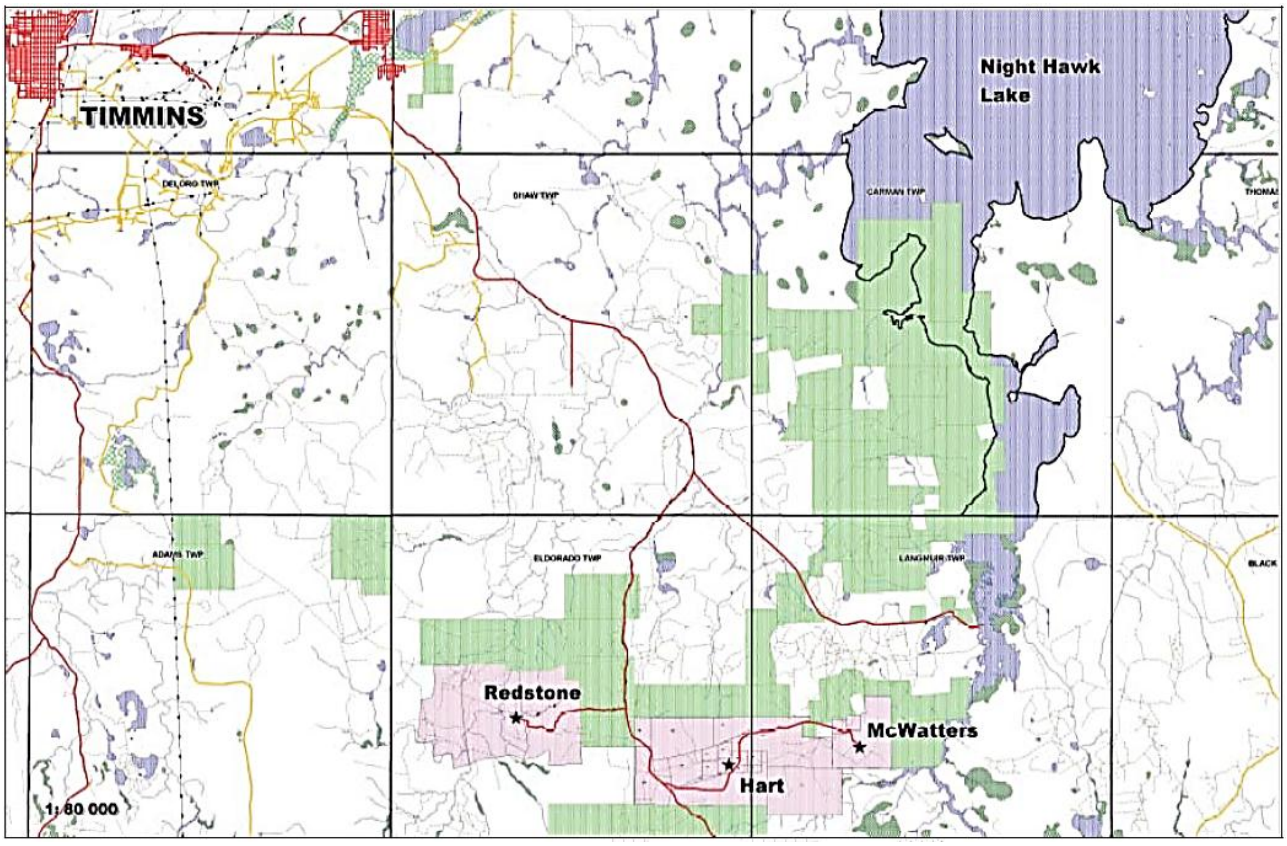
The Hart property consists of 21 contiguous unpatented mining claims which were converted into one mining lease held by Liberty and located in Langmuir and Eldorado Townships of the Porcupine Mining Division. Mining Lease Number 108569 was granted as of 01 January 2012 for a term of 21 years and consists of approximately 928 hectares. The details of these claims are listed in Appendix A. A plan showing the Hart Project mining claims is shown in Figure 4.2.

SRK verified the ownership status of these tenements on the Ministry of Northern Development and Mines Mining Claims Information System. As the 21 claims have been converted to lease, the validity of the property ownership is maintained on an on-gong basis via the payment of annual rent on the granted lease, which is $2,783.78 per year and due on or before the anniversary date of the lease.

The mineral resources reported herein are all located on claims number 1248466, 1248465, and 1247592 (Figure 4.2).

Figure 4.2: Hart Project Mining Claim Plan

Figure 4.3: Detailed Location Map Relative to the City of Timmins



4.3 Underlying Agreements

On 17 July 2006 Liberty optioned the Hart property from Canadian Arrow Mines. At that time the property consisted of claims 1243281, 1243282, 1243283, 1247591, 1247592, 1247593, 1247594, 1248465, 1248466, and 1248467 (the remaining claims were staked by Liberty). On 18 January 2008 Liberty met all obligations to Canadian Arrow Mines as set out under the option agreement, so that now Liberty owns 100 percent of the Hart property with no subsidiary involved.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

The Hart property is proximal to the city of Timmins, Ontario, which has a population of 48,000. The population consists of a skilled workforce with considerable experience and history in mining and mineral processing. Infrastructure is adequate to supply potential power and services for developing local resources, as well as mineral exploration activities.

The Hart property is accessed from the city of Timmins by a series of gravel roads. Approximately 26 kilometres southeast of Timmins, a road branches east to the Hart property. Approximately three kilometres east along this road the deposit location is reached. The access roads are used in all seasons, and are winter safe.

The Hart deposit is located in an area that is relatively flat with poor drainage. The deposit location is generally low-lying with a few local rock outcrops and ranges in elevation from 290 to 330 metres above sea level.

No waters flow through the site. The site naturally drains to the south into the Forks River. The property lies entirely within the Night Hawk Lake sub-watershed. The Forks River drains north-easterly into the Night Hawk River which flows north-easterly into Night Hawk Lake. Night Hawk Lake in turn drains to the Frederickhouse River. The Frederickhouse River drains to the Abitibi River (north of Cochrane) then to Moose River, which ultimately discharges into James Bay.

The terrestrial vegetation is a combination of typical black spruce-lowland areas and slightly higher ground with soft wood forest (Figure 5.1). This vegetation type tends to represent a forest to wetland transition zone, and is characterized by poplar, pine, black spruce, bog rosemary, pale laurel, and sphagnum.

Wildlife communities around the Hart deposit are typical of other poorly drained northern boreal forest areas. The majority of the several species present are small mammals and songbirds that are common and widely distributed. Other species include ungulated, furbearers and raptors. Moose populations in the area are low to moderate. Furbearers in the vicinity include beaver, marten, mink, muskrat, fox, lynx, and black bear. Other animal types include the snowshoe hare, fisher, and wolf.

The climate is typical of northern boreal forest areas, with extended periods of sub-zero temperatures in the winter months of November through to March. Moderate temperatures prevail during the summer months with temperatures in the range of 10 to 30 degrees Celsius accompanied by moderate precipitation. Experience indicates that most preliminary exploration activities can be executed in the summer months.

The Hart Project surface area is large enough to accommodate all future mining related infrastructures. The Hart Project is located in close proximity to other Liberty owned infrastructures, including the operational Redstone Mine as well as to the McWatters Project, which currently is at an early stage of development.

Figure 5.1: Hart Project Surface Vegetation

6.0 HISTORY

The exploration history of the Hart property has been summarized by Brereton (2004), from which the following compilation has been extracted.

Minor trenching was completed by L.N. Hart on the surface iron formation exposures in the period 1960 to 1964. It is probable that the first indications of nickel were recorded at that time. In the period 1964 to 1968, Norlex Mines Ltd. (Norlex) carried out ground EM and magnetic surveys and completed 1,854 metres of drilling in t13 holes on the property. Eight of the Norlex drill holes intersected nickel mineralization and are summarized in Table 6.1.

Paramaque Mines Ltd. (Paramaque) subsequently acquired the property and drilled 1,950 metres of core in six diamond drill holes in the period 1968 to 1969. These holes were also successful in intersecting nickel mineralization and are summarized in Table 6.2.

Table 6.1: Norlex Mines Ltd. Drill Results, Hart Nickel Project

Hole No.	Core Length (ft)	Ni (%)	Cu (%)
NLX 64-1	21.2	0.65	
	3.7	1.24	
NLX 64-5	15	2.10	0.18
NLX 64-6	4.4	0.53	
	31.5	0.31	
	9.2	0.68	
	8	1.12	
NLX 64-8	10	0.50	
	4.9	0.51	
NLX 64-10	17.2	0.89	0.11
NLX 64-12	2.2	0.87	
NLX 64-13	12.9	0.83	

Table 6.2: Paramaque Mines Ltd. Drill Results, Hart Nickel Project

Hole No.	Core Length (ft)	Ni (%)	Cu (%)
PAR 69-1	26.6	0.32	
	5.0	1.78	
	3.0	2.48	
PAR 68-2	25.3	0.22	
PAR 69-3	30.8	0.44	
PAR 68-4	20.4	0.25	
	7.2	2.77	0.13
PAR 68-5	29.0	0.20	
PAR 68-6	10.6	0.62	
	6.6	1.11	0.11

McWatters Gold Mines Limited (McWatters) acquired the property from Paramaque in 1969 and completed 2,440 metres of drilling in eight holes. The results of this work are missing from assessment files in the Timmins MNDM office, which may suggest that this drilling did not intersect mineralization. Evidence of this drilling has not been found on site.

Tontine Mining Limited (Tontine) purchased McWatters Gold Mines Limited in 1969 and apparently completed a feasibility study on the economics of the Hart deposit (this work is only referenced in a report by Timmins Nickel Inc. with no information available on this study. Timmins Nickel Inc. purchased the Hart property in 1989 and completed airborne magnetic and EM surveys over the area. This initial program was followed by ground magnetics and IP over the mineralized portion of the ultramafic. Timmins Nickel never carried out a drill program on the Hart Project.

Starfire Minerals Inc. drilled a total of six very shallow holes in the immediate area of the surface showing in 2002. The holes were also extremely closely spaced and therefore tested the same portion of the nickel mineralization, referred to in this report as the IF Zone. These holes are considered in the present mineral resource estimate, but are deemed of limited value to the overall definition of the orebody. Low values were reported.

Canadian Arrow Mines acquired the property in 2004 through its subsidiary “Legendary Ore Mining Company”. Canadian Arrow Mines conducted ground geophysics over the property and completed a diamond drill program comprising of five drill holes, totaling 306 metres.

Between 2005 and 31 December 2009, Liberty drilled a total of 104 drill holes with an average length of 301 metres. A limited amount of surface trenching was also undertaken.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Introduction

The geology section of this report focuses on the description of the property geology, exploration work completed to date, database development, quality assurance/quality controls (QA/QC), geological modelling, and resource estimation.

7.2 Regional Geological Setting

The Hart deposit is hosted by ultramafic rocks that form part of, or intrude, the Tisdale assemblage that flank the Shaw Dome and form part of the Abitibi greenstone belt (AGB). The Abitibi greenstone belt is one of the youngest parts of the Achaean Superior Province forming what is considered one of the largest and best-preserved belts of its kind in the world. The Abitibi belt developed between 2.8 to 2.6 GA (Jackson and Fyon, 1991) and has been subdivided in nine lithotectonic assemblages (Ayer et al., 2002; Sproule et al., 2002).

The relationships between these assemblages are ambiguous and may represent a superposition of allochthonous terranes (each terrane having been formed in a different tectonic environment), or a tectonically complex and structurally deformed single autochthonous terrane formed along a convergent margin, or a combination of both. Even though the AGB has been subdivided into nine distinct lithotectonic assemblages, only four of these are generally accepted to contain komatiitic rocks and therefore considered prospective for ultramafic-hosted Ni-Cu-(PGE) sulphide deposits. These four assemblages have distinct and well defined ages as well as spatial distribution (Figure 7.1): the Pacaud assemblage (2750-2735 Ma), the Stoughton-Roquemaure assemblage (2723-2720 Ma), the Kidd-Munro assemblage (2719-2711 Ma), and the Tisdale assemblage (2710-2703 Ma). These four assemblages differ considerably in the physical volcanology and geochemistry of the komatiitic flows. It is important to note that the latter two of these assemblages contain larger volumes of high magnesium, Al-undepleted komatiites (>five percent), while the Tisdale assemblage contains more andesitic rocks and sulphide facies iron formations (Sproule et al., 2003).

The Shaw Dome is a major anticline centered approximately 20 kilometres southeast of Timmins, Ontario (Muir, 1979; Green and Naldrett, 1981; Figure 7.1). The anticlinal structure may be a result of regional folding that affected rocks north of the Shaw Dome or, more probably, due to the diapiric action of a large granitic body which partially outcrops in the central south-east portion of the dome. Volcanic rocks associated with the Shaw Dome have been associated with the Deloro assemblage (2730 to 2725 Ma: Ayer et al., 1999) and younger Tisdale assemblage. Pyke (1982) further sub-divided

these assemblages into three volcanic formations: lower, middle, and upper volcanic formations. The lower formation of the Deloro assemblage is not exposed in the Shaw Dome, while the middle formation occupies the central part of the Dome north of the Redstone Mine (Redstone). The upper volcanic formation of the Deloro was described by Pyke (1982) to contain a relative abundance of sulphide facies iron formations and a predominance of intermediate to felsic volcanic rocks of dacitic to andesitic composition. Pyke (1982) does not mention the presence of extrusive komatiitic rocks in this assemblage having mapped all of the ultramafic rocks contained within this supracrustal package as intrusive in nature (Pyke, 1970, 1975). Pyke (1982) does, however, add that "there is some intercalation of the komatiites (of the Tisdale assemblage) with the Deloro Group volcanic rocks". Since, both intrusive and extrusive ultramafic rocks have been identified within the Deloro volcanic package (Hall & Houle, 2003; Houle et al., 2004; Houle & Guillmette, 2005) outlined by Pyke (1982). Therefore, either the assumption that the Deloro assemblage is devoid of komatiitic flows needs to be revised or the disconformity that delineates the contact between Deloro and Tisdale rocks modified.

Stone & Stone (2000) divided the komatiitic rocks into two horizons making no reference to stratigraphy: the lower komatiitic horizon (LKH) and the upper komatiitic horizon (UKH). The UKH consists of extrusive komatiitic rocks intercalated with calc-alkalic volcanic rocks and sulphide facies iron formations, while the LKH consists of komatiitic rocks that intrude the underlying felsic to intermediate volcanic flows and interbedded iron formations. The rocks that form the LKH are mostly dunites, whelrlites, pyroxenites, and gabbros that intrude sometime between 2,725 Ma and 2,707 Ma (Stone & Stone, 2000 and references therein). The UKH rocks are cumulate, spinifex textured and aphyric komatiites that extruded sometime before 2,703 Ma (Corfu et al., 1989). The UKH komatiitic intrusions are interpreted to represent part of the feeder system that resulted in the eruption of channelized komatiitic flows that are, at least initially, cogenetic and form what is now a large dyke-sill-lava complex. Observations and interpretations by Stone & Stone (2000) are supported by later mapping of Adams, Shaw, Langmuir, and Carman Twps by Houle et al. (2004) and Houle & Guillmette (2005).

To date five Ni-Cu_(PGE) deposits have been discovered in the Shaw Dome (Redstone, Hart, McWatters, Langmuir #1, Langmuir #2), and numerous showings have been identified (Galata, etc.). These five deposits occur in komatiitic rocks found within the Deloro assemblage near the base of the Tisdale assemblage.

Figure 7.1: Simplified Regional Geological Setting of the Abitibi Belt

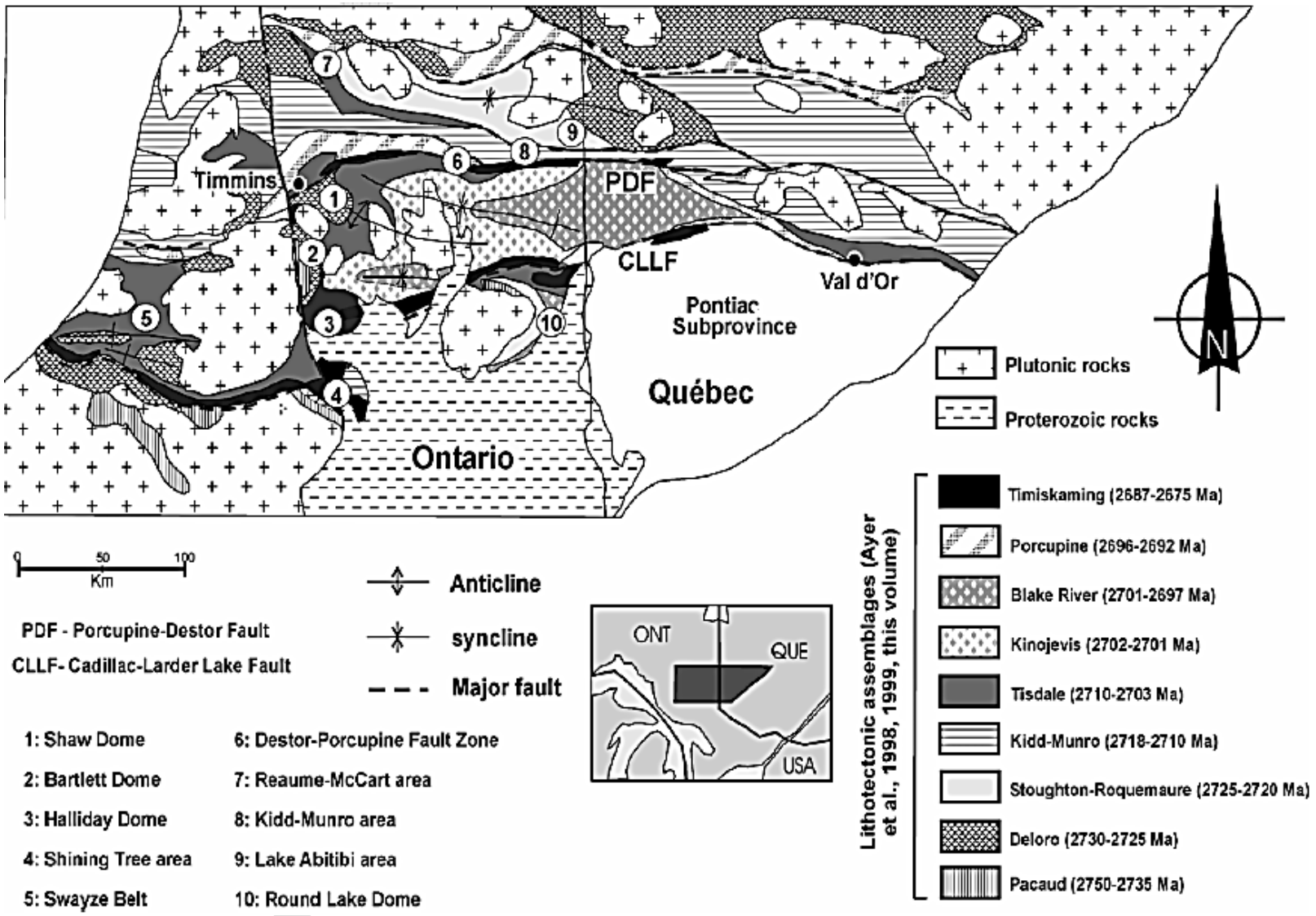
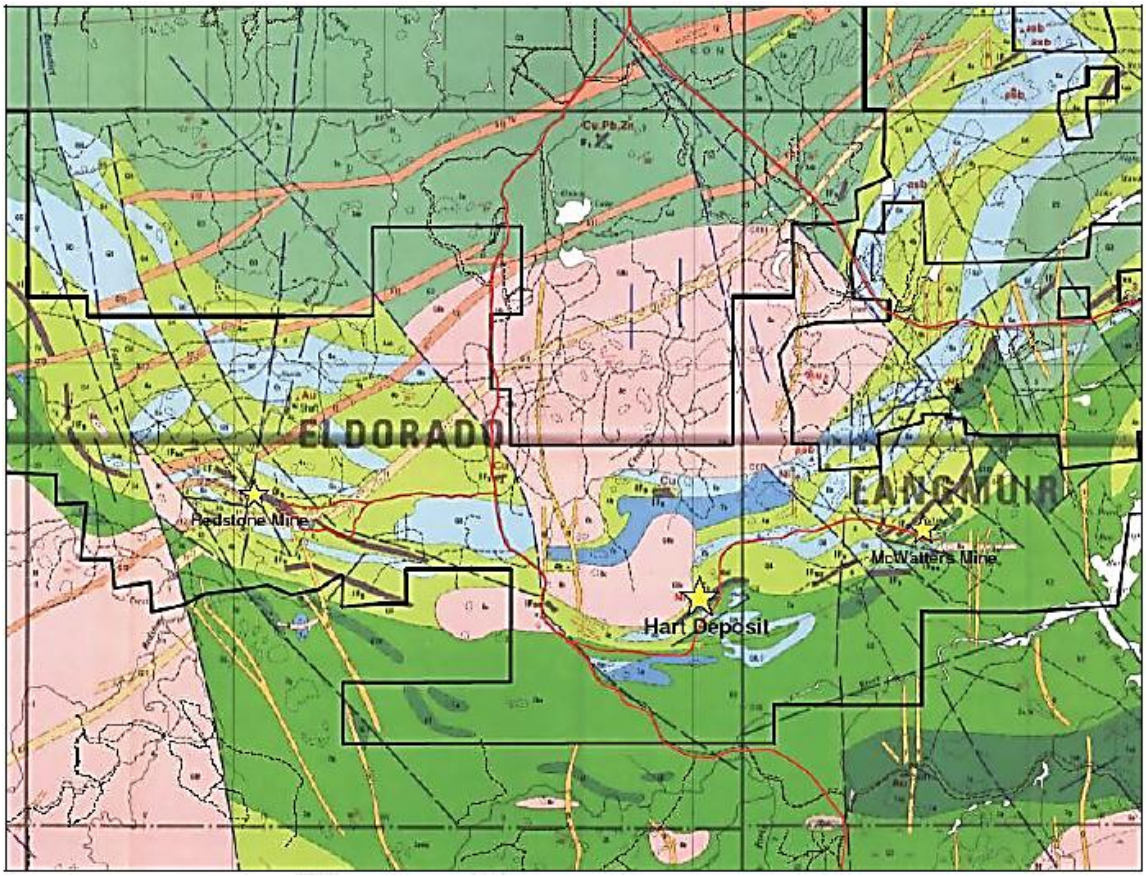


Figure 7.2: Location of the Hart Project (extract from Map P2455, produced by the Ontario Geological Survey)



7.2.1 Property Geology

Five main rock types have been identified from diamond drill core and surface mapping: footwall intermediate to felsic volcanics, banded iron formation (BIF), mineralized ultramafic flows, felsic dykes, and mafic dykes. A surface geology map based on outcrop mapping and diamond drilling is shown in Figure 7.3. Based on whole rock data the volcanic rocks range in composition from andesite to dacite, classified using a total alkalis versus silica (TAS) diagram. They often exhibit pyroclastic textures, including blocks, bombs, and lapilli. The ultramafic rocks are of komatiitic composition plotting near the 100 percent Mg apex on the Jensen cation plot (Jensen, 1976). The dykes are syeno-diorites and gabbros respectively (also using a TAS diagram).

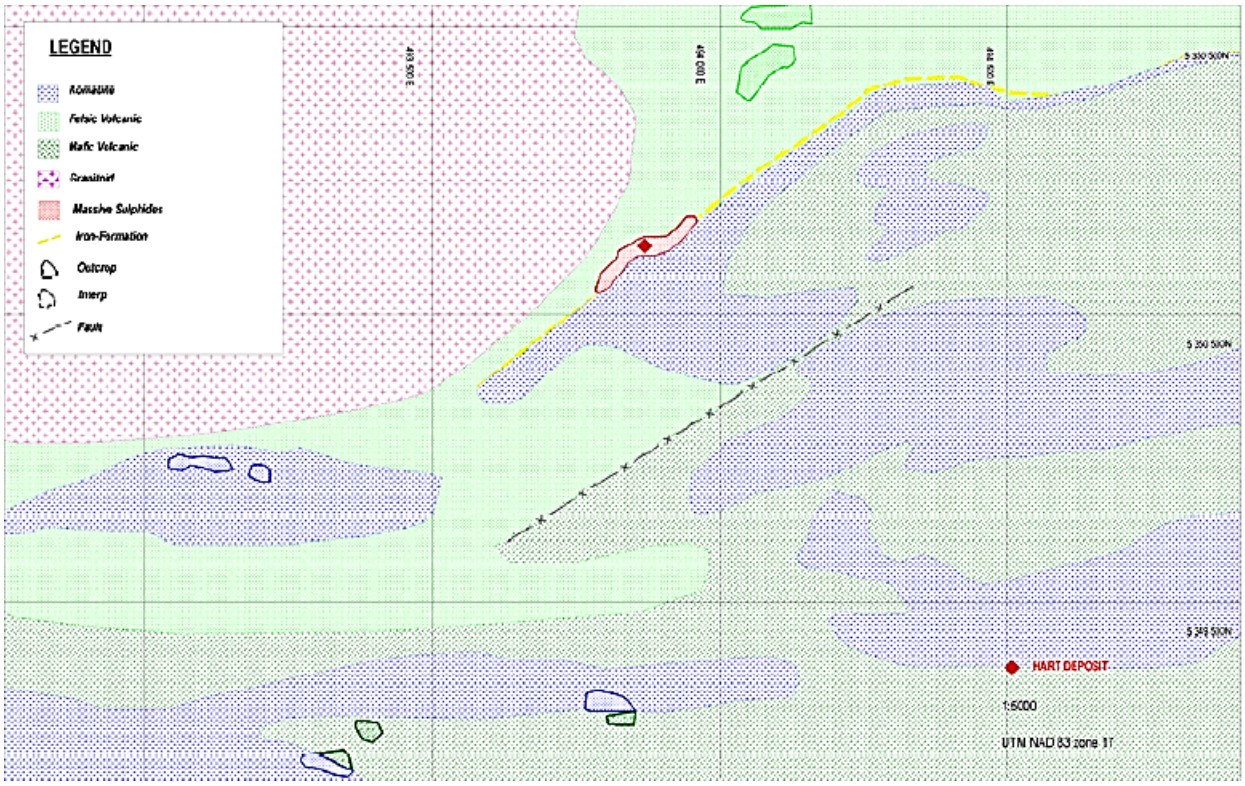
The ultramafic flows, known as komatiites, lie conformably on the banded iron formation which, in turn, overlies the dacitic, pyroclastic volcanic flows. In localized areas the banded iron formation has been thermally eroded so that the komatiitic flows are in direct contact with the felsic volcanic rocks, forming palaeotopographic embayments.

During this process, and as a direct result of the sulphur contamination, nickel-sulphide precipitation occurred within the still active ultramafic flows, accumulating due to gravitational settling in many of these localized embayments. Subsequent regional tectonic events have uplifted the package so that it now dips SSE at an average angle of 75 degrees from horizontal. Little subsequent structural modification has been detected in core samples, unlike the nearby Redstone deposit which has been subjected to considerable post mineralization stress.

The process of sulphide assimilation by the komatiitic flow has been well recorded in the Hart deposit. In addition to the classical magmatic sulphide assemblage a contaminated iron formation (IF Zone) occurs near surface. This geological unit bears more visual resemblance to the barren banded iron formations that flank it, including predominant quartzitic and graphitic bedding planes, but contain significant nickel mineralization. Values range from anomalous to over two percent Ni. This area is interpreted as in situ evidence of sulphide assimilation, showing that the sulphur source and depositional environments can occur in very close proximity. This IF Zone also occurs in a stratigraphically higher region than the magmatic sulphides, re-enforcing the model.

The komatiitic rocks, which host the mineralization are serpentinized and locally altered to talc, chlorite and carbonate. Spinifex textures are common, occurring at distinct stratigraphic horizons, serving as a tentative marker horizon. The contained sulphide minerals in decreasing abundance are pyrrhotite, pentlandite, minor pyrite and chalcopyrite, occurring predominantly as massive to semi-massive sulphides at the base of the komatiitic flow. The total sulphide abundance decreases with increasing distance from the basal contact, in keeping with the classical model involving sulphide settling in an active magmatic environment. As result, the deposit exhibits the full range of concentrations from one to 100 percent sulphides.

Figure 7.3: Simplified Surface Geological Map of the Hart Project



7.3 Mineralization

The Hart deposit mineralized zone can be subdivided in three distinct zones: an upper zone of Ni-enriched banded iron formation (IF Zone), a basal, lower zone consisting of massive to semi-massive sulphides (Figure 7.4), and a stratigraphically overlying zone of disseminated sulphides. The IF Zone consists primarily of altered metasediments including quartzite, graphite, and abundant pyrite, and troilite. Overlying ultramafic rocks have enriched the iron sulphides with nickel. This zone is well bedded and primarily sedimentary.

The main zone that comprises the majority of the mineral resource consists of komatiite-hosted massive to semi-massive sulphides lying conformably on dacitic pyroclastic flows. The sulphide assemblage consists of pyrrhotite, pentlandite, and minor pyrite and chalcopyrite. Typical sulphide concentrations range in the 60 to 80 percent pyrrhotite and 10 to 30 percent pentlandite. The pentlandite occurs intergrown with pyrrhotite as irregular grains that are generally relatively coarse grained. Microphotographs of thin sections taken from this zone are shown in Figure 7.5 and Figure 7.6. The massive zone is overlain by disseminated sulphides of varying sulphide modal abundance, ranging from under one percent to 25 percent. The sulphide minerals are similar to those of the massive zone, with the exception of minor amounts of millerite also

identified in thin section. Silicate minerals have been completely serpentized and/or carbonatized.

Figure 7.4: Semi-massive Sulphide Mineralization (primarily pyrrhotite and pentlandite) from Drill Core (H-07-48)

The sample in Figure 7.5 illustrates the relative coarseness of the pentlandite. The large grains at the upper right and bottom centre are pyrrhotite (buff colour) with intergrown pentlandite (creamy yellow with abundant black polishing pits). The smooth surfaced cream-coloured grain at the upper left is pyrite.

Figure 7.5: Microphotograph of Massive Sulphides (scale 1 cm = 120 microns)

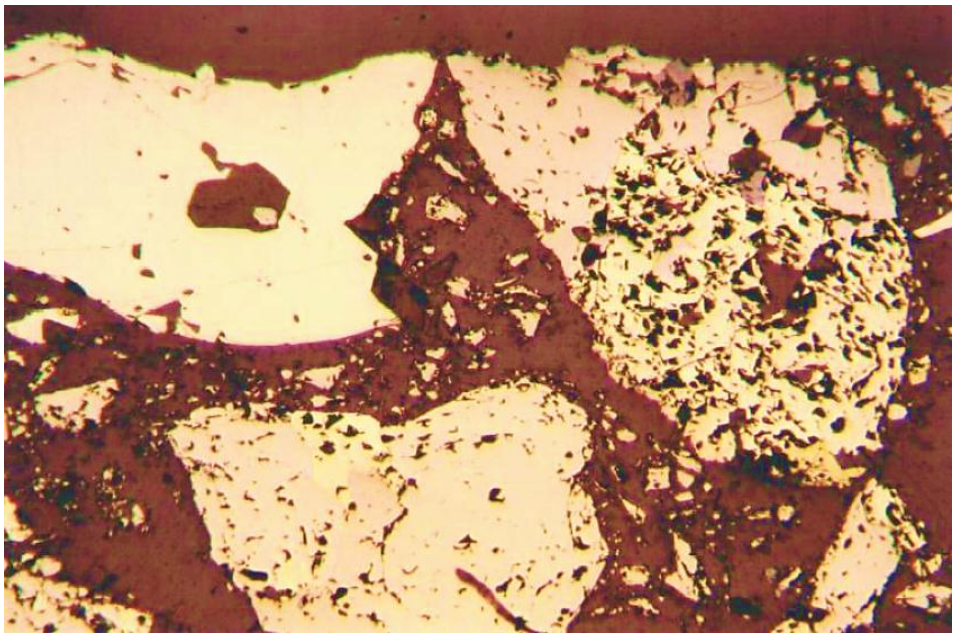
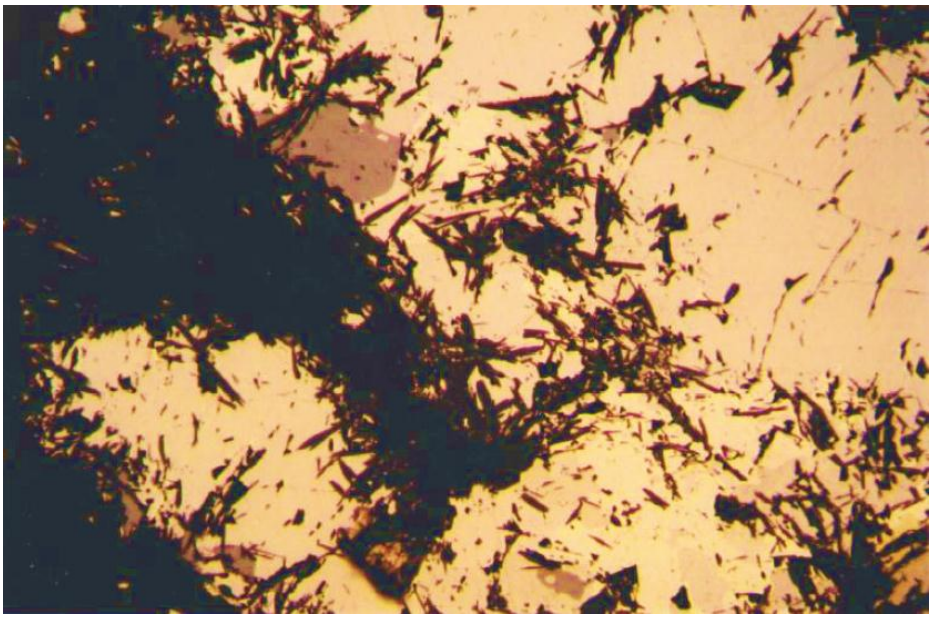


Figure 7.6 shows intimate intergrowths of silicate gangue (acicular black) with pentlandite in pyrrhotite (buff colour). Pentlandite areas (pale yellow, e.g. bottom right, upper centre) in the example range from 200 to 30 microns.

Figure 7.6: Microphotograph of Semi-massive Sulphides (scale 1cm – 120 microns)



8.0 DEPOSIT TYPES

The distribution of magmatic Ni-Cu-PGE sulphide deposits in Canada, with a resource size greater than 100,000 tonnes is shown in Table 8.1.

Considerable research by various writers over the years indicates that komatiite hosted nickel deposits in the Timmins area are similar to the Achaean age nickel deposits of the Kambalda and Windarra areas in Western Australia.

In the AGB four of the assemblages contain komatiites. Komatiite-associated Ni-Cu-(PGE) deposits have only been identified within the Kidd- Munro and Tisdale (including Hart) assemblages. This is consistent with the interpretation that komatiite associated Ni-Cu-(PGE) deposits form within lava channels of channelized sheet flows, but not within sheet flows or lava lobes.

Tisdale assemblage ultramafic volcanic rocks with high MgO contents (up to 32 percent) are defined as aluminium undepleted komatiites (AUK). Individual flows are usually less than 100 metres thick and typically occur at or near the base of ultramafic sequences. The flow units can be recognized by the presence of chilled contacts, the distribution of spinifex textures, marked compositional or mineralogical changes at unit boundaries and the presence of ultramafic breccia or sulphidic sediments at contacts. Intrusive counterparts have also been recognized in the Tisdale assemblage.

The following three paragraphs are largely based on Lesher & Keays (2002), parts of which are paraphrased.

Komatiite-hosted Ni-Cu-PGE deposits are one of several lithological associations within the broader group of magmatic Ni-Cu-PGE deposits. Mineralization occurs in both extrusive and intrusive settings and experimental studies indicate that komatiitic magmas/lavas were emplaced at very high temperatures. Deposits of this association are mined primarily for Ni contents, but contain economically-significant amounts of Cu, Co, and PGE.

Komatiite-associated nickel sulphide deposits are part of a continuum of lithotectonic associations in the family of magmatic Ni-Cu-PGE deposits, which contains a variety of mineralization types (Table 8.1 from Lesher & Keays, 2002.)

Table 8.1: Classification of Mineralization Types in Komatiite-Associated Magmatic Ni-Cu-PGE Deposits (from Lesher and Keays, 2002)

Origin	Magmatic						Hydrothermal-Metamorphic		Tectonic
Type	I Basal/Footwall			II Strata-bound Internal		III Reef	IV		V
Subtype	I Stratiform	I b Footwall Vein	II a Blebby	II b Interstitial	II c Cloudy	Stratiform	IV a Meta-sediment	IV b Vein	Offset
Sulphide distribution	at or near the bases of komatiitic peridotite or komatiitic dunite units	veins or stringers in host or wall rocks associated with Type I a mineralization	coarse disseminations within komatiitic peridotite or dunite units	fine disseminations within komatiitic peridotite or dunite units	very fine disseminations within komatiitic peridotite or dunite units	at or near contact between lower cumulate zones and upper gabbro zones within strongly differentiated units	layers in sulphidic metasediments associated with Type I mineralization	veins in wall rocks associated with Type I mineralization	faults and shear zones within host or wall rocks associated with Type I mineralization
Sulphide textures	massive, net-textured, disseminated; sometimes xenolith- or xenomelt-bearing	massive	blebby	intercumulus, interstitial or lobate	intercumulus, interstitial	disseminated, rarely net-textured	layered, banded, laminated	massive to disseminated, typically associated with quartz and/or carbonate	brecciated, typically heterolithic; durchbewe-gung
Ore tenor	typically moderate-low, slightly fractionated	variable, commonly enriched in Cu-PGE relative to associated contact ores	moderately high, relatively unfractionated	typically high, relatively unfractionated	variable (high to low)	typically high, relatively fractionated	variable, commonly depleted in Cr and Ir relative to associated magmatic ores	variable, commonly depleted in Cr and Ir relative to associated magmatic ores	variable, commonly depleted in Cr, Pt, and Au relative to associated magmatic ores
Timing and paragenesis	early magmatic, segregated prior to or during emplacement	early or late magmatic, injected during initial emplacement or formed via fractional crystallization of MSS	intermediate magmatic, segregated during crystallization of cumulate host rock	intermediate magmatic, segregated during crystallization of cumulate host rock	late magmatic but meta-morphically modified, segregated during crystallization of cumulate host rock	late magmatic, segregated during final stages of crystallization of host rock	late magmatic or syn-metamorpic	syn-metamorphic, mobilized in hydrothermal fluids	syn-tectonic, mobilized from massive or net-textured sulphides
Examples	Alexo, Kambalda, Langmuir, Windarra, Hart	Kambalda, Alexo, Hart	Damba-Silwane, Otter shoot (Kambalda)	Mt. Keith, Dumont, Perseverence Main	Katinniq, Perseverence Main	Delta, Romeo II, Fred's Flow, Boston Creek Unit	Jan shoot (Kambalda), Langmuir, Thompson, Hart	Kambalda, Langmuir, Donaldson West	Thompson, Nepean, Perseverence 1A, Redross, Redstone, Trojan, Windarra

Most of the deposits in the Shaw Dome are Type I (stratiform basal), including Liberty's Redstone and Hart deposits. Type Ib (magmatic footwall vein) mineralization is a minor mineralization type associated with Type I deposits, but is an important ore type in other associations (e.g., Cu-PGE-rich footwall veins at Sudbury). Types IIa (blebby disseminated) and IIc (cloudy disseminated) are common minor mineralization types associated with Types I and IIb. Type III (stratiform "reef") mineralization is a more recently-recognized primary mineralization type in this association and is normally sub economic, but is an important ore type in other associations (e.g., Bushveld, Stillwater). Type IVa (Ni-enriched metasediment) mineralization occurs in many deposits where Type I ores are intimately associated with sulphidic metasedimentary rocks, as is the case with the Hart deposit. Type IVb (hydrothermal vein) mineralization is a relatively minor, but genetically important secondary ore type. Type V (offset) mineralization is associated with almost all Type I deposits and is common both at Redstone and Hart deposits.

The genesis of the Shaw Dome and the Australian deposits is attributed to the combined effect of lava channels (or channelized sheet flows) and intrusives, which provides the heat and metal sources and sulphide bearing iron formations in the footwall that, provide an external sulphur source. Thermal erosion of the underlying rocks by the komatiite flows is considered to be the dominant mechanism for adding sulphur to the magma and to the creating of a depositional 'trough' for sulphide minerals. Type II mineralization characteristically contains disseminated sulphide mineralization within channelized flows resulting in large tonnage low grade deposits. Characteristics of this deposit type which should be used in exploration methodologies include:

- Geological mapping of komatiite flow units;
- Presence of sulphidic footwall rocks;
- Lithogeochemical surveys can detect AUK komatiites; and
- Air borne and ground electromagnetic surveys will detect the location of massive sulphide mineralization, whereas magnetic surveys should detect pyrrhotite rich sulphide mineralization.

9.0 EXPLORATION

9.1 Historical

A review of the historical exploration activities on the Hart property has been presented in Item 6 – History of this report.

9.2 Exploration Work by Liberty

From 2005 to 31 December 2009 (the date of currency of data incorporated in the SRK Technical Report), Liberty drilled a total of 104 NQ-sized diamond drill holes with an average length of 301 metres within the Hart mineralized zone. A total of five surface trenches were also undertaken.

Since the SRK Technical Report (i.e. since 31 December 2009), a total of 39 NQ-sized holes totalling 13,882.1 metres have been completed on the Hart property, the vast majority of which lie outside the Hart mineralized zone and the mineral resource and reserve estimates contained within the SRK Technical Report.

In 2010, Liberty did not conduct any diamond drilling in the area of the Hart mineralized zone.

In 2011, a total of 9,302.7 metres of drilling in 31 NQ-sized diamond drill holes were completed on the Hart property, principally in the area east of the Hart mineralized zone, and outside the mineral resource and reserve estimates contained within the SRK Technical Report. From 01 January to 31 August 2012, a total of 4,579.4 metres in eight NQ-sized diamond drill holes were completed by Liberty on the Hart property, the majority of which explore outside the Hart mineralized zone.

As only few drill holes have been completed within the vicinity of the previous geological modeling and mineral resource estimate contained with the SRK Technical Report, drilling completed since the time of that report has no material impact on either the geological modeling of or the mineral resource estimate for the Hart deposit as published in that report. Those geological models and resource estimates remain unchanged as at time of writing of this report.

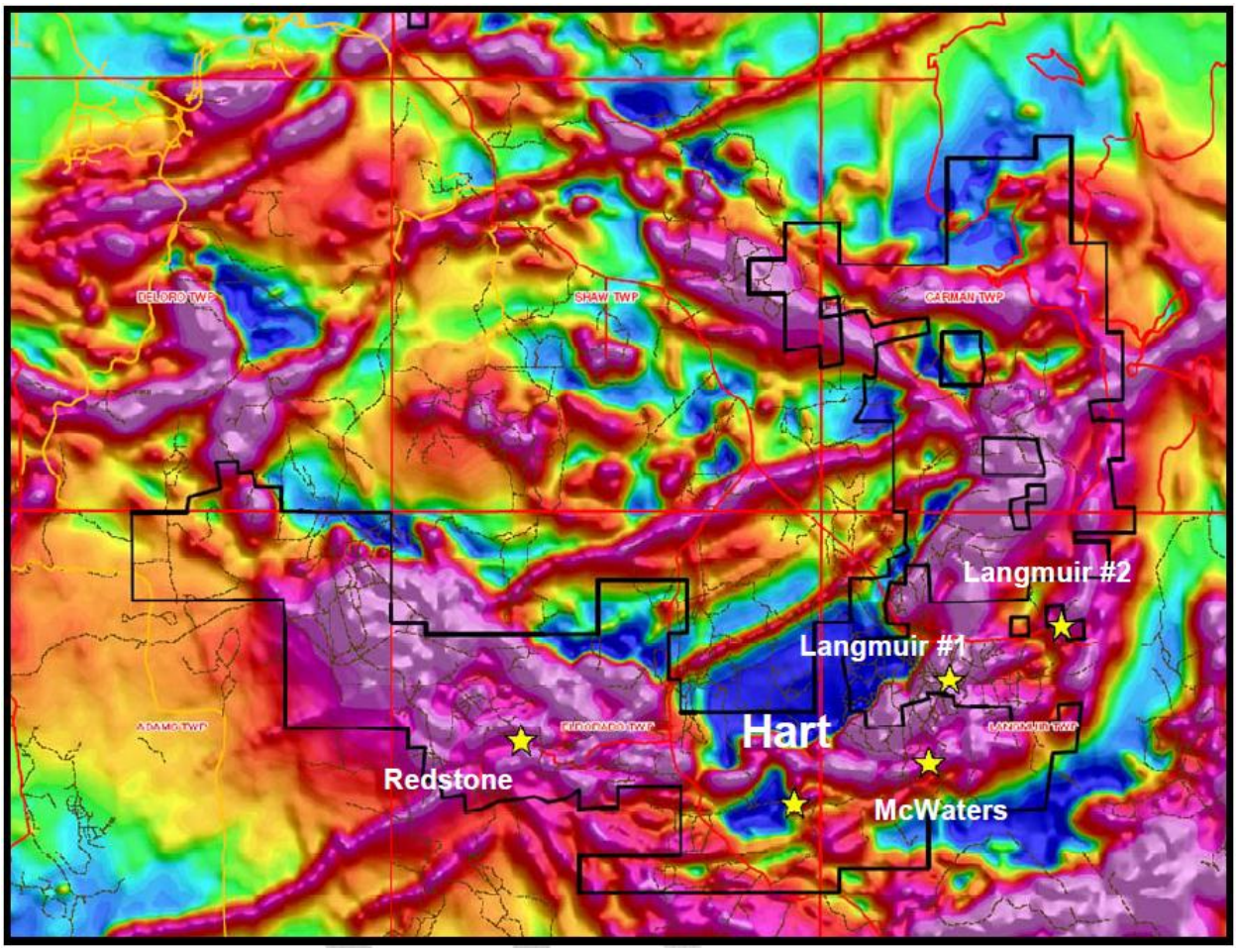
9.3 Future Exploration Work

The komatiitic flow that hosts the Hart ore zone continues at depth and has a strike length of several kilometres. Future exploration will focus on drill testing the depth extension from surface and/or underground drill bays in the vent of mining. At depth a

gabbroic dyke is known to cross-cut the mineralization. The nature of the orebody below this dyke is unknown and warrants further exploration.

Figure 9.1 is a plan position of the Hart Project in relation to other Shaw Dome properties in relation to Liberty's regional claim outline overlain on an aeromagnetic image of the area. The entire strike length of the komatiitic flow package is prospective as the geological setting has been shown to be fertile. It is recommended that the strike length be evaluated and drill tested. Of particular importance is the identification of nickel enriched metasediments in the immediate vicinity of the magmatic sulphides, such that future exploration should be well aware of this relationship. There are numerous instances throughout the Shaw Dome of iron formations in contact with komatiitic flows that may exhibit a similar signature upon closer inspection.

Figure 9.1: Plan Position of the Hart Project In Relation to other Shaw Dome Properties



10.0 DRILLING

10.1 Introduction

During the period 1964 to 2002, a number of exploration companies undertook various phases of drilling activities in the vicinity of the Hart property. Poor records exist of the diamond drilling during this period, and the results have not been used in the present study. The block model used in this study was based on drilling conducted by Starfire, Canadian Arrow, and Liberty which is summarized in Table 10.1. Total drilling utilized in the block modeling therefore amounted to 32,054 metres of diamond drill core.

Table 10.1: Summary of Drilling Data Available and Utilized by SRK for the Hart Project Mineral Resource Estimate

Company	Period	Type	No. Holes	Total Metres	Drilling Details Average Metres
Starfire	2002	Surface DD	6	471	78.5
Canadian Arrow	2005	Surface DD	5	306	61
Liberty	2007-08	Surface DD	104	31,277	301

Diamond drilling conducted by Starfire consists of six short angled holes. Original drill logs and assay certificates from Swastika Laboratories, Kirkland Lake, Ontario, were found. Surface plan maps showing drill hole locations were also located, which aided in reconstructing drillhole locations. Casings were inconsistently left in the ground enabling Liberty to survey a few of the holes, adding confidence to the data. The drill core pertaining to this phase of drilling has not been examined by Liberty staff or SRK, and therefore has not been independently verified.

Diamond drilling conducted by Canadian Arrow consists of five angled holes. Original drill logs and assay certificates from Swastika Laboratories, Kirkland Lake, Ontario, were examined. All drill hole collars were identified and surveyed. Drill core from this phase of drilling is stored at the Redstone site, where Liberty staff was able to corroborate geological and analytical data satisfactorily.

10.2 Drilling by Liberty (Post 2005)

All drilling by Liberty was conducted from surface. A total of 104 HQ-size core boreholes with an average length of 301 metres were completed on the site (31,277 metres) in the period from 2005 to 31 December 2009 and these are the drill holes that were examined and utilized in the mineral resource and mineral reserve estimates contained herein Figure 10.1.

Subsequent to the completion of the resource estimate by SRK, Liberty drilled a total of 39 NQ-sized holes totalling 13,882.1 metres on the Hart property (Table 10.2). The vast majority of the drilling completed since31 December 2009 lies outside the Hart mineralized zone and the mineral resource and reserve estimates contained within the SRK Technical Report.

Table 10.2: Summary of Drilling Completed by Liberty Subsequent to Hart Deposit Mineral Resource Estimate Contained in SRK Technical Report Dated 26 February 2010

Period	Type	Location	No. Holes	Total Metres
2011	Surface DD	Hart East, Hart, other	31	9,302.7
2012*	Surface DD	At depth and west of Hart, Hart	8	4,579.4

Note: * 2012 Drilling includes drilling in the period from 01 January 2012 to 31 August 2012, the date of currency of the data contained within this report.

In 2010, Liberty did not conduct any diamond drilling in the area of the Hart mineralized zone.

In 2011, a total of 9,302.7 metres of drilling in 31 NQ-sized diamond drill holes were completed on the Hart property, principally in the area east of the Hart mineralized zone, and outside the mineral resource and reserve estimates contained within the SRK Technical Report. From 01 January 2012 to 31 August 2012, a total of 4,579.4 metres in 8 NQ-sized diamond drill holes were completed by Liberty on the Hart property, the majority of which explore outside the Hart mineralized zone.

As only few drill holes have been completed within the vicinity of the previous mineral resource and resent estimates contained with the SRK Technical Report, drilling completed since the time of that report has no material impact on the mineral resource and reserve estimates published within the SRK Technical Report and those estimates remain unchanged as at time of writing of this report.

Drill core is stored at the Redstone Mine site and is available for review.

The drilling contractor for the entire program was Bradly Bros. Limited of Timmins. The boreholes are labeled by a clear alphanumeric code. The drill core was not routinely photographed, although representative core intersections were photographed.

Drill collars were surveyed by a land surveyor, with the original collar azimuth and plunge setup determined by compass and/or cut grid lines. Down-hole surveying was routinely conducted at 25 metre intervals with an EZ Shot Reflex instrument. Casing is used for one hole per set-up for all surface drill locations, with collar pickets installed with clear labels indicating location, borehole names, azimuth, and dip. Core orientation is

achieved with the EasyMark system. Core recovery and rock quality determination were routinely collected.

An example of the output of a typical Liberty drill log (H08-99) from the Hart drilling program highlighting all drilling information in DH logger (Century Systems) output is shown in Figure 10.1.

Figure 10.1: Extract from a Typical Drill Log Layout *H08-99

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LIBERTY MINES INC.

LIBERTY MINES DETAILED LOG

Hole Number: **H-08-99** | Units: METRIC

Borehole ID:	H-08-99	Project Number:	HART	Start Date:	Apr 28, 2008
Primary Grid:	HART:	Claim #:	30310638	Finish Date:	May 16, 2008
Primary North:	3699.89	Township:	Eldorado	Drill Contractor:	Bradley Bros.
Primary East:	2561.03	Logged By:	tdunnett	Core Size:	NQ
Primary Elev:	2296.93	Log Finished:	Apr 28, 2008	Hole Length:	569.00
Destination Grid:	UTM:	Core Storage:	Redstone Minesite	Azimuth:	360.00
Destination North:		Casing:	Left in hole	Dip:	-67.00
Destination East:					
Destination Elev:					

Comments:

Survey Tests

Depth	Az	Dip	Depth	Az	Dip	Depth	Az	Dip	Depth	Az	Dip
0	360.00	-67.00	28.0000	355.20	-66.50	53.0000	357.90	-66.50	77.0000	357.30	-66.60
101.0000	355.30	-66.80	125.0000	356.70	-66.90	149.0000	32.00	-66.70	173.0000	1.30	-66.70
197.0000	359.80	-67.10	221.0000	2.50	-67.10	245.0000	2.50	-67.10	269.0000	2.60	-67.60
293.0000	3.10	-67.10	317.0000	3.20	-66.90	341.0000	359.10	-66.90	365.0000	2.60	-66.80
389.0000	3.40	-67.00	413.0000	3.30	-66.70	437.0000	3.30	-66.70	461.0000	5.10	-66.60
485.0000	4.70	-66.40	509.0000	2.20	-66.30	533.0000	2.70	-66.30	557.0000	3.10	-65.80
569.0000	3.50	-65.70									

Detailed Lithology			Mineralization Data					Assay Data							
From	To	Lithology	From	To	Mineralization Type	Mineralization Style	Min %	Sample Number	From	To	Ni %	Cu %	Au gpt	Pt gpt	Pd gpt
0	17.00	**CAS, Casing**													
17.00	28.00	**KPd, Komatiite**													
28.00	28.20	**MD, Mafic Dike** hard, black, non-magnetic.													
28.20	36.00	**KPd, Komatiite** very broken and soft Kpd													
36.00	38.00	**FLT, Fault Zone**													
38.00	65.00	**KPd, Komatiite** very broken and soft Kpd													
65.00	96.80	**KPd, Komatiite** more competent rock													
96.80	97.80	**Kosx, Komatiite Spinifex** spinifex texture clearly visible.													
97.80	106.70	**KPd, Komatiite**													
106.70	111.40	**Kosx, Komatiite Spinifex**													
111.40	119.80	**KPd, Komatiite**													
119.80	123.10	**Kosx, Komatiite Spinifex**													

10.3 Drilling Pattern and Density

The plan position and a typical section showing the typical drilling pattern conducted at Hart are illustrated in Figure 10.2 and Figure 10.3.

Starfire and Canadian Arrow drilled 11 surface holes targeting near surface mineralization. The maximum depth below surface achieved was approximately 80 metres, although drilling typically targeted depths less than 60 metres below surface. Drilling was conducted on a very tight pattern with one, two, or three drill holes per set-up. These two phases of diamond drilling intersected what has been identified as the IF Zone, corresponding to Type Iva nickel mineralization (Lesher & Keays, 2002). The main zone was not intersected by this drilling.

Liberty drilled 104 core boreholes from surface in the period from 2005 and 31 December 2009. These holes were all drilled grid north, with dips angles ranging from79 to 45 degrees. Two to three boreholes were typically drilled from each set-up. Drilling was designed to achieve a drill spacing of between 20 to 30 metres for the upper part of the deposit (above 250 metres below surface), and 45 to 70 metres below 250 metres. The varying drill spacing was to ensure higher confidence in areas to be mined first, while also allowing an acceptable confidence in the delineation of the lower zone (Figure 10.3). Intersection widths in the lower zone are also larger, contributing to a sparser drill density.

It is the opinion of SRK that the drilling strategy and pattern have produced an adequate drill density to support resource estimation.

Figure 10.2: Plan Map Showing Drill Hole Collar Locations, Grid Layout, and Claim Outlines

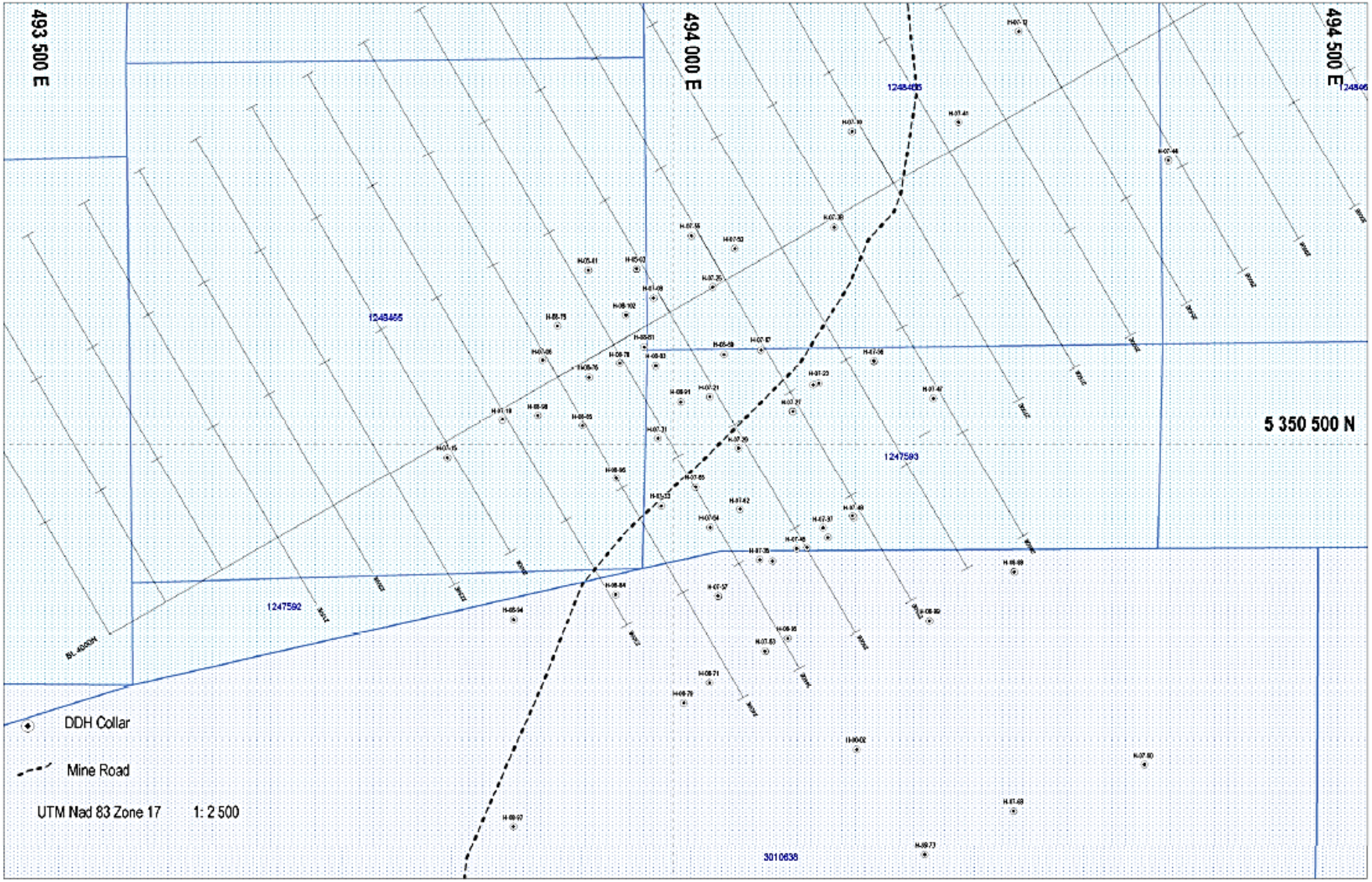
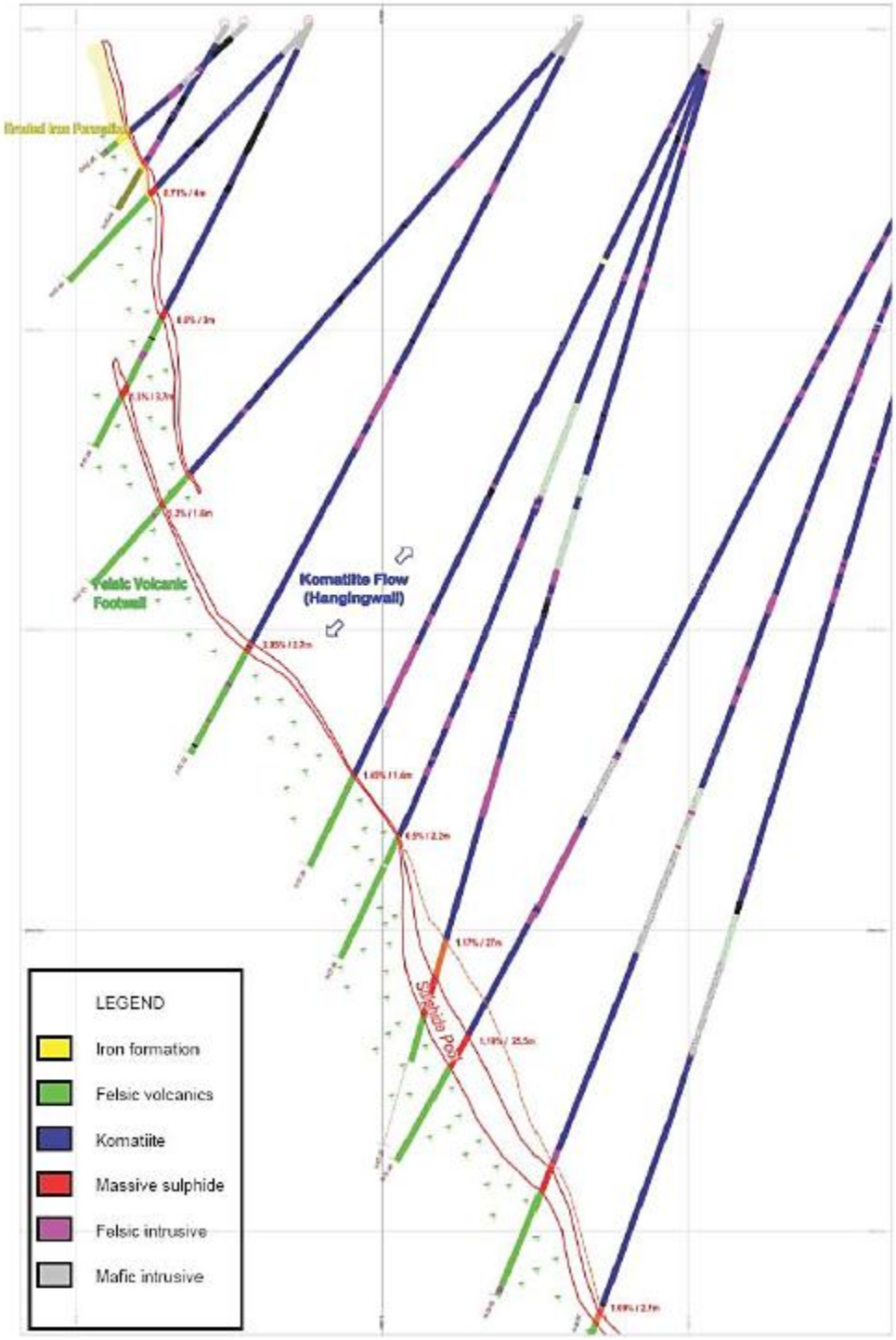


Figure 10.3: Idealized Section Showing Drill holes and Geology



11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

11.1 Sample Approach and Methodology

Data reviewed as part of this study and used for geological modelling and resource estimation represent an aggregated data collected during various phases of exploration drilling from 2005 to 2008. Exploration field procedures implemented by exploration staff for the 2005 drilling is unavailable. However, the historical portion of the total data set is relatively minor (only five drill holes) and does not have a material impact on the reported mineral resources.

SRK was able to review core handling, logging or sampling procedures implemented by Liberty. All drill core is transported to the secure Redstone core yard, near the main office, where it is logged. Core is marked for sampling and mechanically split lengthwise for assaying. Half of the split core is submitted for sample preparation and analyses (and sometimes for specific gravity), whereas the other half remains stored in the original core boxes. Drill core logging and sampling information are recorded into DH Logger (Century Systems) format, with adequate detail on lithology and mineralization. Assay results for nickel (percent), copper (percent, gold (gpt), platinum (gpt), and palladium (gpt) are recorded adjacent to lithology descriptions. SRK notes that gold, platinum, and palladium have not been routinely sampled. An extract from the drill log for H-08-99 form 527.1 metres to 569 metres is provided in Figure 11.1.

Figure 11.1: Extract form Hart Drill Log for H-08-99 in DH Logger Format

Jul 31, 2008 LIBERTY MINES INC. **LIBERTY MINES DETAILED LOG** Page 5 of 5

Hole Number: **H-08-99** Units: METRIC

Detailed Lithology			Mineralization Data					Assay Data							
From	To	Lithology	From	To	Mineralization Type	Mineralization Style	Min %	Sample Number	From	To	Ni %	Cu %	Au gpt	Pt gpt	Pd gpt
527.10	534.50	**SMS, Semi Massive Sulphide** 40-60% Sulphides. **RQD** 527.00 - 536.00 : % RQD 98.00 % Recovery 100.00						E106279	527.10	528.00	1.1800	0.0800			
								E106280	528.00	529.00	1.4100	0.1400			
								E106281	529.00	530.00	1.4000	0.0800			
								E106282	530.00	531.00	1.4600	0.1000			
								E106283	531.00	532.00	1.5200	0.1100			
								E106284	532.00	533.00	1.5300	0.0600			
								E106285	533.00	534.00	1.2400	0.1100			
								E106286	534.00	534.50	1.5100	0.0800			
534.50	535.00	**MS, Massive Sulphide** cba 40 degrees, massive Ni Sulphides, tested positive with xray gun for Ni. **RQD** 527.00 - 536.00 : % RQD 98.00 % Recovery 100.00						E106287	534.50	535.00	3.3800	0.0800			
535.00	569.00	**FV, Felsic Volcanic** foliated, 1% fe-sulphides. **RQD** 527.00 - 536.00 : % RQD 98.00 % Recovery 100.00						E106288	535.00	536.00	0.0900	0.0050			

RQD

From	To	Drill Length	Recovered Length	Piece Length >10cm	Recovery %	RQD %	Description
527.00	536.00	9.00	9.00	8.82	100.00	98.00	

11.2 Sampling Protocols

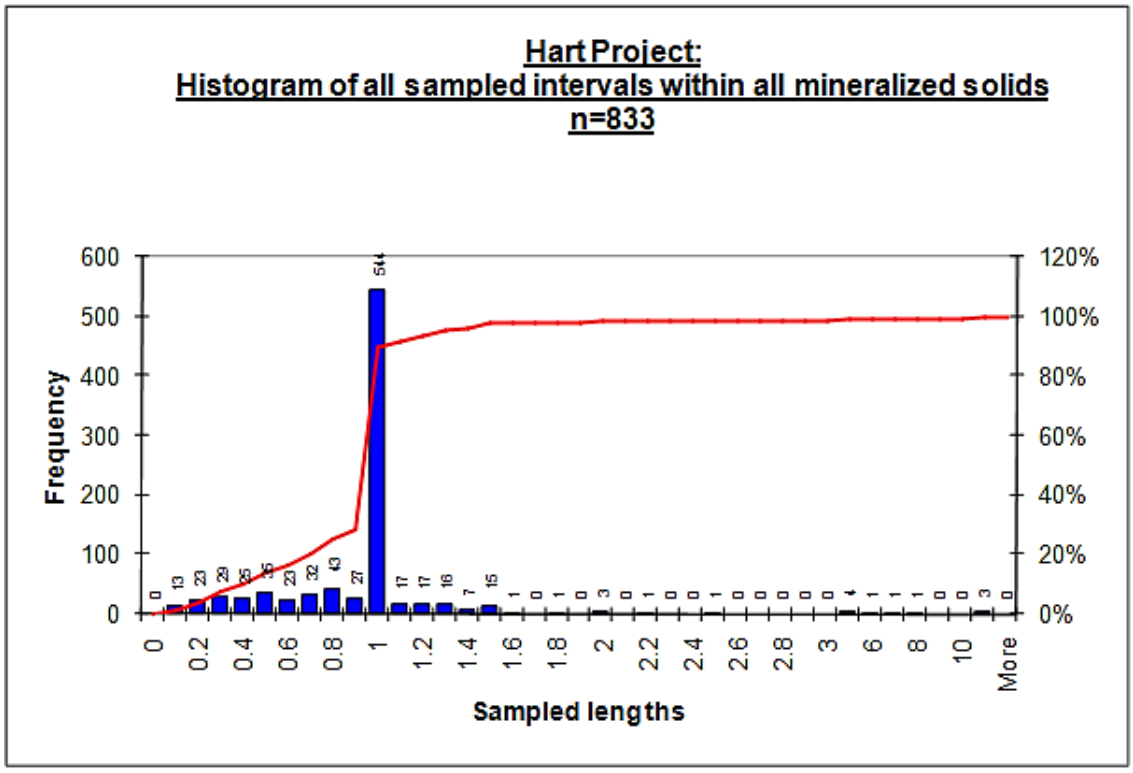
Summary statistics for sample lengths for the total Liberty drilling sampled intervals within mineralized solids at Hart is shown in Table 11.1. It is noted that the mean sample length for the Liberty drilling sampling within the modeled mineralized solids is 0.96 metres. During 2007-2008, Liberty sampled all mineralized core intercepts, including a footwall sample below the massive sulphide basal contact as well as continuous sampling over all visibly mineralized sulphides in the overlaying disseminated sulphide zone. Records of sampling protocols for 2005 (and prior to that) sampling programs are unavailable. Only sample records from 2005 to 2008 were used for resource estimation.

A histogram illustrating the sampling intervals within all the modeled mineralized solids at the Hart project is shown in Figure 11.2. It can be noted that about 90 percent of sample intervals are one metre in length or less.

Table 11.1: Statistics of Sampled Drilling Lengths within Modelled Mineralized Solids at the Hart Project

Statistic	Length
Mean	0.96
Standard Error	0.02
Median	1.00
Mode	1.00
Standard Deviation	0.73
Sample Variance	0.54
Kurtosis	113.54
Skewness	9.45
Range	10.98
Minimum	0.02
Maximum	11.00
Sum	848.27
Count	883

Figure 11.2: Histogram of Sampled Lengths within the Modeled Mineralized Solids



11.3 Sample Preparation and Analyses

Information regarding the historical sample preparation, analyses, and procedures is not available to SRK. However, they represent a very small portion of the total assay data and are not considered to have a significant impact on the overall database. Summarized information regarding Liberty sample preparation and analyses is documented here.

The primary laboratory used by Liberty for drill core analyses is the accredited ALS Chemex Laboratory. Samples submitted for assaying were prepared at the Timmins sample preparation facility and subsequent analyses were performed at the ALS Chemex North Vancouver laboratory. Total turn-around time is reported to be approximately four weeks.

ALS Chemex North Vancouver laboratory is accredited to ISO 9001 by QMI and ISO 17025 by the Standards Council of Canada for a number of specific test procedures, including fire assay for gold with atomic absorption and gravimetric finish, multi-element inductively coupled plasma optical emission spectroscopy (ICP-AES) and atomic absorption assays for silver, copper, lead, and zinc. ALS Chemex Laboratories also participate in a number of international proficiency tests, such as those managed by

CANMET and Geostats. At ALS Chemex, core samples were prepared using industry standard preparation procedures.

After reception, samples were organized into batches and weighed (method code LOG-22). Samples were than crushed to 70 percent passing below two millimetre mesh screen (CRU-31). A sub-sample of up to 1,500 grams was prepared using a riffle splitter (SPL-21) and pulverized to 85 percent passing below 75 microns (PUL-31).

Generally analyses are conducted for only nickel and copper, with analyses for platinum, palladium, and gold conducted only by request. The assay method used for base metals is aqua regia digestion followed by fusion and AAS (analytical code AA46). Analyses for precious metals are reported from an aqua regia leach and using conventional inductively coupled plasma optical emission spectroscopy (ICP-AES) analyses (analytical code ME-ICP41).

Analytical results are communicated by ALS Chemex to Liberty electronically with data directly updated to the Century Systems database. Certificates of Analyses are received for all assay data and visually checked against the original digital data. The original pulps are stored for 90 days subsequent to the submission of the Certificates of Analyses, thereafter they are returned to site on request for storage.

11.4 Security - Quality Assurance and Quality Control Program

Quality control measures are typically set in place to ensure the reliability and trustworthiness of exploration data. This includes written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management, and database integrity. Appropriate documentation of quality control measures and analysis of quality control data are an integral component of a comprehensive quality assurance program and an important safeguard of project data.

Aspects of the quality control measures implemented by Liberty have been reviewed by SRK. It is SRK's opinion that recent quality control measures implemented and documented by Liberty, generally meet industry best practices. Analytical quality control measures typically involve internal and external laboratory measures implemented to monitor the precision and accuracy of the sampling, preparation and assaying process. They are also important to prevent and monitor the voluntary or inadvertent contamination of samples. Assay certificates and Quality Assurance and Quality Control reports from ALS Chemex were made available to SRK, who noted that internal and external laboratory control measures were in place.

In addition to the quality assurance measures taken by ALS Chemex, a series of external analytical quality control measures were implemented by Liberty. This includes

the use of sample blanks and quality control samples inserted at approximately every 10 to 20 samples (approximately two per batch).

Certified blank samples are used by Liberty. These blanks have recently also been verified by Liberty, by sending 10 blank samples to the SGS Laboratory at Lakefield. Nickel and copper assay results for the blank samples are shown in Figure 11.3. A slight variance is noted in a limited number of samples available.

Three commercial certified reference material samples (LBE-1, LBE-2, and LBE-3) were used by Liberty. Reference samples LBE-1 and 2 were produced from Redstone Mine material, whereas LBE-3 was produced from material from the Montcalm Mine near Timmins, Ontario. Assay results for the certified reference material samples are summarized in Figure 11.4. The recommended values for the copper and nickel reference materials are as follows:

	Ni%	Cu%
LBE-1	1.090	0.071
LBE-2	6.440	0.200
LBE-3	1.540	0.780

Figure 11.3: Plot for Blank Control Nickel and Copper Samples used by Liberty

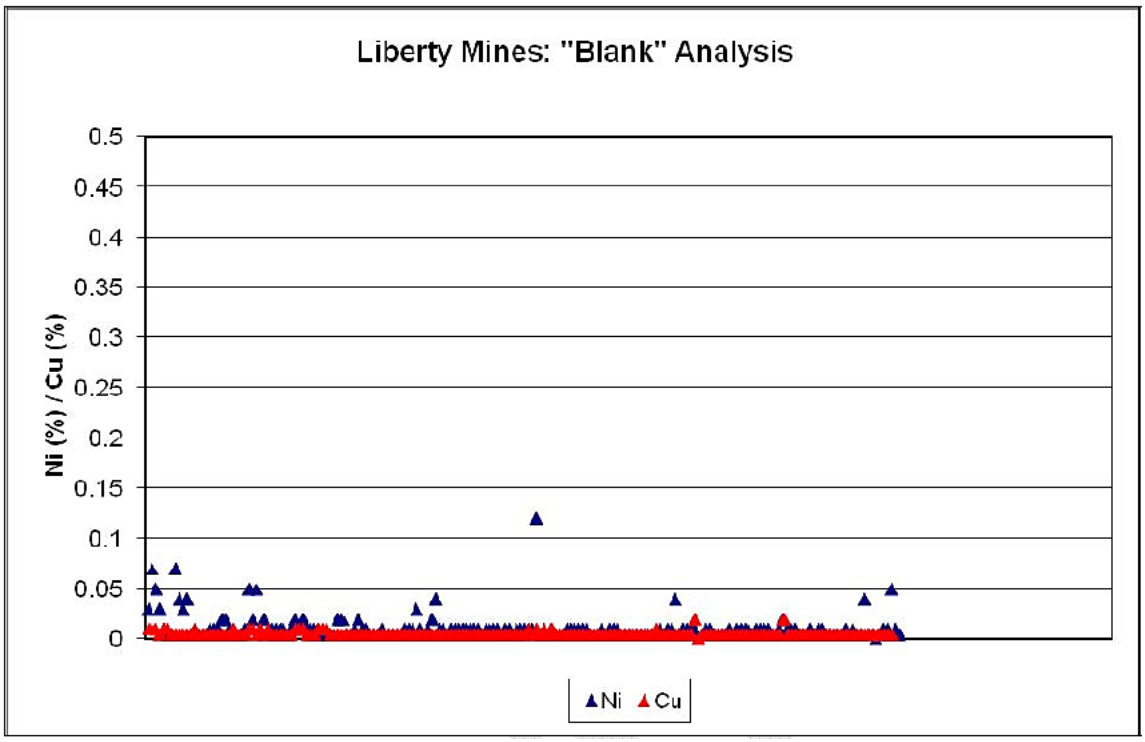
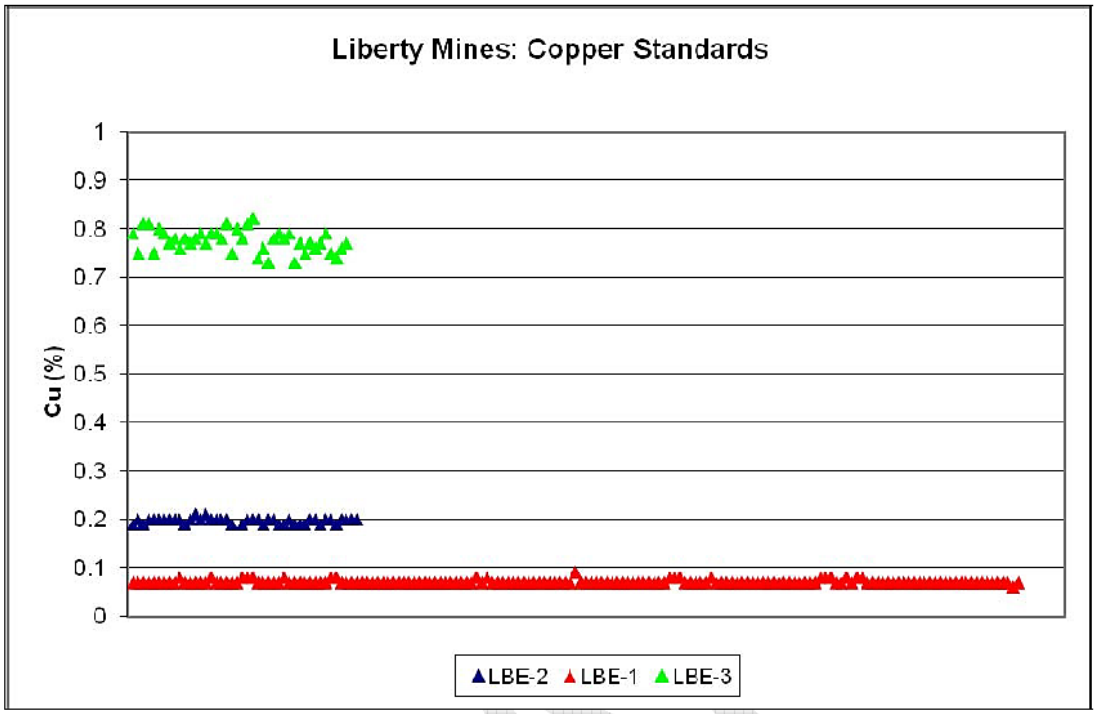
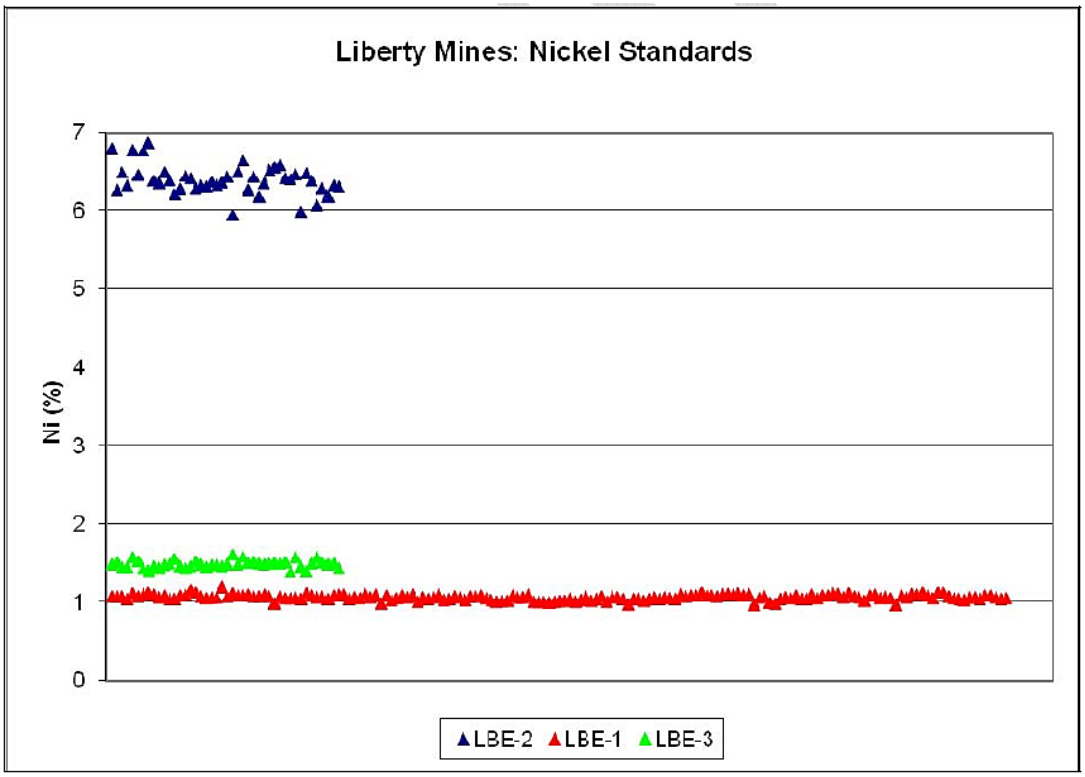


Figure 11.4: Plot for the Control Nickel and Copper Samples used by Liberty (top-copper, bottom – nickel)





11.5 Specific Gravity Database

Specific gravity measurements were collected during the Liberty core drilling program in 2007 and 2008. No reliable specific gravity data exists for the 2005 drilling program.

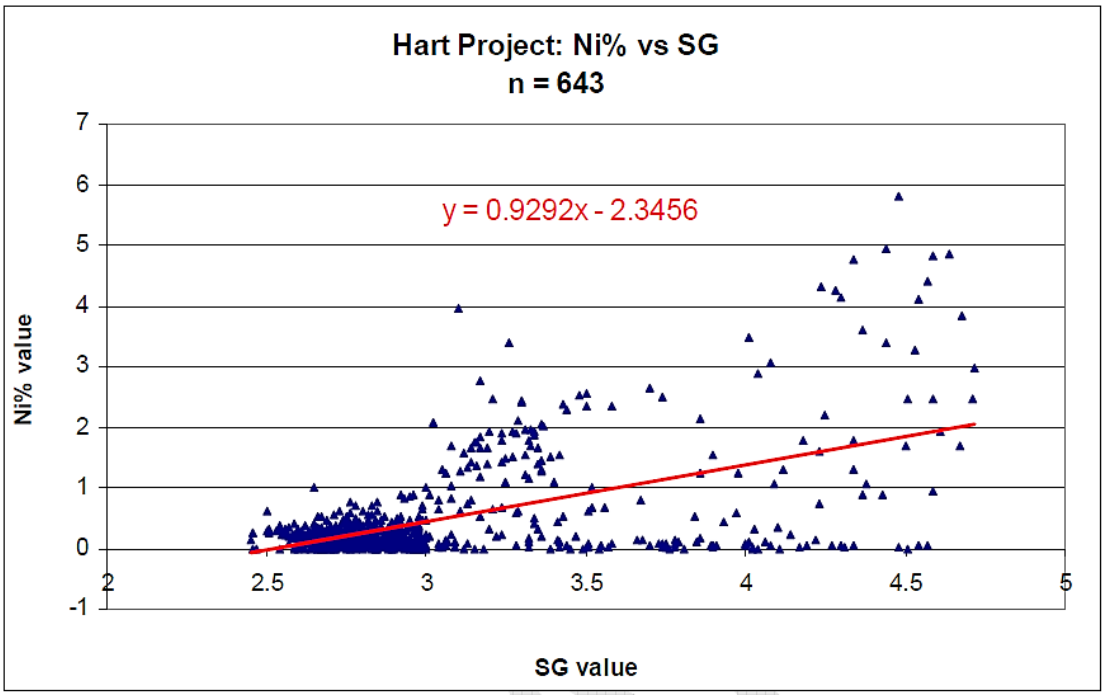
A total of 643 specific gravity determinations are available for the Hart Project. From within the nickel-copper sulphide mineralization considered for resource estimation, 231 determinations were made. All specific gravity measurements were made by ALS Chemex from core pulp samples, using a pycnometer (Method Code OA-GRA08b). The statistics of this dataset available for the Hart Project is summarized in Table 11.2. This table differentiates between the three sulphide mineralization types (iron formation, massive, and disseminated). The mean specific gravity for each type was used to estimate tonnages.

Table 11.2: Summary of Specific Gravity Data (by sulphide mineralization type)

Statistic	Iron Formation	Massives	Disseminated
Mean	4.00	3.47	2.82
Standard Error	0..13	0.05	0.02
Median	4.05	3.30	2.78
Mode	n/a	3.17	2.78
Standard Deviation	0.41	0.55	0.16
Sample Variance	0.17	0.30	0.02
Kurtosis	0.96	-0.33	3.47
Skewness	-1.09	0.92	1.68
Range	1.30	2.07	0.76
Minimum	3.13	2.65	2.61
Maximum	4.43	4.72	3.37
Sum	39.98	436.87	267.57
Count	10	126	95

Note: A general positive relationship exists between specific gravity and nickel grade (Figure 11.5)

Figure 11.5: Scatter Plot Showing the Relationship between Specific Gravity and Nickel Grade



12.0 DATA VERIFICATION

12.1 Introduction

The mineral resource model presented herein was prepared by SRK from exploration data provided by Liberty and a geological interpretation provide by Mr. Will Randall, P. Geo., a former employee of Liberty. As required under National Instrument 43-101, SRK has verified the quality and reliability of all data and geological interpretations provided by Liberty and considered for resource estimation.

After review by SRK, the geological model provided by Liberty was found to be reasonable and appropriate for resource estimation.

It is good practice for exploration staff to implement field procedures designed to verify the collection of exploration data and to minimize the potential for inadvertent data entry errors. SRK was unable to comment on the procedures adopted prior to 2007. SRK was however able to review the procedures adopted by Liberty exploration staff since 2007, during which most of the exploration data for the Hart Project was collected (refer to **Error! Reference source not found.**.

12.2 Control Sampling Assay Protocols

Control sampling procedures applied by Liberty at Hart include techniques such as the following:

- Insertion of routine blank samples to check for possible sample contamination during the preparation and assaying process;
- Application of appropriate grade certified control samples (standards);
- Replicate analysis on a second split of the pulverized sample at the laboratory;
- Duplicate analyses of selected samples;
- Sieve tests to verify the grinding on the pulp required for assaying;
- Validation of the assay results in the database compared with the original assay certificates; and
- The Century Systems database system used by Liberty is more than just a database; it is a management tool that combines borehole logging and assay data in a way that integrates seamlessly with Datamine Studio. Century Systems has built-in data verification tools, generating data input error and quality control reports for management action.

12.3 SRK Independent Verifications

During the site visit, SRK was able to verify many of the surface drill collar positions and review most of the exploration protocols and procedures used by Liberty exploration staff. SRK found that these protocols and procedures generally meet industry 'best practices'. In addition SRK inspected core from five drill holes drilled by Liberty in 2008. Generally logging in the digital database compares well to what SRK observed in the drill core.

Assay results were compared to actual core intersections and a good correlation between sulphide mineralization and higher grades was observed.

SRK also collected seven core samples for independent verification analyses. Care was taken to replicate sampled intervals for various types of sulphide mineralization (low and high grade nickel mineralization). The verification samples were specifically collected to attest to the existence of nickel and copper mineralization on the Hart property.

The SRK samples were submitted SGS Laboratories in Toronto for independent analyses using a 'near total' four acid digestion followed by ICP-AES (analytical code ICP90Q). Liberty used an aqua regia digestion followed by atomic absorption finish. The comparative results are summarized in Table 12.1 and graphically in Figure 12.1. SRK regards the variance in nickel and copper grades in Table 12.1 to be acceptable and typical for deposits of this nature.

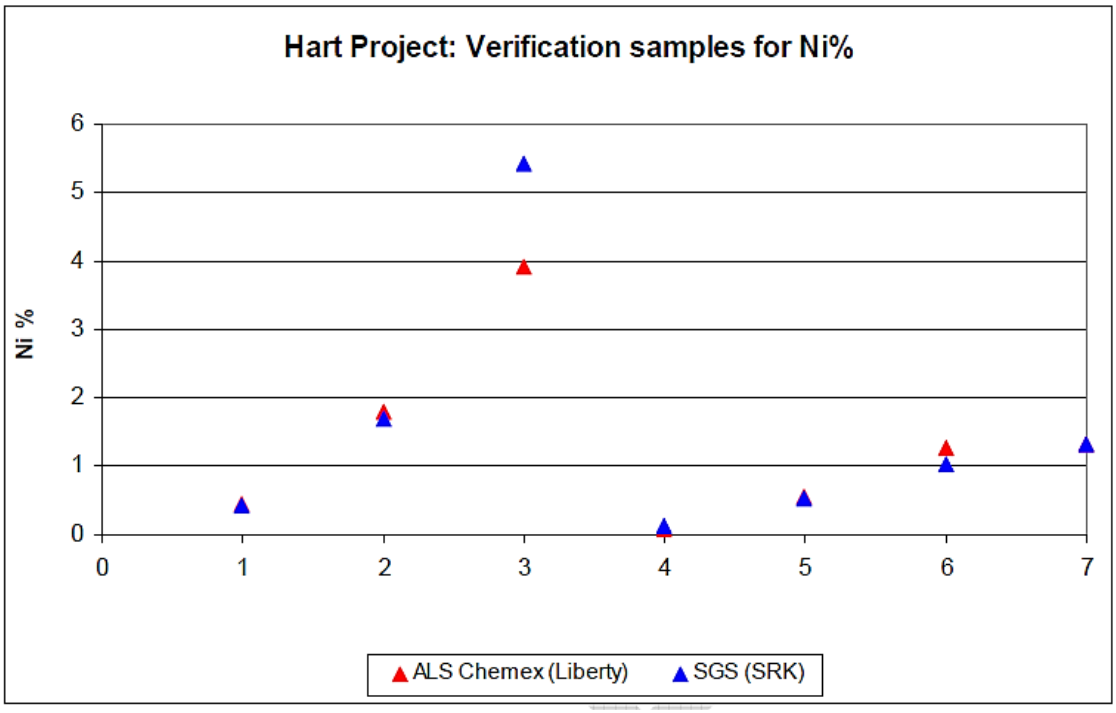
The verification study showed that although average assays are similar, for higher nickel grades SGS results tend to be higher, whereas at lower nickel grades ALS Chemex yield marginally higher results. These variations are however not considered significant.

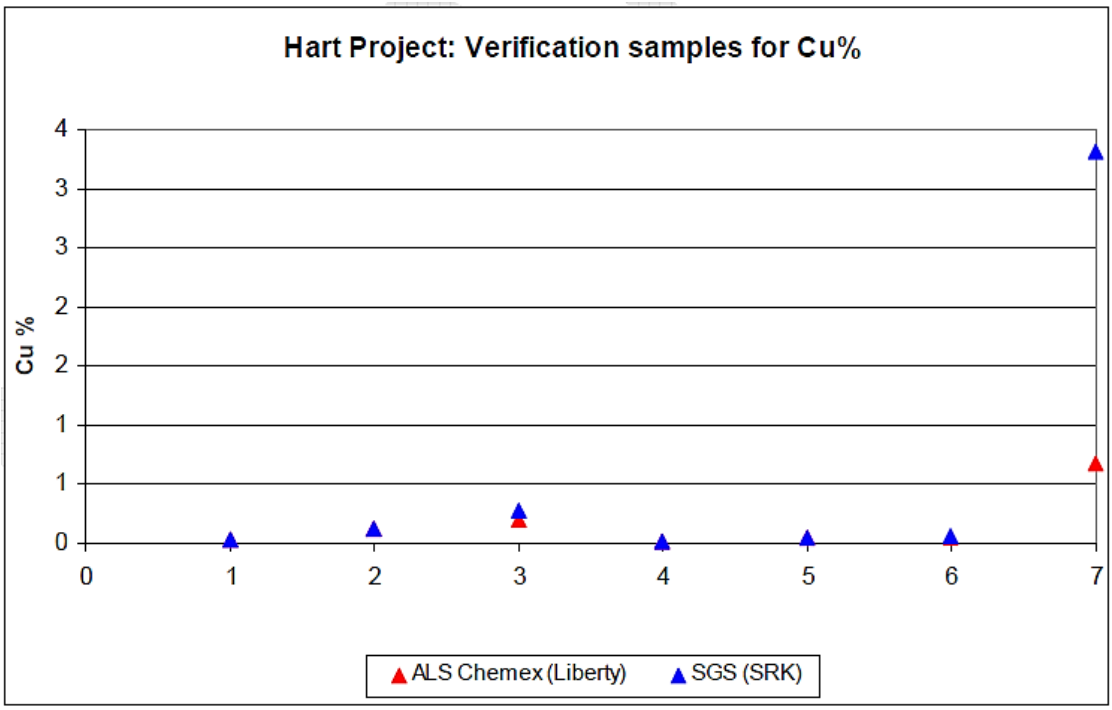
In the opinion of SRK, the analytical results delivered by ALS Chemex are sufficiently reliable for the purpose of resource estimation.

Table 12.1: Comparative Analyses for SRK Check Assay Verification

Hole #	Sample #	Drill Depth (m)	SGS ICP 90Q		ALS Chemex AA46	
			Ni%	Cu%	Ni%	Cu%
H07-29	E96149	276.0 – 277.0	0.43	0.03	0.44	0.03
	E96150	277.0 – 277.2	1.69	0.12	1.81	0.12
	E97301	277.2 – 277.6	5.42	0.27	3.90	0.20
H07-55	E107844	61.0 – 61.6	0.13	<0.01	0.09	0.01
	E107845	61.6 – 62.6	0.54	0.04	0.55	0.04
H07-50	E105715	451.0 – 452.05	1.03	0.06	1.27	0.05
	E105716	452.05 – 452.2	1.31	3.31	1.31	0.67
		Average	**1.51**	**0.55**	**1.34**	**0.16**

Figure 12.1: Graph Showing Comparative Ni% and Cu% Assays for SGS (ICP90Q) and ALS Chemex (AA46)





13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

It is envisioned by Liberty that the sulphide mineralization from the Hart property could be processed at the Redstone Mill, located at the Redstone Mine site approximately 25 kilometres southeast of Timmins, Ontario. This modern nickel concentrator was commissioned in July 2007 with a designed capacity of 2,000 tonnes per day of nickel sulphide ore with a high MgO content.

Liberty initiated test work (open cycle test at different grades on representative core samples) on Hart sulphide mineralization to assess the compatibility of the sulphide mineralization with the Redstone mill process. The test work which was done internally, as well as completed mineralogical petrographic reports, is under review by an independent qualified person. At the time this report was prepared, results of the review had not yet been received.

Figure 13.1: Redstone Mill

14.0 MINERAL RESOURCE ESTIMATES

14.1 Introduction

The Hart nickel deposit has a historical resource of 770,000 tonnes grading 0.9 percent nickel (Ministry of Northern Development and Mines Resident Geologist Report, 1999). The details of how this historical resource estimate was derived are uncertain. This historical mineral resource estimate was prepared prior to the adoption of NI 43-101 and should not be relied upon.

SRK prepared a mineral resource estimate for the hart Project in accordance with NI 43-101 guidelines in June 2008. Additional resource data has not been generated since that estimate. This section describes the resource estimation process followed by SRK in June 2008.

This section summarizes the data, methodology and parameters used by SRK to estimate the mineral resources for the Hart deposit. The mineral resource estimates considers all Canadian Arrow and Liberty drilling data acquired during the period 2005 to 208. The limited drilling data collected prior to this period was not considered.

All resource estimation work was completed by Glen Cole, P. Geo. from data received from William Randall, P. Geo. from Liberty. The resource estimation and accompanying technical report was reviewed by Dr. Jean-François Couture, P. Geo. of SRK.

The mineral resources presented herein are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into mineral reserve.

Datamine Studio Version 3 was used to construct the geological solids. Datamine Studio Version 2.1 was used to build composites, the block model, to run the grade interpolation, and to estimate and tabulate mineral resources. Isatis Version 5.1.7 was used to undertake geostatistical analyses of the dataset and to generate variograms for nickel and copper.

14.2 Database Validation

Data used for resource estimation was validated as discussed in Section 12 of this report. The database records provided to SRK by Liberty were audited against digital log sheets, sections, and plans. Database records reflect original data. Lithology codes applied are the standardized codes used by Liberty exploration staff on all Liberty projects in the Shaw Dome being based on reasonable geological criteria suitable for the local variances within this type of deposit. These lithology codes facilitated the geological modelling process.

The Excel and Datamine format database provided to SRK was checked for any missing data, overlapping intervals, and for duplicated data inputs. The assay database comprises of two data types viz. drill data as well as limited surface trench data.

14.3 Resource Estimation

14.3.1 Database

The database used for resource estimation includes exploration drilling data collected during three exploration programs conducted during the period 2005 to 2008. The Liberty drilling database is summarized in Table 10.1. The total database comprises 3,209 sample records from115 drill holes and five surface trenches.

The Hart borehole database contains validated information about drill collar location, assay results for nickel and copper, lithology, and surveying for all Liberty and Canadian Arrow drill holes. Additional information available in the database includes structural, rock quality determination, core recovery, and specific gravity data. SRK is of the opinion however that the Hart dataset is adequate in detail, size, and quality for resource modelling and grade estimation for this style of sulphide mineralization.

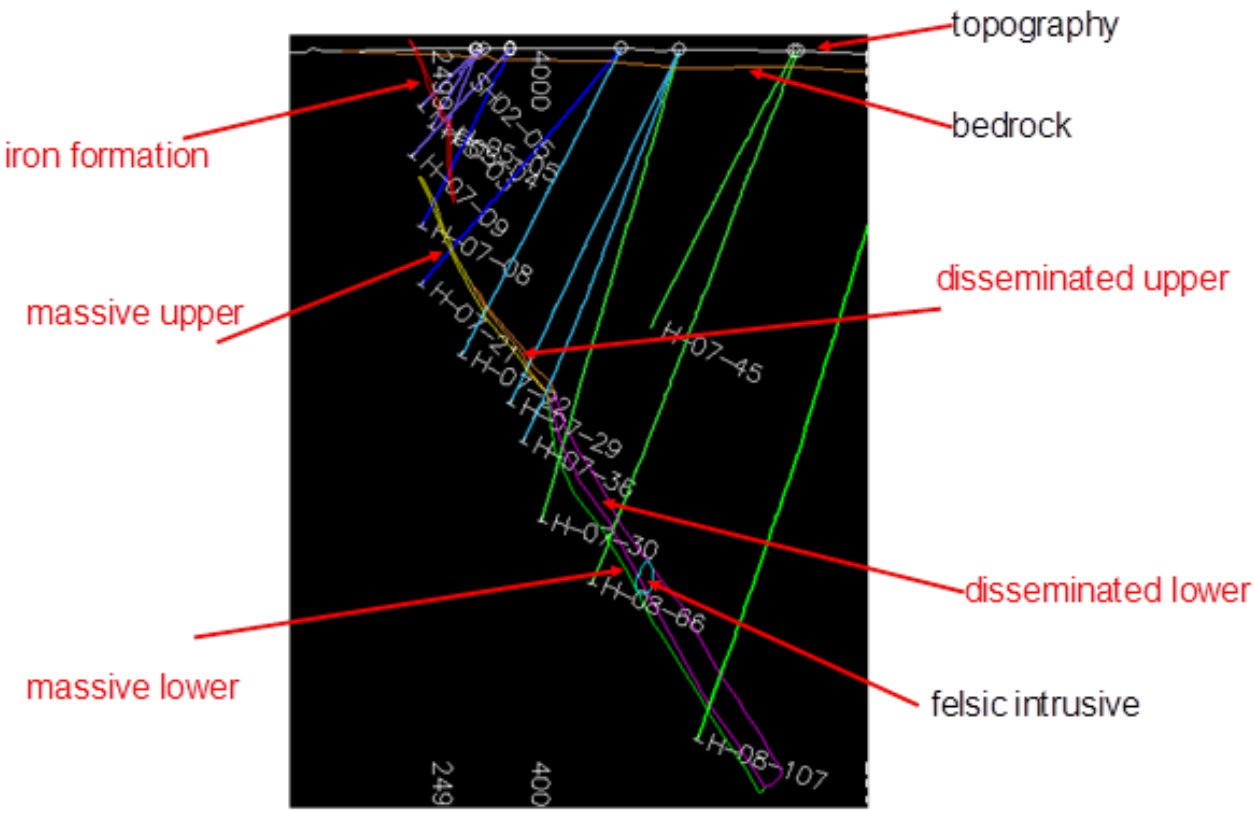
14.4 Solid Body Modelling

Nickel (and copper) grades are spatially related to three kinds of sulphide mineralization. The highest and most continuous nickel mineralization is associated with the basal massive sulphide mineralization horizon. Disseminated sulphides overlay the massive sulphide mineralization forming discontinuous bodies with highly variable nickel grades. Locally, nickel sulphide also occurs in an iron formation.

Resource estimation was constrained to three 3D wireframes interpreted from the drilling data:

- Iron formation hosted mineralization;
- Massive sulphide mineralization, subdivided into upper and a lower subdomains;
- Disseminated sulphide mineralization, generated using a 0.3 percent nickel threshold, also divided into upper and a lower sub-domains.
- The distinction between upper and lower sub-domains is defined by an inferred structural break in the sulphide mineralization at an average depth of between 200 to 230 metres below surface. A simplified section and an oblique view illustrating all relevant wireframes constructed to constrain resource estimation are presented in Figure 14.1 and Figure 14.2.

Figure 14.1: Simplified Vertical Section (looking east) of the Hart Modelled Solids (mineralization solids in red)

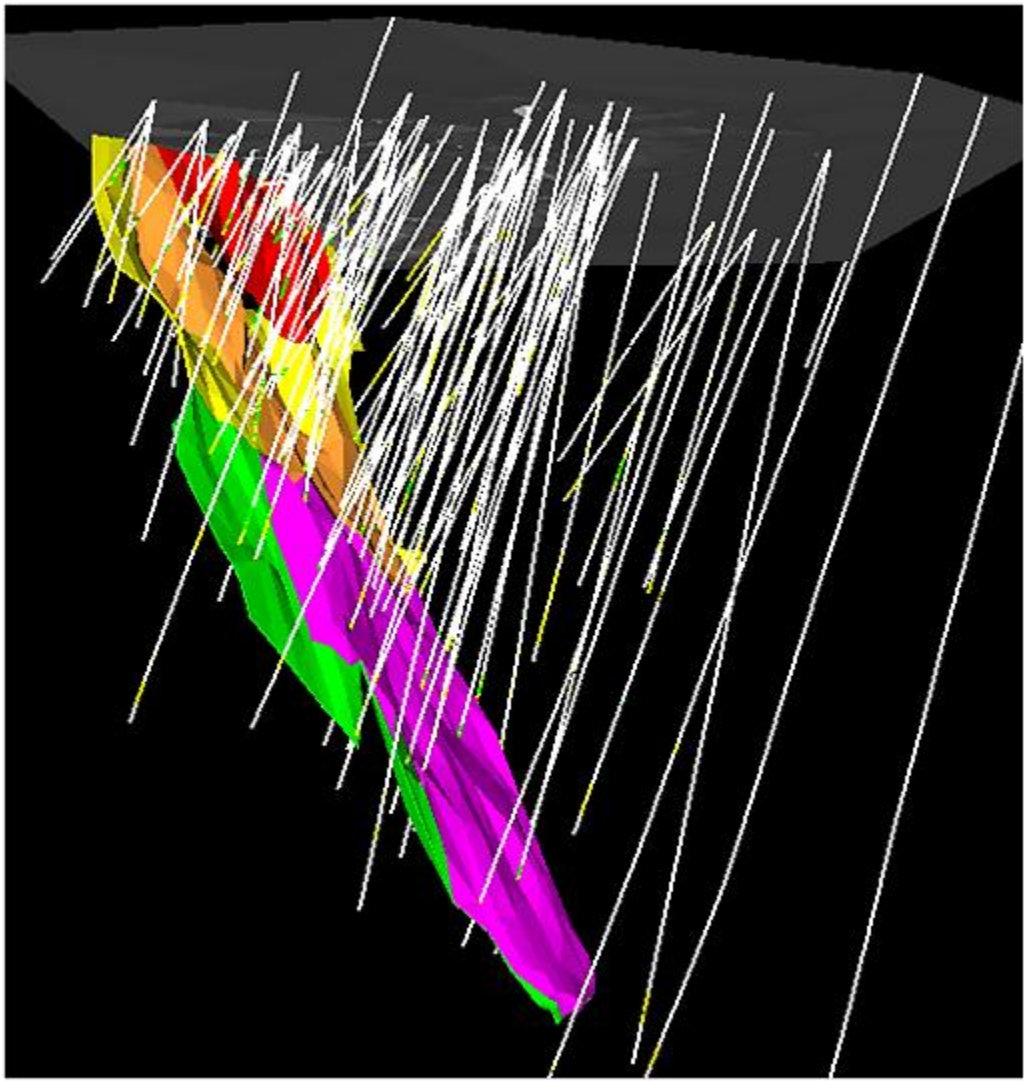


A topographic surface has been modeled from surveyed data by Liberty. Drill collars fit well to this topography surface. A bedrock surface, which is usually less than five metres below surface, has also been modeled. All resource wireframes were cut against the bedrock surface.

A felsic intrusion cross cuts the modeled ore domains and has been modeled from drill hole data. The volume of this intrusion was removed from the resource volumes.

It is recognized that this geological model is a simplification of the reality at Hart. The model should be seen as a starting point upon which to attach more detail as this becomes available. It is particularly important that the structural geology aspects be investigated during future drilling programs to improve the understanding of the geometry of the sulphide mineralization.

Figure 14.2: Oblique View of the Modeled Mineralization Solids at Hart in Relation to Informing Drill hole Data (looking northeast)



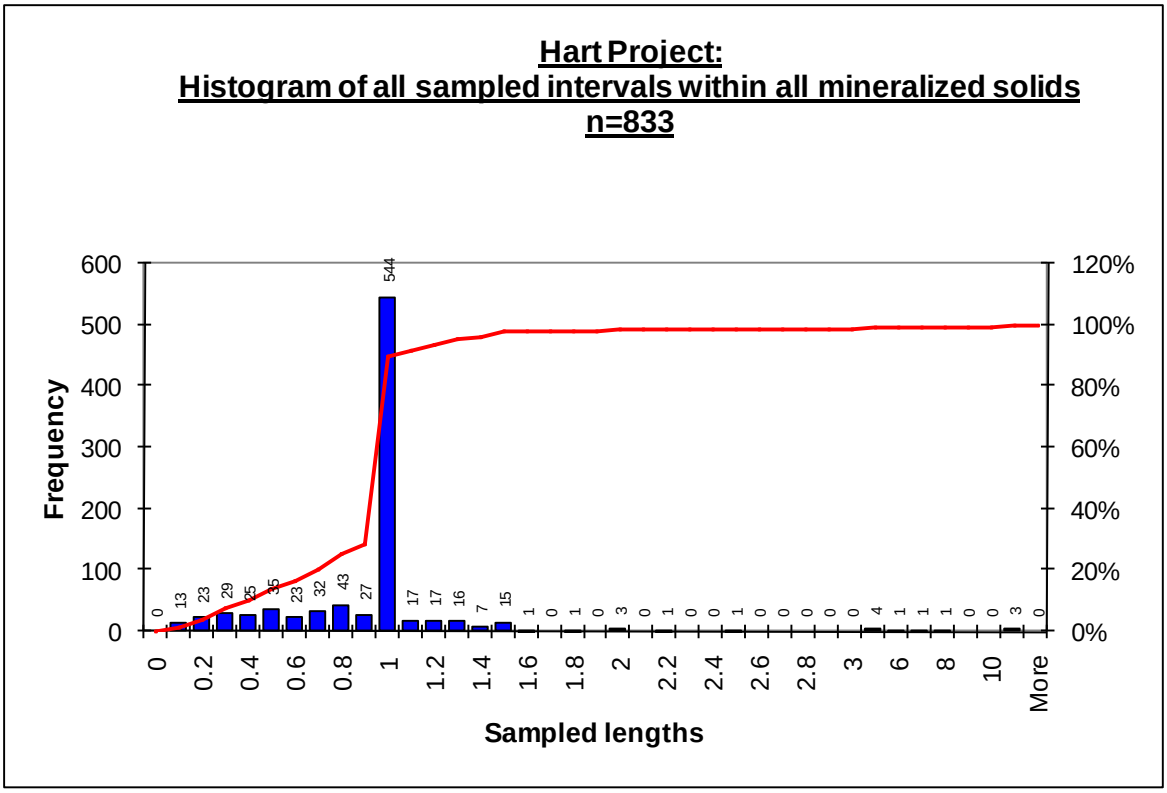
Weathered surfaces have not been modeled, as all drilled material is considered fresh by all available logging detail and by site inspection of the Liberty core by SRK.

14.5 Compositing

Composite files were created using uncapped values starting at the drill hole collar position and defined within each sulphide mineralization type.

An optimum composite length of one metre was chosen for the input data within the modeled mineralized solids. Composites were extracted to a workspace for statistical analyses and grade interpolation. The core sample interval lengths are summarized in Figure 14.3. A value of zero was assigned to unsampled intervals. The mean sample length is 0.96 metres (mode = one metre) with a maximum of eleven meters.

Figure 14.3: Histogram of all Sampled Intervals within all Mineralized Solids (n = 833)



After excluding all data within modeled dykes, composited datasets were generated for the modeled sulphide subdomains. There are 77 composites in the iron formation subdomain, 109 in the Upper Massive, 163 in the Lower Massive subdomain, and 251 and 297 composites in the Upper and Lower Disseminated subdomains, respectively.

14.6 Statistics

Basic statistics for nickel and copper composites within the sulphide subdomains are presented in Table 14.1. This table compares composited metal grades with the original assay data and capped composite. The statistical signature of each of the three subdomains is substantially different, justifying the decision to separate each subdomain for geostatistical analyses.

Histograms for composited nickel and copper within the five modeled mineralized zones are provided in Appendix B.

Table 14.1: Descriptive Statistics (original, composited and capped) for Composited Ni% and Cu% Data from the Five Modeled Geostatistical Domains

Basic Statistics Tabulations															
	Iron Formation			Upper Massives			Lower Massives			Upper Disseminated			Lower Disseminated		
	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped
Nickel %															
Mean	0.69	0.68	0.68	1.04	1.09	1.08	1.68	1.71	1.70	0.33	0.30	0.30	0.31	0.27	0.27
Standard Error	0.05	0.05	0.05	0.08	0.08	0.08	0.08	0.09	0.09	0.02	0.01	0.01	0.02	0.01	0.01
Median	0.61	0.61	0.61	0.80	0.88	0.88	1.61	1.57	1.57	0.31	0.30	0.30	0.27	0.26	0.26
Mode	0.31	0.00	0.00	0.80	0.39	1.45	0.01	0.00	0.00	0.30	0.00	0.00	0.01	0.00	0.00
Standard Deviation	0.45	0.41	0.41	0.94	0.86	0.82	1.12	1.11	1.09	0.23	0.17	0.17	0.25	0.24	0.24
Sample Variance	0.21	0.17	0.17	0.89	0.73	0.67	1.26	1.23	1.19	0.05	0.03	0.03	0.06	0.06	0.06
Kurtosis	3.20	3.53	3.53	6.35	7.50	4.34	1.39	1.31	0.82	55.05	5.49	5.49	19.29	16.58	16.58
Skewness	1.36	1.31	1.31	2.06	2.06	1.64	0.99	0.96	0.85	5.81	1.09	1.09	3.52	2.87	2.87
Range	2.39	2.34	2.34	5.68	5.68	4.86	5.80	5.80	4.86	2.79	1.31	1.31	2.01	1.98	1.98
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	2.39	2.34	2.34	5.68	5.68	4.86	5.80	5.80	4.86	2.79	1.31	1.31	2.01	1.98	1.98
Sum	54.80	52.08	52.08	138.74	118.28	117.46	301.36	278.02	277.08	76.61	75.07	75.07	80.24	79.59	79.59
Count	80	77	77	133	109	109	179	163	163	234	251	251	257	297	297

Basic Statistics Tabulations															
	Iron Formation			Upper Massives			Lower Massives			Upper Disseminated			Lower Disseminated		
	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped	Original	Composited	Capped
Copper %															
Mean	0.06	0.06	0.06	0.08	0.07	0.07	0.12	0.12	0.11	0.02	0.02	0.02	0.02	0.02	0.02
Standard Error	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Median	0.05	0.05	0.05	0.06	0.07	0.07	0.11	0.11	0.11	0.01	0.01	0.01	0.01	0.01	0.01
Mode	0.04	0.05	0.05	0.01	0.02	0.02	0.11	0.11	0.11	0.01	0.01	0.01	0.01	0.01	0.01
Standard Deviation	0.05	0.04	0.04	0.08	0.06	0.06	0.10	0.09	0.07	0.03	0.02	0.02	0.03	0.02	0.02
Sample Variance	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Kurtosis	5.90	2.23	2.23	23.57	2.73	2.73	12.88	12.71	0.99	88.76	129.76	129.76	99.93	26.56	26.56
Skewness	20.5	1.19	1.19	3.73	1.37	1.37	2.93	2.69	0.94	8.97	10.01	10.01	8.79	4.10	4.10
Range	0.28	0.19	0.19	0.66	0.31	0.31	0.98	0.68	0.33	0.33	0.31	0.31	0.41	0.17	0.17
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	0.28	0.19	0.19	0.66	0.31	0.31	0.68	0.68	0.33	0.33	0.31	0.31	0.41	0.17	0.17
Sum	4.68	4.47	4.47	10.18	8.07	8.07	21.36	19.31	18.66	3.99	3.83	3.83	5.25	4.88	4.88
Count	80	77	77	133	109	109	179	163	163	234	251	251	257	297	297

Nickel and copper data are highly skewed with a dominance of lower values, within the disseminated sulphide and ironstone hosted domains. A more uniform grade distribution occurs in the massive sulphide domains. Copper values are however uniformly low in all mineralized domains.

14.7 Grade Capping

Based on careful examination of the combined composited nickel and copper datasets for all data within the modeled mineralized zones, and by consideration of the respective probability plots (see Figure 14.4), nickel and copper composites ere capped at 4.86 and 0.33 percent, respectively. Capping only impacts the lower and upper massive sulphide subdomains.

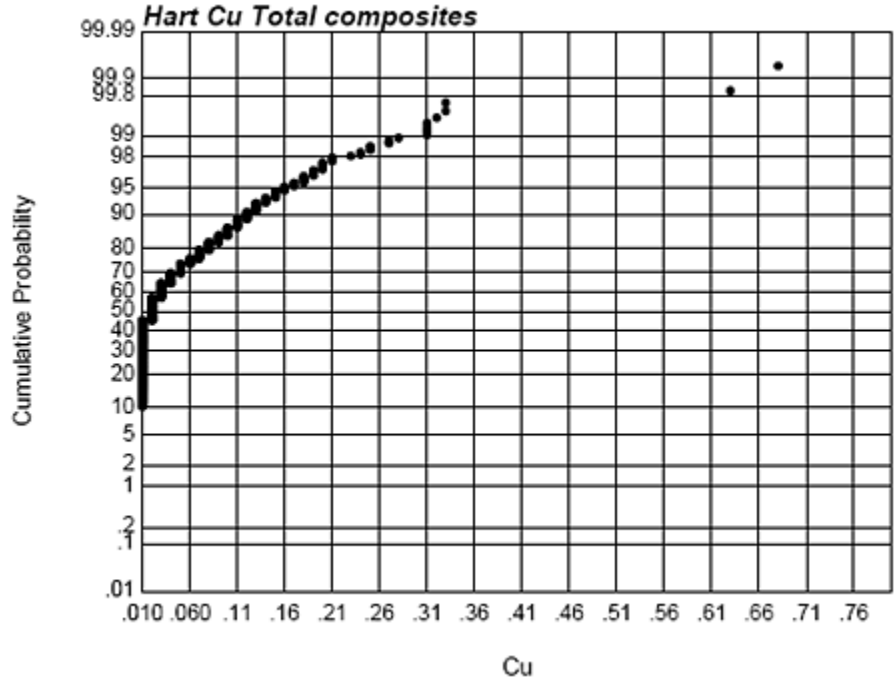
14.8 Variography

Isatis Software Version 5.1.7 was used to generate all variograms. Traditional experimental variograms were modeled from the capped composited datasets for the various mineralization domains (two massive sulphides and two disseminated sulphides, and one iron formation domain) for nickel and copper for all three principle directions.

A total of 30 variograms were then fitted, yielding the directional ranges listed in **Error! eference source not found.**. Based on the highly irregular variograms obtained from the Hart dataset, it was decided not to use kriging as a grade estimation technique, but rather to use an inverse distance square algorithm.

A single spherical structure variogram (including a nugget effect) was constructed and fitted for each direction (strike = N090, dip direction = N180 and normal to the reference plane) and inputted into the Datamine for grade estimation. These directions coincide with local modeled geological orientations, yielding optimal variograms. Slightly different search ellipses (ranges) were used for nickel and copper in the disseminated sulphide subdomains to reflect the different geological imprints compared to the massive sulphide subdomains. Variograms for all subdomains were modeled with the reference plane inclined at negative 60 degrees in the dip direction to conform to geological modelling.

Figure 14.4: Probability Plots for Composited Nickel and Copper for all Data Sources within Various Mineralized Zones



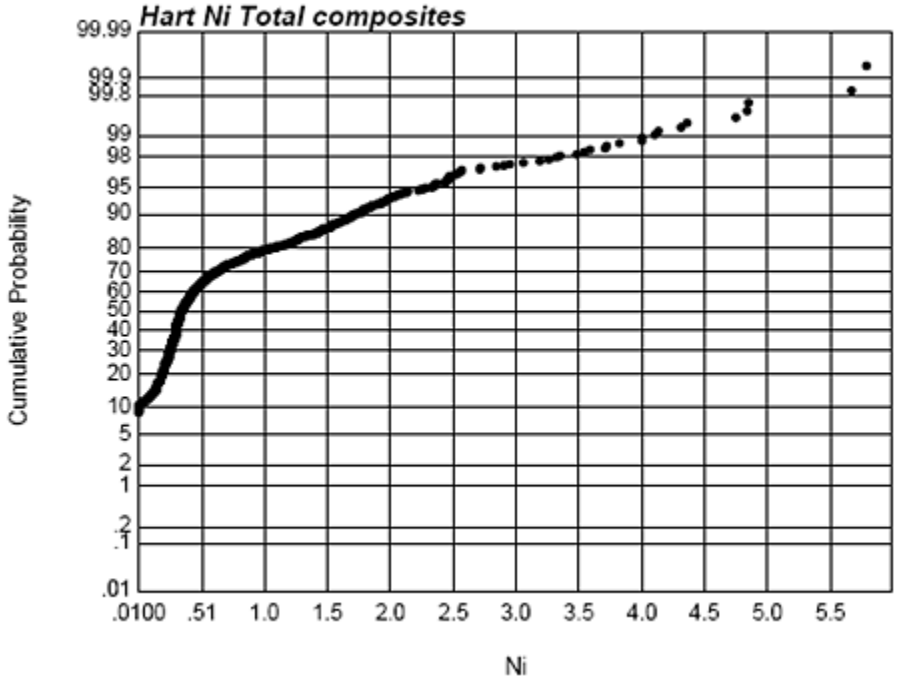


Table 14.2 Variography Analyses: Ranges for Nickel and Copper for all Modeled Directions and for all Modeled Mineralization Domains

Modeled Direction	Nickel (m)	Copper (m)
Iron Formation Domain		
Strike (90º)	45	50
Dip (180º)	45	55
Vertical	7	7
Massive Sulphide Domains		
Lower		
Strike (90º)	60	40
Dip (180º)	50	50
Vertical	10	10
Upper		
Strike (90º)	30	30
Dip (180º)	55	70
Vertical	10	10
Disseminated Sulphide Domains Lower		
Strike (90º)	25	70
Dip (180º)	30	45
Vertical	5	5
Upper		
Strike (90º)	45	35
Dip (180º)	35	40
Vertical	5	5

14.9 Block Model and Grade Estimation

Criteria used in the selection of block size includes the borehole spacing, composite assay length, a consideration of potential mining unit sizes as well as the geometry of the modeled mineralized zones. The block size was set at 2.5 m x 2.5 m in the easting, northing, and elevation directions respectively. The parameters of the Datamine block model constructed by SRK are presented in Table 14.3.

A three split Datamine sub-block routine was applied during block model construction (with a minimum block size of 0.31 m x 0.31 m x 0.31 m) to ensure that the modeled mineralized zones are adequately filled.

Block grade estimation was completed in a single pass using the search ellipse ranges defined by variography as outlined in the previous section. In addition, the minimum and maximum numbers of samples used for grade estimation were set at two and twenty respectively.

The block models were coded to differentiate between resource classes (see Section 14.11 below). Specific gravity values appropriate to the mineralization code were added to the model (as per Section 11.5). The block models were cut to only include modeled ore below the bedrock surface and the volumes occupied by felsic intrusions were excluded from tonnage estimation.

Table 14.3: Parameters of the Hart Block Model (constructed by SRK)

Aspect	Block Model
Block Origin X	2,330
Block Origin Y	3,805
Block Origin Z	1,715
Rows	110
Columns	140
Levels	238
Percent Model	No
Rotation	No

14.10 Model Validation

Global and local grade estimates were checked for appropriateness. Original nickel and copper drilled grades were compared with block grades on a section-by-section basis. Grade estimation by inverse distance squared was found to appropriately reflect general grade trends and appropriately correspond to proximal borehole grades. Other verification checks were also conducted to validate the integrity of the block model (including QQ plots and statistical reconciliations with the informing composited dataset).

14.11 Mineral Resource Classification

Mineral resources have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Bet Practice Guidelines". Mineral resources are not mineral reserves and do not have demonstrated economic viability.

SRK is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, or other relevant issues that could potentially affect this estimate of mineral resources. Mineral reserves can only be estimated based on the results of an economic evaluation a part of a preliminary feasibility study or a feasibility study. As such mineral reserves have not been estimated by SRK as part of the present assignment. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

Mineral resources for the Hart deposit have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (December 2005) by Glen Cole, P. Geo., an appropriate independent Qualified Person as defined by Ni 43-101.

Mineral resource classification is based on variography and on the confidence of geological interpretation and modelling. Both are directly related to the current drill spacing.

An Indicated Mineral Resource classification was assigned to blocks within the primary variography distance from sample points (per **Error! Reference source not found.**).

An Inferred Mineral Resource classification was assigned to blocks within twice the primary variography range from informing data.

14.12 Mineral Resource Statement

The Mineral Resources for the Hart nickel deposit are reported at a single cut-off of 0.46 percent nickel, that is considered by SRK and Liberty management to be achievable by a future underground mine, considering the nature of the nickel mineralization, its geometry, and the projected underground extraction scenario. This cut-off is primarily based on current mining experience at the comparable Redstone Mine.

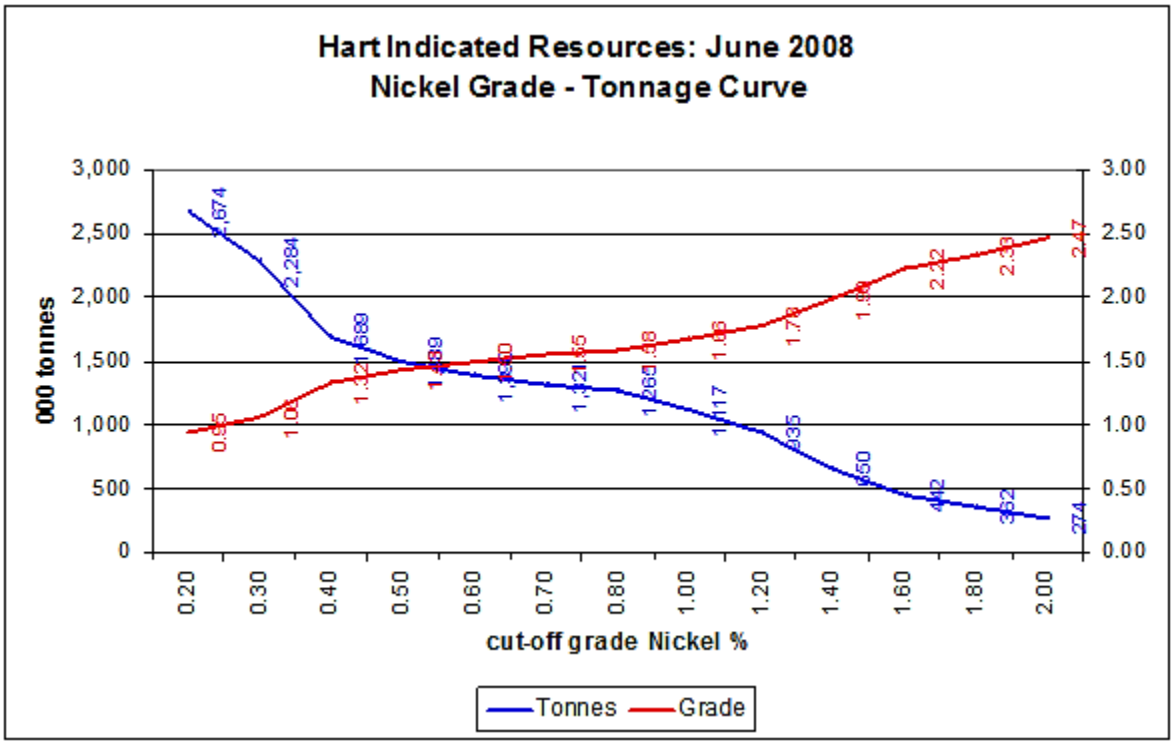
The Mineral Resources statement for the Hart nickel project is presented in Table 14.4. The numbers have been rounded to reflect the relative accuracy of the estimates. Tonnage and metal grades are sensitive to the cut-off grade. Grade tonnage curves are presented in Figure 14.5. Other sensitivity tables are presented in Appendix C.

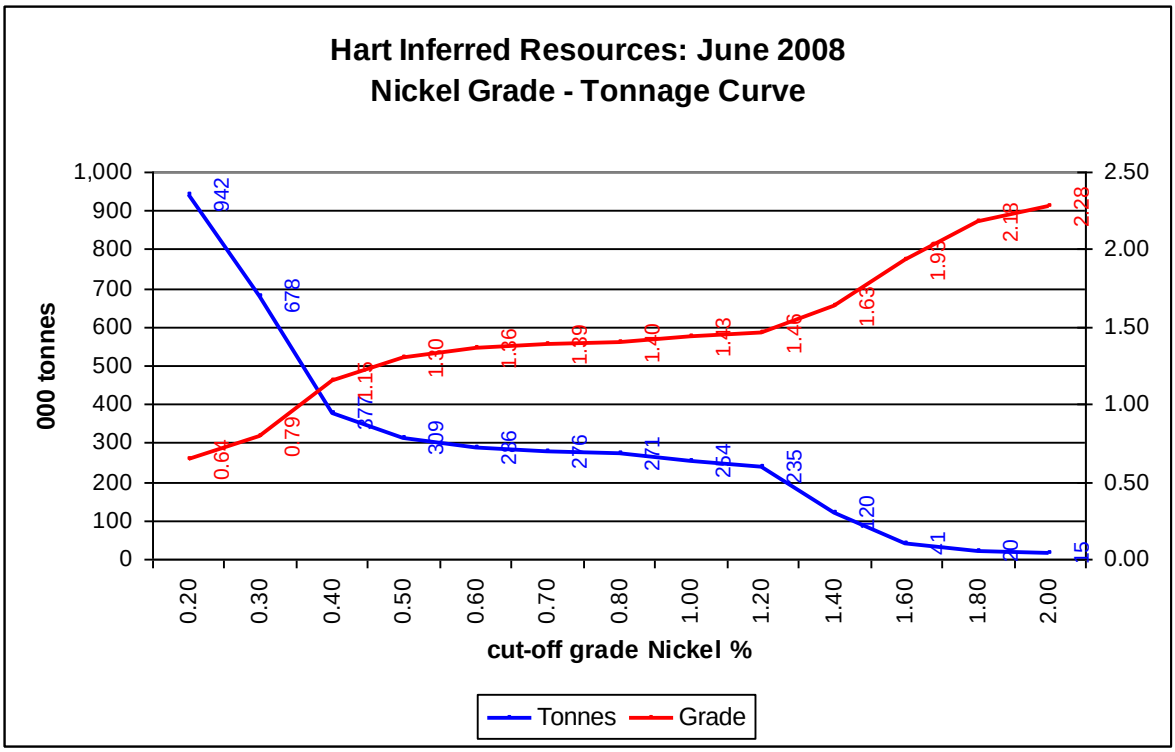
Table 14.4: Mineral Resource Statement*, Hart Nickel Deposit, Timmins, Ontario SRK Consulting 01 January 2010

Sulphide Zone	Classification	Tonnes (000's)	Nickel (%)	Copper (%)	Contained Nickel (lbs 000's)
IF Zone					
	Indicated	120	0.70	0.06	1,850
	Inferred	12	0.86	0.07	225
Massive Zone					
Lower	Indicated	999	1.56	0.11	34,352
	Inferred	228	1.40	0.09	7,044
Upper	Indicated	353	1.36	0.09	10,588
	Inferred	59	1.12	0.08	1,466
Disseminated Zone					
Lower	Indicated	60	0.63	0.04	838
	Inferred	22	0.52	0,02	255
Upper	Indicated	14	0.50	0.03	152
	Inferred				
Total					
	Indicated	1,546	1.40	0.10	47,779
	Inferred	322	1.27	0.08	8,990

*Reported at 0.46% nickel cut-off. All figures have been rounded to reflect the accuracy of the estimate. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

Figure 14.5: Nickel Grade Tonnage Curve for Hart Indicated (top) and Inferred (bottom) Resources





15.0 MINERAL RESERVE ESTIMATES

15.1 Summary

The purpose of this technical report is to present the findings of a Preliminary Economic Assessment (PEA) through the application of mine design parameters to the geological model and derivation of production schedules with applicable capital and operating cost estimates. It should be noted that the PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the financial results of the PEA will be realized. In other words, no mineral reserve calculations were conducted in this study, primarily due to the inclusion of inferred resources in the mine plan. The mine plan is essentially based on the mineral resource estimates which consist of 83% indicted resources and 17% inferred resources.

The mining concept provides for ramp access to the Hart Zone and employs a blast hole mining method. The designs and estimates are based on Indicated and Inferred mineral resources (per December 2011 block model) and are commensurate with “Prefeasibility” level of confidence (i.e. generally ±25%). The designs and estimates are not considered “optimized”; nor have required project resources been levelled.

Based on a cut-off grade of 0.46% Ni, and the mining of the massive sulphide zone only, the mineable resource is estimated at 1.7 million tonnes grading 1.24% Ni, after allowances for mining recovery and dilution.

The “base case” in the PEA is founded on a nominal production rate of 750 tonnes per day at steady state. Overall mine life is projected to be 10 years.

Pre-production estimate to develop the underground mine is estimated at $93.5 million. This includes capital development and certain mobile and fixed mine plant equipment. A further $7.2 million is included as “Sustaining” Capex from Year 5 onwards to complete lateral and vertical development and purchase / install equipment as the mine ramps up to steady state production.

Over the life of mine, mine operating costs (direct and indirect) amount to approximately $64 per tonne of ore mined.

Although a detailed risk assessment has not been completed as part of this mining concept study, no technical “fatal flaws” to success of the project are evident.

15.2 Mineral Reserve Estimates

The resources used in this assessment are exclusively from the electronic block model provided by Liberty in July 2011.

Three zones exist for the Hart Project, the Massive Sulphide Zone (MS), the Disseminated Sulphide (DS) and the Iron Formation (IF). The DS zone is not considered in this preliminary assessment. Further drilling results since that time are not considered. Datamine based files are used directly in Mine 2-4D mine planning software.

Preliminary cost estimates suggest a break-even cut-off grade of 0.46% Ni. This corresponds with the resource estimate of 1.8 million tonnes grading 1.39% Ni used here for preliminary mine planning purposes, which is derived from Indicated and Inferred Resources as shown in Table 15.1.

Table 15.1: In-situ Indicated and Inferred Resources used for Mine Planning

		Development			Stopes			Less Than 2m			Other			Total		
Level	Zone	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)
Crown	IF	-	-	-	-	-	-	-	-	-	81,413	0.633	0.055	81,413	0.633	0.055
45	IF	5,070	0.669	0.064	-	-	-	1,324	0.690	0.062	847	0.763	0.076	7,241	0.684	0.065
65	IF	4,772	0.706	0.069	15,447	0.695	0.070	3,739	0.717	0.057	-	-	-	23,958	0.701	0.068
80	IF	3,653	0.797	0.057	9,322	0.733	0.063	5,298	0.724	0.062	-	-	-	18,274	0.743	0.062
110	IF	-	-	-	-	-	-	13,829	0.742	0.067	-	-	-	13,829	0.742	0.067
140	IF	-	-	-	-	-	-	1,336	0.819	0.086	-	-	-	1,336	0.819	0.086
Crown	MS	-	-	-	-	-	-	-	-	-	39,522	0.585	0.032	39,522	0.585	0.032
45	MS	4,478	0.672	0.047	-	-	-	559	0.781	0.065	203	0.664	0.042	5,240	0.683	0.049
65	MS	3,978	0.693	0.053	11,867	0.743	0.053	1,890	0.909	0.067	-	-	-	17,736	0.750	0.055
80	MS	8,987	0.774	0.060	8,912	0.925	0.071	4,158	0.955	0.073	-	-	-	22,057	0.869	0.067
110	MS	6,551	0.998	0.072	19,788	0.935	0.068	5,247	1.090	0.094	1,295	1.060	0.078	32,881	0.977	0.073
140	MS	8,586	1.280	0.086	46,126	1.176	0.080	10,257	1.058	0.081	43	0.968	0.080	65,012	1.171	0.081
170	MS	9,685	1.255	0.076	52,912	1.296	0.082	3,850	1.402	0.077	-	-	-	66,447	1.296	0.081
200	MS	9,287	1.121	0.075	43,958	1.406	0.085	7,411	0.968	0.073	763	0.489	0.026	61,419	1.299	0.081
235	MS	11,122	1.173	0.073	61,569	1.217	0.075	8,018	1.110	0.115	-	-	-	80,709	1.200	0.079
270	MS	24,648	1.850	0.105	85,006	1.527	0.087	7,846	1.629	0.088	-	-	-	117,501	1.602	0.091
305	MS	12,929	1.930	0.114	81,931	1.944	0.116	6,757	1.459	0.083	-	-	-	101,618	1.910	0.114
340	MS	15,805	1.772	0.122	107,618	1.804	0.113	3,992	1.228	0.055	-	-	-	127,414	1.782	0.112
375	MS	15,905	2.034	0.156	131,740	1.961	0.138	2,215	1.390	0.102	-	-	-	149,860	1.960	0.139
410	MS	29,181	1.240	0.095	123,172	1.794	0.140	4,613	1.556	0.121	-	-	-	156,965	1.684	0.131
445	MS	15,785	1.161	0.082	106,115	1.155	0.082	3,479	1.275	0.093	-	-	-	125,380	1.159	0.082
480	MS	15,274	1.557	0.093	137,686	1.373	0.089	1,517	1.271	0.082	-	-	-	154,478	1.390	0.090
515	MS	13,549	1.402	0.077	117,286	1.413	0.081	1,804	1.578	0.099	-	-	-	132,639	1.414	0.081
550	MS	13,139	1.333	0.080	113,538	1.377	0.078	441	1.491	0.065	889	1.599	0.086	128,006	1.374	0.079
580	MS	7,132	1.188	0.057	72,085	1.268	0.072	-	-	-	5,744	1.269	0.070	84,962	1.262	0.070
Below	MS	-	-	-	-	-	-	-	-	-	3,221	1.167	0.051	3,221	1.167	0.051
All	**IF**	**13,496**	**0.717**	**0.064**	**24,769**	**0.710**	**0.067**	**25,526**	**0.736**	**0.065**	**82,260**	**0.635**	**0.056**	**146,050**	**0.673**	**0.060**
All	**MS**	**226,021**	**1.416**	**0.092**	**1,321,310**	**1.501**	**0.097**	**74,054**	**1.240**	**0.087**	**51,680**	**0.726**	**0.039**	**1,673,066**	**1.454**	**0.094**
All	**All**	**239,517**	**1.377**	**0.091**	**1,346,079**	**1.486**	**0.096**	**99,580**	**1.111**	**0.081**	**133,940**	**0.670**	**0.049**	**1,819,116**	**1.391**	**0.091**

These tonnes and grades exclude allowances for mining recovery and dilution.

An estimate of “mineable” tonnes and grade are provided in Table 15.2 with dilution and recovery factors applied. Since Inferred resource category material is included and based on the preliminary nature of the cost estimates, the resources are suitable for evaluation at the “Preliminary Economic Assessment” level only. As such, the estimated

mineable tonnes and grade do not represent official “Reserves” that meet National Instrument 43-101 standards.

For the proposed blasthole mining method, a 92% mining recovery is considered reasonable for the typical stopes and a 70% recovery factor for the sill pillars with 15% mining dilution. For the development in ore a 100% recovery factor and an overbreak allowance of 15% (with zero grade) is considered reasonable.

For purposes of this PEA, the mineable portion of the mineral resource is estimated at 1.7 million tonnes grading 1.24% Ni after applying mining recovery and dilution factors.

Table 15.2: Potential Mineable Resource

Level	Zone	Type	Density	Tonnes	Ni (%)	Cu (%)
45	IF	-	3.47	7,389	0.459	0.044
65	IF	-	3.63	24,061	0.551	0.055
80	IF	-	3.56	16,472	0.558	0.046
45	MS	-	3.24	5,936	0.507	0.035
65	MS	-	3.30	18,251	0.596	0.043
80	MS	-	3.28	15,125	0.694	0.053
110	MS	-	3.22	35,086	0.671	0.049
140	MS	-	3.30	62,427	0.976	0.066
170	MS	-	3.31	70,710	1.064	0.067
200	MS	-	3.29	61,621	1.092	0.067
235	MS	-	3.30	82,832	0.990	0.061
270	MS	-	3.32	107,534	1.317	0.074
305	MS	-	3.30	101,218	1.579	0.094
340	MS	-	3.33	133,867	1.544	0.098
375	MS	-	3.33	160,300	1.685	0.120
410	MS	-	3.34	148,165	1.498	0.116
445	MS	-	3.33	123,104	0.988	0.071
480	MS	-	3.34	164,517	1.202	0.077
515	MS	-	3.34	140,973	1.216	0.069
550	MS	-	3.34	136,390	1.183	0.068
580	MS	-	3.34	85,053	1.088	0.061
All	**IF**	**All**	**3.58**	**47,922**	**0.539**	**0.050**
All	**MS**	**All**	**3.32**	**1,653,106**	**1.257**	**0.081**
All	**All**	**All**	**3.33**	**1,701,028**	**1.237**	**0.080**

16.0 MINING METHODS

16.1 Geotechnical Assessment

Information regarding the rock mass characteristics and the maximum allowable stope dimensions has not been provided for this study. Stope dimensions have been based on resource geometry and typical industry standard sizes.

A copy of the "Geotechnical Assessment of the Crown Pillar Stability" is included in Appendix D for reference. The geotechnical report reviews the stability of the proposed crown pillar based on boreholes through the crown pillar region. The report describes the crown pillar to be situated in good to excellent rock (RQD values of 80 to 100 and uniaxial compressive strengths of 140 to 200 MPa).

At the nearby Redstone and McWatters mines, RQD values of 80 and UCS strengths of 70 MPA are reported, with the host material exhibiting slightly higher values.

The geotechnical assumptions for this study are based on the crown pillar report and the expectations of similar characteristics at the nearby Redstone and McWatters Mines.

Table 16.1: Summary of Rock Quality Data for Main Rock Types

Rock Unit	RQD %	UCS (MPa)	Source
Resource – crown	80 to 100	140 to 200	Crown Pillar Report
Resource – below crown	50	70	PEA Report
Host rock	55	80	PEA Report

Additional geotechnical evaluations should be completed prior to project execution, specifically regarding ground support requirements, spans and stope dimensions as these will have significant impact on schedules, productivities and cost.

16.1.1 Ground Support – Development Drifts

The ground support for lateral drifts and ramp development has been based on industry standard practices. For normal drift development in waste rock (typical drift sizes of 4.5 m wide x 4.7 m high, and 4 m wide x 4.5 m high), ground support will consist of 1.8 metre long resin grouted rebar bolts installed on a 1.2 m x 1.2 m pattern in the back and 1.5 metre split sets in the wall on a 1.2 m x 1.2 m pattern. Welded wire mesh screen will be installed on the back and walls to within 1.5 metres of the floor.

Additional support requirements include the installation of 3.6 metre long spin cables installed on a 2.1 m x 2.1 m pattern at Access Ramp passing areas (Figure 16.1) and at 20% of the intersections (Figure 16.2).

Figure 16.1: Access Ramp Passing Areas

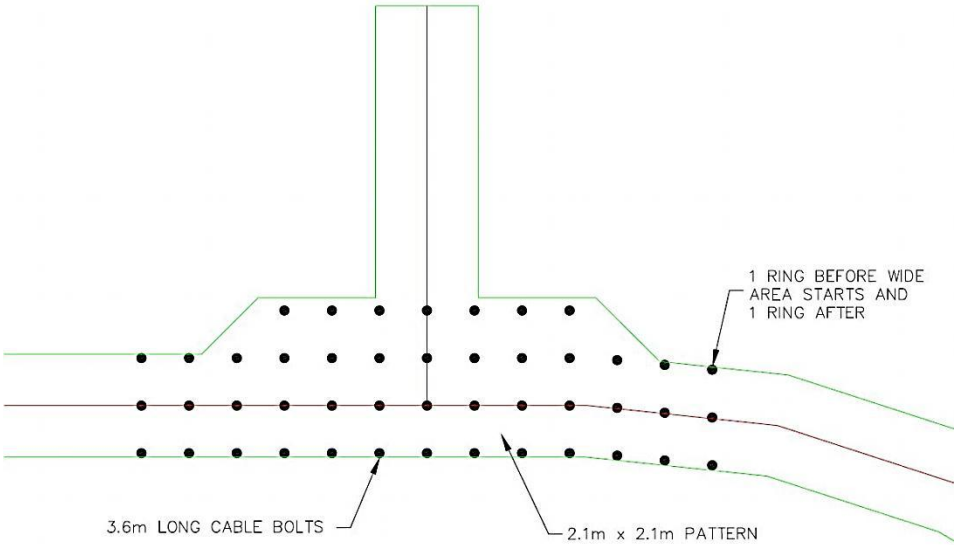
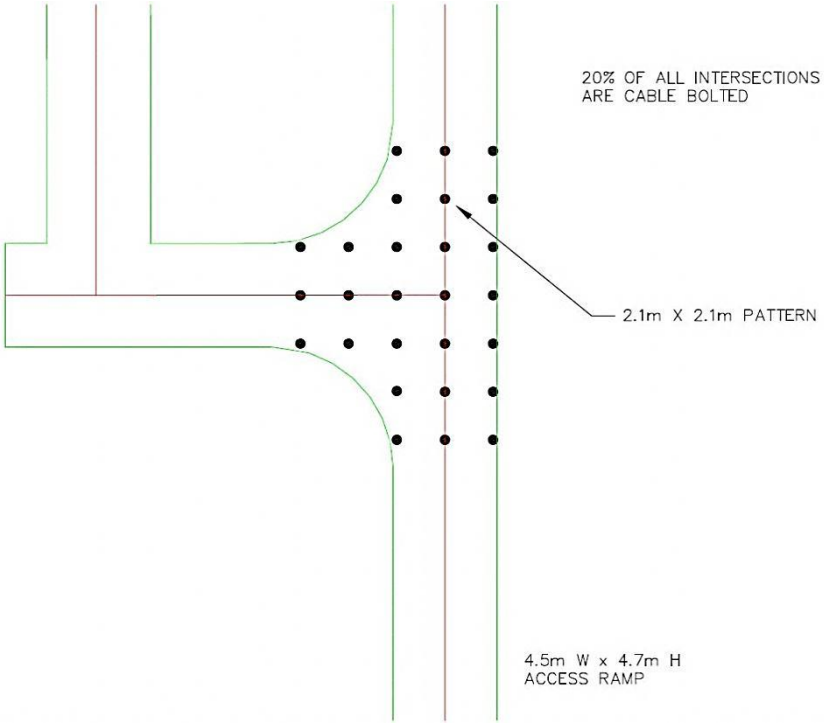


Figure 16.2: Ground Support for Large Intersections



An allowance has been included in the drift and ramp development rates for the use of shotcrete with 5% of each heading sprayed to 50 millimetres thick.

Ventilation raises used for personnel access (secondary escapeway raise) will have resin rebar bolts and welded wire mesh screen installed. The return air raises, which are raisebore and will not have personnel access, will not have any ground support installed. Access to the bottom of these raises (non-escapeway raises) will be restricted.

16.1.2 Ground Support – Stopes

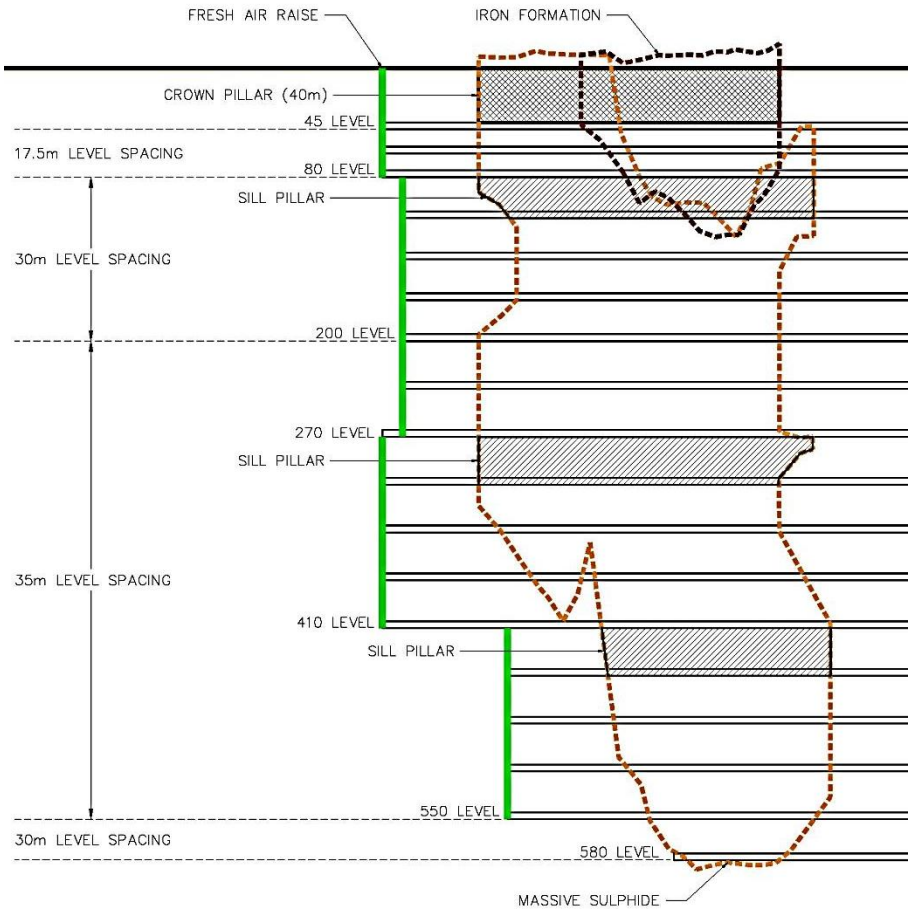
For development in ore, ground support will typically include the installation of Swellex or split set bolts. Welded wire mesh screen will not be required in the over-cut and under-cut drifts. As mining progresses, the over-cut drift of a lower level stope will become the under-cut drift of the stope above. In this case, an allowance of 25% of the original drift support installation cost is included for repair of the original support that may have been damaged during the blasting of the stope below.

Spin cable bolts (3.6 metres long) will be installed in the brow of each production stope on a pattern of three to five bolts per ring (dependent on the width of the under-cut) and three rings per brow.

Blasthole stopes will vary from 17.5 to 35 metres high. The typical stope size has been set at 40 metres long and mined to the full width of the resource (maximum is 15 metres wide).

The mine has been divided into four mining blocks based on geometry and scheduling criteria. The upper block (80 Block) is only two stopes high (17.5 metres each) stopes due to the narrow resource and flat transition zone below the 80 Level. The next block is the 270 Block, with stopes ranging from 30 to 35 metre high (35 metres high near the bottom as the width of the resource increases). The remaining blocks (410 Block and the 550 Block) have 35 metre high stopes.

Figure 16.3: Long Section Showing Level Heights



The mining sequence is longitudinal retreat to the central access. Stopes will be mined after the previous stope has been filled and the backfill has cured. The overall production sequence will be bottom-up for each mining block. A maximum of three mining blocks will be in production at the same time.

All blasthole stopes will be backfilled using paste fill (plant and distribution system design by others).

16.2 Hydrogeology

A water inflow estimate of 23 m³ per hour (100 USgpm), as per the SRK Technical Report has been used in the design of the underground dewatering system.

A large capacity sump will be excavated inside the portal in the event that a large inflow of water occurs, due to spring run-off, large storm, etc. The potential risk of increased water inflows has been noted as a project risk in Section 9.0 of this report.

The lowest mining level (580 Level) will have minimal infrastructure and could be used as an emergency sump in the event of an extended electrical power outage, a major mechanical pump failure, or a sudden inflow of water.

16.3 Mine Design

16.3.1 Underground Mine Layout

Access to the underground mine will be via a single ramp to be developed from surface. This ramp will be driven 5.0 m wide x 5.2 m high at a typical grade of -15%. The ramp grade will be reduced to -5% at major intersections (access to levels). The ramp will be used to provide access for personnel and materials, movement of mining equipment from level to level, ore/waste haulage and the exhaust air route for mine ventilation. All ramp development will include the installation of long-term ground support (grouted rebar bolts, screen, and cable bolts where required).

Level spacing will vary from 17.5 metre to 35 metre vertical intervals with the first level located at the 45 Level, based on the selected stope sizes. During the initial ramp development, access stubs at 20 metre vertical intervals will be excavated to allow development of future production levels with minimal interference of the ramp operations.

Production levels will be driven at a nominal grade of ±3% from the access ramp to the level sump/drain-hole location in order to provide positive drainage. All level development will include the installation of permanent ground support (grouted rebar bolts, screen, and cable bolts at major intersections).

All ramp and level development will be capitalized, including the first 15 metres of stope access development from the level drift.

The mine has been divided into four mining blocks, based on geometry and scheduling criteria. The upper block (80 Block) will be only two stopes high (17.5 metres each) due to the narrow resource and flat transition zone below the 80 Level. The 270 Block will have stopes ranging from 30 to 35 metres high (35 metres high near the bottom as the width of the resource increases). The remaining blocks (410 Block and the 550 Block) will have 35 metre high stopes, with the exception of the 580 Level in the 550 Block (only 30 metres high based on limited tonnes below this elevation). Each mining block will be mined bottom-up, with the sill pillar being recovered after completion of production from the lower levels of the mining block above. This will require re-development of the sill pillar top-cut drifts as the bottom cut (mucking) drift for the previously mined stope above will have been backfilled.

Stope over-cut and under-cut drifts will be driven at 4.5 metres high and a minimum of four metres wide and up to a maximum of eight metres wide depending on the width of the resource. All drifts will be driven at a grade of +3% to provide positive water drainage from the stopes. The drift height is required in order to allow efficient drilling of blastholes and also to allow installation of ventilation ducting in the under-cut (mucking) drifts. The stope over-cut and under-cut drifts will include the installation of short-term ground support (split set or Swellex bolts).

An allowance of 25% of the initial cost for drift support installation is included for the installation of additional bolts in the under-cut drifts. For a large percentage of the blasthole stopes, these drifts will require some rehabilitation prior to production from the stope above, due to blast damage incurred when producing from the stope below.

Blasthole stopes will be backfilled with paste produced in a plant on surface. The paste fill will be delivered to the underground stopes via boreholes and pipelines. The paste backfill system will be designed by others and detailed in a separate report.

Ore and waste rock will be hauled via trucks (30 and 45 tonne capacity) in the access ramp. Ore and waste rock will be hauled to surface ore and waste rock stockpiles located near the ramp portal. A surface contractor will move the ore to the surface ore crusher and waste rock to the selected waste rock disposal location. Ore and waste handling is reviewed in Section 4.6 of this report.

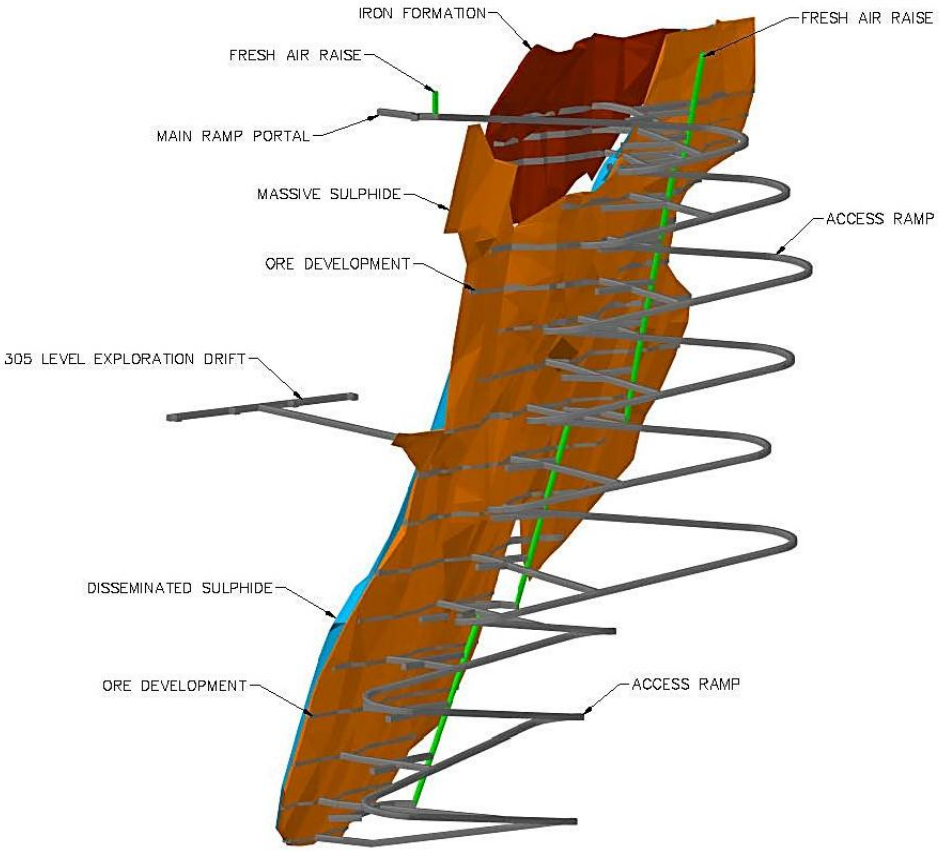
The permanent mine ventilation system will consist of a fresh air raise, and the access ramp as the exhaust route. The fresh air raise will be equipped with a manway to serve as a second egress from the mine. The access ramp will be upcast. The mine ventilation system is reviewed in Section 5.1.

The mine dewatering system will consist of a dirty water pumping system (utilizing hard metal centrifugal pumps). Main sumps will be located on the 80 Level (pumping to the portal sump) and on the 270, 410 and 550 Levels (each pumping to the level sump above). Drain holes will connect each mining level to allow drainage to the appropriate mine sump. The mine dewatering system is detailed in Section 5.2.

16.3.2 Underground Mine Development

Mine development will be completed using traditional drill and blast mining methods. Development jumbos will be equipped to drill 4.1 metre long holes, resulting in a 3.8 metre round advance. A schematic view (section) of the overall mine development is shown in Figure 16.4.

Figure 16.4: Overall Mine Development Schematic



The access ramp will be on the critical path for the mine development. As such, a reputable mine contractor will be employed. This ramp will be driven predominantly as a single heading development only. As development progresses to the 80 Level, the ramp crew will focus on developing to the fresh air raise. Once this priority development is complete, the crew will once again prioritize the ramp development.

On the 80 Level, a raisebore contractor crew will be mobilized once the development is complete and will develop and equip the fresh air raise to surface. Once complete and the surface fans are installed and commissioned, there will be sufficient ventilation available to permit a second crew to commence development. Additionally, the 1.2 metre ventilation ducting can be removed from the ramp, which will permit the larger 42 tonne trucks to haul up the ramp.

The focus of the second development crew will be to complete the remaining development on the 80 Level, including the under-cut development in ore for both the massive and the iron formation. Once this is complete, the crew will move to the 65 Level and complete the lateral development. At this time stopes will be available for production from the 80 Block. The development crew will then focus on the 45 Level.

The access/haulage ramp will be the route for the return air and is sized to accommodate the full mine ventilation volumes.

The ramp crew will continue the decline to the 170 Level and complete the development on the level to the fresh air raise. From there the ramp crew will again focus on the decline, down to the 270 Level, where the process will be repeated.

On the 170 Level, the raise crew will develop and equip the fresh air raise to the 80 Level. Once complete the surface fans will be adjusted, providing sufficient ventilation for a third crew to commence development. Again, the 1.2 metre ventilation ducting can be removed from the ramp from the 80 Level to the 170 Level.

The focus of the third development crew will be to complete the remaining development on the 170 Level, including the under-cut development in the massive zone. Once this is complete, the crew will move to the 140 Level and complete the lateral. The development crew will then move to the 110 Level. Once the third crew has completed the development on the 110 Level, there will be insufficient faces to support three crews; therefore this crew will no longer be required.

As the ramp crew completes the 270 Level and the fresh air raise is excavated and the fans adjusted, the crew on the 45 Level will move to the 270 Level (when the excavations are complete on the 45 Level) and complete the development of 270 Level followed by the 235 Level. The completion of the 235 Level will allow production to commence in the 270 Block.

The same process will be repeated by the ramp crew down to the 410 Level. When the ramp crew accesses the 550 Level, the crew will no longer have to focus on ramp development, therefore the crew will complete the 550 Level development, including the undercuts in ore, plus the crew will develop down to the 580 Level and establish the undercuts on this level. This will define the end of the project for the contractor's ramp crew. All development and production ventilation for the 580 Level will be via ducting in the ramp, although there may be an opportunity to drive a short ventilation raise from the 580 Level to the 550 Level to establish a flow through connection.

Development advance rates will average 4.0 metres per day of face advance per crew for a single heading (approximately 5.0 metre total advance per day including development of remucks, service cut-outs, etc.). Actual ground conditions encountered in the field may significantly affect (positive or negative) the expected cycle times. The actual ground conditions encountered may present a project cost and schedule risk (reviewed further in Section 9.0).

The access ramp will be driven 5.0 m wide x 5.2 m high. The drift dimensions are based on the full mine ventilation volumes and practical air velocities in the ramp. Additionally the width and heights were reviewed to provide sufficient clearance for a 42 tonne truck to travel safely.

A cross-section of the ramp during the development phase is shown in Figure 16.5 and the final phase is shown in Figure 16.6. Services to be installed in the ramp include twin 1.2 metre diameter (48 inch) ventilation ducts (temporary installation during initial ramp development), temporary compressed air line, water supply line, water discharge line, electrical power lines, and a leaky feeder communication line. Some of the services may be temporary and reinstalled permanently in the fresh air raise. Installation and maintenance of a good quality roadbed will be essential for efficient truck haulage in the ramp. An allowance of 300 millimetre thickness for roadbed is included in the final ramp design.

Figure 16.5: Ramp Section during Development with 30 Tonnes Trucks

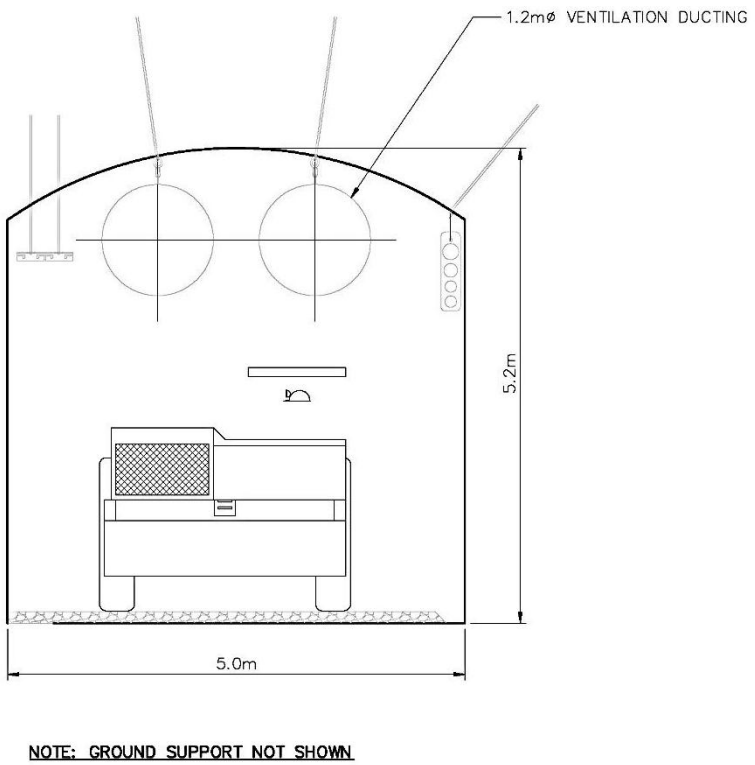
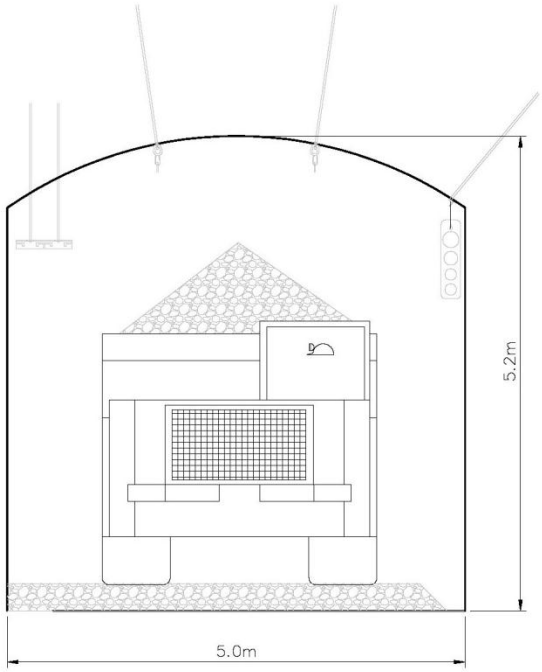


Figure 16.6: Ramp Section during Operations with 42 tonne Trucks



NOTE: GROUND SUPPORT NOT SHOWN

The majority of the level development will be driven 4.0 m wide x 4.5 m high in order to allow efficient LHD operation. These drifts will require installation of twin 1.0 metre diameter (42 inch) ventilation duct and fans (for ventilation during initial development and for ventilation of ore access headings), compressed air and water lines, electrical power and communication cables, and paste backfill lines. All drifts will be driven at grades of ±3% or greater to provide positive drainage for water inflows.

The fresh air raises will be developed using a raisebore machine at a diameter of 4.3 metres. The fresh air raise will be equipped with secondary egress, installed from the top-down upon completion of the excavation. This raise will also serve as a permanent route for services into the mine, including electrical power and compressed air.

A short 3 m x 3 m fresh air raise will be driven near the portal to reduce infrastructure near the portal entrance and to provide a source of heated air in the portal to reduce the potential for freezing.

The mine exhaust raises will be via the access ramp.

Development of the raisebore raise is scheduled at an overall advance rate of 2.4 metres per day and will require 10 days to setup and tear-down.

To summarize, the overall mine development sequence will include (refer to Figure 16.7 for a high level development and production schedule):

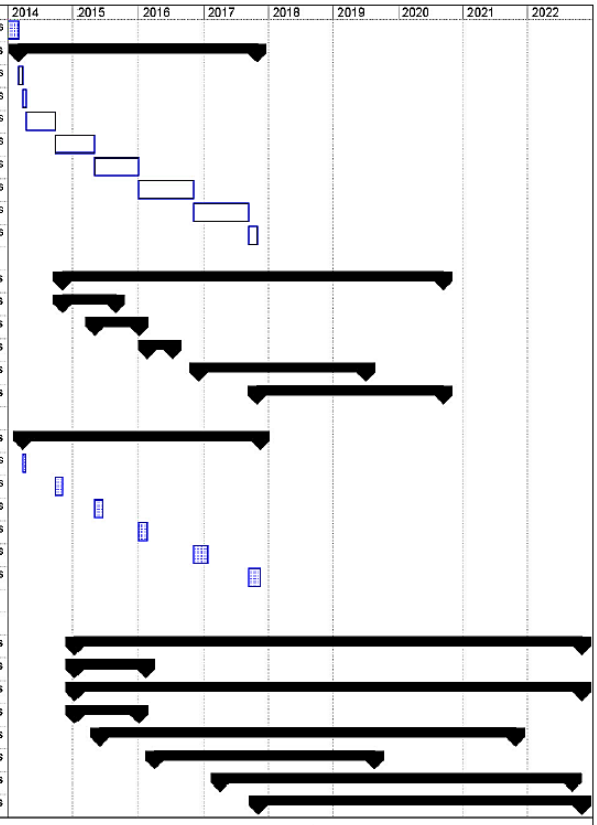
- Development of the access ramp to 80 Level and development of the 80 Level access to the fresh air raise from surface. Development of the fresh air/escapeway can then be completed.
- Completion of the 80 and 65 Levels and start production from the 80 Block.
- Development of the access ramp to 170 Level, establish the ventilation/escape raise and bring in a temporary third crew to complete the 170, 140, and 110 Levels.
- Development of the access ramp to the 270 Level, completion of the 270 / 235 Levels (including both the fresh air/escapeway and the return air raise) and start production from the 270 Block.
- Development of the access ramp to the 410 Level, completion of the 410/375 Levels (including both the fresh air/escapeway and the return air raise) and start production from the 410 Block.
- Development of the access ramp to the 550 Level, completion of the 550/580 Levels (including both the fresh air/escapeway and the return air raise) and start production from the 550 Block.

Table 16.2: Mine Development (Metres)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Ramp	1,139	1,422	1,486	1,334	0	0	0	0	0	5,381
Capital	333	1,000	819	1,602	518	226	93	0	0	4,591
Operating	27	203	83	111	101	26	0	0	0	551
Total	**1,500**	**2,624**	**2,389**	**3,047**	**618**	**252**	**93**	**0**	**0**	**10,523**
Raising	**108**	**91**	**194**	**205**	**0**	**0**	**0**	**0**	**0**	**598**

Figure 16.7: High Level Development and Production Schedule

ID	Task Name	Quantity	Rate	Duration
1	Portal			60 days
2	**RAMP**			**1293 days**
3	Portal to Ramp Raise	48	2	24 days
4	Ramp Raise to Sump	60	3	20 days
5	Sump TO 80 Level	811	5	163 days
6	80 Level TO 170 Level	1010	5	202 days
7	170 Level TO 270 Level	1152	5	231 days
8	270 Level TO 410 Level	1543	5	309 days
9	410 Level TO 550 Level	1475	5	295 days
10	550 Level TO 580 Level	245	5	49 days
11				
12	**Lateral Waste Development**			**2049 days**
13	**80 Block**			**279 days**
17	**170 Block**			**234 days**
22	**270 Block**			**142 days**
26	**410 Block**			**896 days**
33	**550 Block**			**1004 days**
40				
41	**Raises**			**1288 days**
42	FA near Portal	25	2.4	16 days
43	FA 80 L to Surface	83	2.4	41 days
44	FA 170 L TO 80 L	91	2.4	44 days
45	FA 270 L TO 170 L	104	2.4	49 days
46	FA 410 L TO 270 L	147	2.4	67 days
47	FA 550 L TO 410 L	148	2.4	68 days
48				
49				
50	**Production**			**2747 days**
51	**Iron Formation**			**381 days**
57	**Massive**			**2747 days**
58	**80 Block**			**343 days**
64	**170 Block**			**2251 days**
72	**270 Block**			**1192 days**
79	**410 Block**			**1907 days**
89	**550 Block**			**1748 days**



Project: Very Preliminary dev and prod
Date: 08-16-12

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

Page 1

16.3.3 Underground Mine Production

All underground production mining will be completed using blasthole stoping methods with longitudinal retreat.

Stope production will be completed using LHD's mucking to a re-muck bay located near the access ramp. The LHD's will be equipped to allow remote operation to provide safe working conditions near stope brows and to facilitate final clean-up of the longhole stope floor prior to backfilling.

Grade control will be active throughout the stope development, drilling, and production periods. During initial over-cut and under-cut development, drill hole sampling and drift mapping will be completed to provide detailed information as to the ore grade variations along the drifts. All production drill holes will have cutting samples taken by the driller to better determine the production grade estimates for the stope. As a result of this drill hole sampling program, it may be determined that portions of the stope should not be blasted.

The final production grade control will consist of draw-point sampling during the production mucking. This will confirm expected production grades from the stopes, and provide confirmation of drill sampling results.

A mine production plan has been generated as shown in Table 16.3. This production plan indicated the start of production in September 2014. The production rate will build up to a steady-state production rate of 265,000 tonnes per year starting in Year 4, with four years of steady state production.

Table 16.3: Mine Production Plan

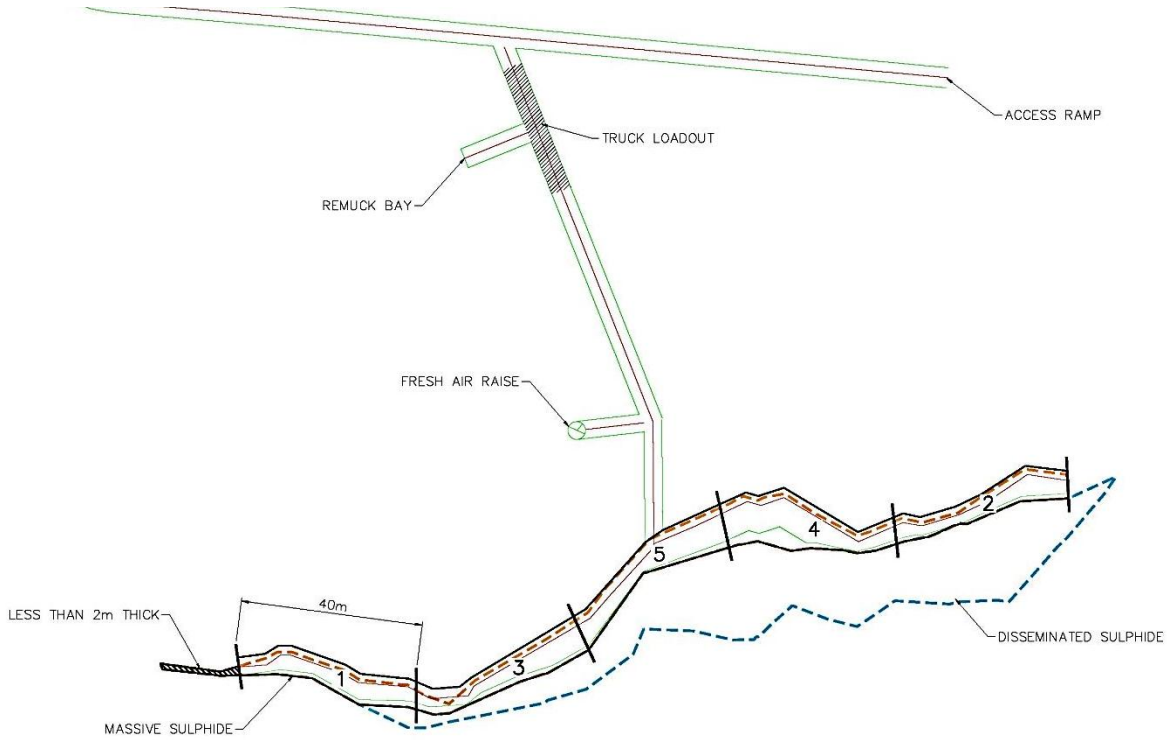
	2015	2016	2017	2018	2019	2020	2021	2022	Total
Total Production	87,812	139,332	194,866	272,055	274,103	280,186	261,585	191,092	**1,701,030**
Ni	0.64%	0.93%	1.25%	1.34%	1.32%	1.30%	1.28%	1.29%	**1.24%**
Cu	0.045%	0.059%	0.083%	0.090%	0.084%	0.083%	0.082%	0.083%	**0.080%**
Tonnes per Day	**247**	**392**	**549**	**766**	**772**	**789**	**737**	**538**	

Blasthole Mining

The stopes will have a nominal size of 40 m long x 2 to 15 m wide x 17.5 to 35 m high. The height and width vary depending on the location of the stopes and width of the resource.

A single over-cut (drill) drift and under-cut (mucking) drift will be driven for each production level. Each drift may serve several stopes starting at the east and/or west ends of the resource, and retreating toward the level access near the center of the resource. Stopes located at the east or west extremities will be mined as primary stopes, with the adjacent stopes being mined as secondary stopes after the primary stopes have been backfilled and the fill has cured. Figure 16.8 illustrates a typical production level and the anticipated blasthole stope outlines. The numbers indicate the sequence in which mining of the stopes is scheduled.

Figure 16.8: Typical Production Level and Stope Production Sequence



Production drilling will be completed with 90 mm (3.5”) or 115 mm (4.5”) diameter holes depending on the height and width of the stope. A second drill (in-the-hole unit) will serve as a back-up production drill as well as for drilling service boreholes and drainholes throughout the mine. The blastholes will be loaded and blasted using an emulsion product. A dedicated loading crew will be utilized for production loading and blasting to ensure attention to detail and safe practices are maintained.

Stope production will start with development of a slot. A slot raise will be excavated using a drop raise approach, although the opportunity exists to use a Machine Roger or equivalent to drill off the slot raise. This will provide a hole between the undercut and overcut drifts which can then be slashed to provide a slot the full width of the resource. Parallel blastholes will be drilled and blasted into the void. It will require approximately three blasts to complete the slot process, once the drop raise is complete.

Stope backfilling will be completed using paste fill delivered via pipeline to the over-cut drift. Work required to complete paste filling of a stope will include:

- Installation of a paste fill pipeline from the backfill station on the level to the stope in the overcut;
- Construction of a backfill bulkhead five metres from the brow of the stope in the under-cut drift;

- Paste filling of the first ±8 metre of stope height to form a solid plug at the bottom of the stope. Allow the paste plug to cure for five days; and
- Fill the remainder of the stope to the level of the floor of the over-cut drift. Allow 14 days for the fill to cure before completing any blasting of stopes beside or above a paste filled stope.

A production stope may contain 8,500 to 42,000 tonnes of ore; therefore the production rate will vary significantly depending on the stope size. Excluding the completion of over-cut and under-cut access development, various stope cycle times are shown in Table 16.4.

Table 16.4: Typical Stope Cycles and Production Rate (total stope cycle)

Stope Cycle Times		Average Stope Tonnes		
		8,500	**20,800**	**41,300**
Stope Production Drilling (including slot)	days	20	36	53
Stope Blasting / Production	days	16	37	70
Preparation Backfilling / Pouring	days	6	11	18
Backfill Curing	days	14	14	14
Total	**days**	**56**	**97**	**154**
Tonnes per Day		**153**	**214**	**268**

This equates to approximately 150 to 270 tonnes per day, with the bulk of the mineable tonnes in the 200 to 270 tonne per day range. Therefore, a minimum of three blocks will need to be in production at any time in order to provide a steady-state mine production rate of 750 tonnes per day.

16.3.4 Mine Production Rates

The underground mine will produce at a rate of 750 ore tonnes per day. This production rate is primarily the result of:

- The mill feed requirements;
- The limited number of ore production stopes available on any level and the total number of production stopes available in total at any time; and

Waste rock production is estimated to be 100 tonnes per day during steady state operations. The majority of the development will be completed in Years 1 - 5. Mine operations personnel will have the potential to reduce truck haulage of waste rock if stopes can be maintained available for disposal of mine waste underground.

16.3.5 Mobile Equipment

Typically Liberty will provide equipment for the contractor to utilize, and the contractor will be responsible for maintaining the equipment (costs included) to develop the mine. This will include a set of development gear, including a two boom jumbo, 4.5 m^3 LHD, scissor lift, and 30 tonne haulage trucks, plus associated pickup trucks required for supervision/support. The second set of development gear required by the contractor will be on site for approximately one year, and will be the responsibility of the contractor to provide and maintain.

Longhole drilling will also be contracted, and the selected contractor will provide the longhole drill and the personnel to operate, maintain and supervise the work.

The required mobile equipment will be purchased in stages as the mine development advances and additional development and operating crews are added. The production truck haulage fleet will be increased with the mine production rates and average depth of mining.

For the initial ramp development starting in Year 1, Liberty will provide the contractor with a development jumbo, LHD, 30 tonne trucks, and scissor lift. This provides a minimum amount of equipment for a single development crew. Liberty crews will start development later in Year 1, and will purchase a similar fleet including a boom truck, an additional scissorlift, plus a transmixer for construction, and utility pick-up trucks and surface vehicles.

During Year 2, the contractor's second development crew will begin working. As well, Liberty crews will begin production on 80 Level. Additional contractor development equipment and some of the mine production equipment will be purchased during this period including an additional 30 tonne haulage truck. The 45 tonne trucks will be purchased as required in subsequent years, as production tonnes and haulage distances increase.

Table 16.5: Mobile Equipment List

	2014	2014	2015	2016	2017	2018	2019	2020	2021	Spares
Haulage Truck 30 t	1	2	2	2	0	0	0	0	0	1
Haulage Truck 42 t	0	0	1	2	3	3	3	3	2	0
LHD 6 m^3	0	0	1	1	2	2	2	2	2	1
LHD 4.5 m^3	2	3	3	2	1	1	0	0	0	1
Jumbo	2	3	3	2	1	1	1	0	0	1
Production Drills		1	1	1	2	2	2	2	1	0
Scissor Lift Truck	2	3	3	2	1	1	1			0
Scissor Lift Truck - Construction	1	1	1	1	1	1	1	1	1	0
Utility Pick-up	6	6	6	6	4	4	4	4	4	0
Personnel Carrier		1	1	1	1	1	1	1	1	0
Forklift	0	0	2	2	2	2	2	2	1	0
Boom Truck	1	2	2	2	1	1	1	1	1	0
Grader	0	1	1	1	1	1	1	1	1	0
Explosive Truck	0	0	1	1	1	1	1	1	1	0
Fuel/Lube Truck	0	1	1	1	1	1	1	1	1	0
Surface Payloader/Forklift	1	1	1	1	1	1	1	1	1	0
Surface Pick-up Trucks	6	8	8	6	5	5	5	5	5	0
Total	**22**	**33**	**38**	**34**	**28**	**28**	**27**	**25**	**22**	**4**

17.0 RECOVERY METHODS

17.1 Dilution and Ore Recovery

Internal dilution (including waste rock and below cut-off grade mineralized material) has been included in the stope production grade. A summary of mineral resources, mining reserve, dilution, and ore recovery is included in Table 17.1 and Table 17.2.

Table 17.1: Mineral Resource and Diluted Production – Development in Ore

Level	Zone	Type	In-situ Ore Development				Dilution Overbreak @ 15%		Mineables			
			Density	Tonnes	Ni %	Cu %	Density	Tonnes	Density	Tonnes	Ni %	Cu %
45	IF	Primary	3.63	6,426	0.528	0.051	2.70	964	3.47	7,389	0.459	0.044
65	IF	Primary	3.51	6,711	0.502	0.049	2.70	1,007	3.38	7,718	0.437	0.043
80	IF	Primary	3.40	5,747	0.507	0.036	2.70	862	3.29	6,609	0.441	0.031
45	MS	Primary	3.34	5,161	0.583	0.041	2.70	774	3.24	5,936	0.507	0.035
65	MS	Primary	3.29	4,952	0.557	0.042	2.70	743	3.20	5,695	0.484	0.037
80	MS	Primary	3.26	4,954	0.588	0.046	2.70	743	3.18	5,697	0.511	0.040
80	MS	Secondary	3.18	7,495	0.540	0.041	2.70	1,124	3.11	8,619	0.469	0.036
110	MS	Primary	3.21	9,163	0.713	0.051	2.70	1,374	3.13	10,538	0.620	0.044
140	MS	Primary	3.22	11,848	0.927	0.063	2.70	1,777	3.14	13,626	0.806	0.054
170	MS	Primary	3.24	12,808	0.949	0.057	2.70	1,921	3.16	14,729	0.825	0.050
200	MS	Primary	3.20	13,142	0.792	0.053	2.70	1,971	3.13	15,114	0.689	0.046
235	MS	Primary	3.22	15,384	0.848	0.053	2.70	2,308	3.14	17,692	0.738	0.046
270	MS	Primary	3.28	15,302	1.450	0.081	2.70	2,295	3.19	17,597	1.261	0.070
270	MS	Secondary	3.29	15,493	1.511	0.088	2.70	2.324	3.20	17,816	1.314	0.076
305	MS	Primary	3.33	15,171	1.645	0.097	2.70	2,276	3.23	17,446	1.430	0.084
340	MS	Primary	3.38	17,397	1.610	0.111	2.70	2,610	3.27	20,007	1.400	0.096
375	MS	Primary	3.35	18,191	1.778	0.136	2.70	2,729	3.25	20,919	1.546	0.118
410	MS	Primary	3.41	15,521	1.202	0.092	2.70	2,328	3.29	17,849	1.045	0.080
410	MS	Secondary	3.41	15,698	1.116	0.085	2.70	2,355	3.29	18,052	0.970	0.074
445	MS	Primary	3.40	17,068	1.074	0.076	2.70	2,560	3.29	19,628	0.934	0.066
480	MS	Primary	3.40	16,386	1.452	0.087	2.70	2,458	3.29	18,844	1.262	0.075
515	MS	Primary	3.40	14,682	1.293	0.071	2.70	2,202	3.28	16,885	1.125	0.062
550	MS	Primary	3.40	14,146	1.238	0.075	2.70	2,122	3.29	16,267	1.076	0.065
580	MS	Primary	3.41	7,640	1.108	0.053	2.70	1,146	3.29	8,787	0.964	0.046
Total	**IF**	**All**	**3.52**	**18,884**	**0.512**	**0.046**	**2.70**	**2,833**	**3.38**	**21,716**	**0.445**	**0.040**
Total	**MS**	**All**	**3.32**	**267,602**	**1.196**	**0.078**	**2.70**	**40,140**	**3.23**	**307,742**	**1.040**	**0.068**
Total	**Combined**	**All**	**3.33**	**286,485**	**1.151**	**0.076**	**2.70**	**42,973**	**3.24**	**329,458**	**1.001**	**0.066**

Table 17.2: Mineral Resource and Diluted Production – Stoping

Level	Zone	Type	In-situ Stope Ore				Dilution 15%		Mineables – Recovery 92% Sill Recovery 70%			
			Density	Tonnes	Ni %	Cu %	Density	Tonnes	Density	Tonnes	Ni %	Cu %
65	IF	Longitudinal	4.00	15,447	0.695	0.070	2.70	2,317	3.76	16,343	0.605	0.061
80	IF	Longitudinal	4.00	9,322	0.733	0.063	2.70	1,398	3.76	9,863	0.637	0.055
65	MS	Longitudinal	3.47	11,867	0.743	0.053	2.70	1,780	3.35	12,556	0.646	0.046
80	MS	Longitudinal	3.47	8,912	0.925	0.071	2.70	1,337	3.35	9,429	0.804	0.061
110	MS	Sill Pillar	3.47	19,788	0.935	0.068	2.70	2,968	3.35	15,929	0.813	0.059
140	MS	Longitudinal	3.47	46,126	1.176	0.080	2.70	6,919	3.35	48,802	1.023	0.070
170	MS	Longitudinal	3.47	52,912	1.296	0.082	2.70	7,937	3.35	55,981	1.127	0.072
200	MS	Longitudinal	3.47	43,958	1.406	0.085	2.70	6,594	3.35	46,507	1.223	0.074
235	MS	Longitudinal	3.47	61,569	1.217	0.075	2.70	9,235	3.35	65,140	1.058	0.065
270	MS	Longitudinal	3.47	85,006	1.527	0.087	2.70	12,751	3.35	89,937	1.328	0.075
305	MS	Sill Pillar	3.47	81,931	1.944	0.116	2.70	12,290	3.35	65,955	1.690	0.101
340	MS	Longitudinal	3.47	107,618	1.804	0.113	2.70	16,143	3.35	113,860	1.569	0.098
375	MS	Longitudinal	3.47	131,740	1.961	0.138	2.70	19,761	3.35	139,381	1.705	0.120
410	MS	Longitudinal	3.47	123,172	1.794	0.140	2.70	18,476	3.35	130,316	1.560	0.121
445	MS	Sill Pillar	3.47	106,115	1.155	0.082	2.70	15,917	3.35	85,423	1.005	0.071
480	MS	Longitudinal	3.47	137,686	1.373	0.089	2.70	20,653	3.35	145,672	1.194	0.078
515	MS	Longitudinal	3.47	117,286	1.413	0.081	2.70	17,593	3.35	124,088	1.229	0.070
550	MS	Longitudinal	3.47	113,538	1.377	0.078	2.70	17,031	3.35	120,123	1.197	0.068
580	MS	Longitudinal	3.47	72,085	1.268	0.072	2.70	10,813	3.35	76,266	1.103	0.062
Total	**IF**	**All**	**4.00**	**24,769**	**0.710**	**0.067**	**2.70**	**3,715**	**3.76**	**26,206**	**0.617**	**0.059**
Total	**MS**	**All**	**3.47**	**1,321,310**	**1.501**	**0.097**	**2.70**	**198,197**	**3.35**	**1,345,364**	**1.307**	**0.084**
Total	**Combined**	**All**	**3.48**	**1,346,079**	**1.486**	**0.096**	**2.70**	**201,912**	**3.35**	**1,371,570**	**1.294**	**0.084**

17.1.1 Dilution

Sources of external dilution for blasthole stopes include:

- Below cut-off grade mineralization and waste rock;
- Waste backfill dilution from adjacent stope backfill walls; and
- Waste backfill from previously filled stopes located below the production horizon (stope floor).

External dilution has been included for all blasthole stopes. The external dilution is based on an average of 0.75 metres of slough from the hangingwall, 0.5 metres of slough from the footwalls, and 1.0 metres of slough from backfill on the end walls. All external dilution has been assumed to have zero grade.

An allowance of 0.5 metres of fill dilution (zero grade) has also been included to allow for LHD's digging into fill material when mucking ore from a stope located immediately above a backfilled stope.

Although the external dilution will vary for each stope depending on the height and width of the stope (ranging from 26% to 14%), an average of 15% dilution was used for this study at zero grade.

Table 17.3: Dilution Table

	Tonnes	Estimated Dilution	Diluted Tonnes	Overall Dilution
80 Block	45,511	26%	11,917	**15%**
270 Block	314,329	18%	56,904	
410 Block	444,545	14%	62,514	
550 Block	547,022	14%	76,925	

The ore development for the blasthole stopes contains planned dilution and 15% external dilution assuming an over-break allowance with zero grade associated with the extra tonnes. Planned dilution varies depending on the width of the resource. The minimum width of excavation assumed for this study is four metres wide and a maximum of eight metres wide. The minimum stope width assumed for this study is two metres wide; therefore the four metre wide under-cuts will have significant dilution in the narrow portions.

17.1.2 Recovery

All under-cuts will have 100% recovery. Ore recovery for blasthole stopes will typically amount to 92% for the ore contained within the blasthole stope outline. Small losses will be incurred due to ore not drilled and blasted at the sides of the top cut drift, as well as broken ore being left at the sides and corners of the stope when remote mucking.

The blasthole stopes located in the sill pillars will have a recovery of 70% due to the potential geotechnical issues of mining the remnant stopes with fill above, below and in some cases on the end walls.

Total Mine

For the underground mine (45 Level to 580 Level) recovery of contained metal in production compared to the resource (using a 0.46% Ni cut-off grade and excluding the disseminated) is 92%, which includes 95% for the massive zone and 28% for the iron formation.

Recovery losses include:

- Blocks of above cut-off grade ore located in stopes that have a mining width of less than two metres;
- Small isolated blocks of above cut-off grade ore that are not included in the stope designs;

- An estimated 8% ore loss for all blasthole production stopes due to the loss of a small amount of ore at the drill drift elevation, and for small amounts of ore left in the stope when mucking remotely;
- The crown pillar contains 1% of the nickel tonnes in the massive zone and 53% of the nickel tonnes in the iron formation; and
- Mineral resource below the 580 Level.

Table 17.4 presents the reconciliation of the in-situ tonnes compared to the mineable tonnes, along with the other losses, for the massive and the iron formation.

Table 17.4: In-situ Tonnes Compared to the Mineable Tonnes

		Development			Stopes			Less Than 2m			Below Cutoff			Other			Total		
Level	Zone	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)	Tonnes	Ni (%)	Cu (%)
Crown	IF	-	-	-	-	-	-	-	-	-	-	-	-	81,413	0.633	0.055	81,413	0.633	0.055
45	IF	5,070	0.669	0.064	-	-	-	1,324	0.690	0.062	-	-	-	847	0.763	0.076	7,241	0.684	0.065
65	IF	4,772	0.706	0.069	15,447	0.695	0.070	3,739	0.717	0.057	-	-	-	-	-	-	23,958	0.701	0.068
80	IF	3,653	0.797	0.057	9,322	0.733	0.063	5,298	0.724	0.062	-	-	-	-	-	-	18,274	0.743	0.062
110	IF	-	-	-	-	-	-	13,829	0.742	0.067	-	-	-	-	-	-	13,829	0.742	0.067
140	IF	-	-	-	-	-	-	1,336	0.819	0.086	-	-	-	-	-	-	1,336	0.819	0.086
Crown	MS	-	-	-	-	-	-	-	-	-	-	-	-	39,522	0.585	0.032	39,522	0.585	0.032
45	MS	4,478	0.672	0.047	-	-	-	559	0.781	0.065	-	-	-	203	0.664	0.042	5,240	0.683	0.049
65	MS	3,978	0.693	0.053	11,867	0.743	0.053	1,890	0.909	0.067	1,913	0.290	0.023	-	-	-	19,649	0.705	0.052
80	MS	8,987	0.774	0.060	8,912	0.925	0.071	4,158	0.955	0.073	3,545	0.330	0.029	-	-	-	25,602	0.795	0.061
110	MS	6,551	0.998	0.072	19,788	0.935	0.068	5,247	1.090	0.094	5,195	0.348	0.032	1,295	1.060	0.078	38,076	0.891	0.067
140	MS	8,586	1.280	0.086	46,126	1.176	0.080	10,257	1.058	0.081	-	-	-	43	0.968	0.080	65,012	1.171	0.081
170	MS	9,685	1.255	0.076	52,912	1.296	0.082	3,850	1.402	0.077	-	-	-	-	-	-	66,447	1.296	0.081
200	MS	9,287	1.121	0.075	43,958	1.406	0.085	7,411	0.968	0.073	16,703	0.328	0.023	763	0.489	0.026	78,122	1.091	0.069
235	MS	11,122	1.173	0.073	61,569	1.217	0.075	8,018	1.110	0.115	14,539	0.435	0.027	-	-	-	95,247	1.084	0.071
270	MS	24,648	1.850	0.105	85,006	1.527	0.087	7,846	1.629	0.088	-	-	-	-	-	-	117,501	1.602	0.091
305	MS	12,929	1.930	0.114	81,931	1.944	0.116	6,757	1.459	0.083	-	-	-	-	-	-	101,618	1.910	0.114
340	MS	15,805	1.772	0.122	107,618	1.804	0.113	3,992	1.228	0.055	-	-	-	-	-	-	127,414	1.782	0.112
375	MS	15,905	2.034	0.156	131,740	1.961	0.138	2,215	1.390	0.102	-	-	-	-	-	-	149,860	1.960	0.139
410	MS	29,181	1.240	0.095	123,172	1.794	0.140	4,613	1.556	0.121	-	-	-	-	-	-	156,965	1.684	0.131
445	MS	15,785	1.161	0.082	106,115	1.155	0.082	3,479	1.275	0.093	-	-	-	-	-	-	125,380	1.159	0.082
480	MS	15,274	1.557	0.093	137,686	1.373	0.089	1,517	1.271	0.082	-	-	-	-	-	-	154,478	1.390	0.090
515	MS	13,549	1.402	0.077	117,286	1.413	0.081	1,804	1.578	0.099	-	-	-	-	-	-	132,639	1.414	0.081
550	MS	13,139	1.333	0.080	113,538	1.377	0.078	441	1.491	0.065	-	-	-	889	1.599	0.086	128,006	1.374	0.079
580	MS	7,132	1.188	0.057	72,085	1.268	0.072	-	-	-	-	-	-	5,744	1.269	0.070	84,962	1.262	0.070
Below	MS	-	-	-	-	-	-	-	-	-	-	-	-	3,221	1.167	0.051	3,221	1.167	0.051
All	**IF**	**13,496**	**0.717**	**0.064**	**24,769**	**0.710**	**0.067**	**25,526**	**0.736**	**0.065**	**-**	**-**	**-**	**82,260**	**0.635**	**0.056**	**146,050**	**0.673**	**0.060**
All	**MS**	**226,021**	**1.416**	**0.092**	**1,321,310**	**1.501**	**0.097**	**74,054**	**1.240**	**0.087**	**41,895**	**0.366**	**0.026**	**51,680**	**0.726**	**0.039**	**1,714,961**	**1.427**	**0.092**
All	**All**	**239,517**	**1.377**	**0.091**	**1,346,079**	**1.486**	**0.096**	**99,580**	**1.111**	**0.081**	**41,895**	**0.366**	**0.026**	**133,940**	**0.670**	**0.049**	**1,861,011**	**1.368**	**0.090**

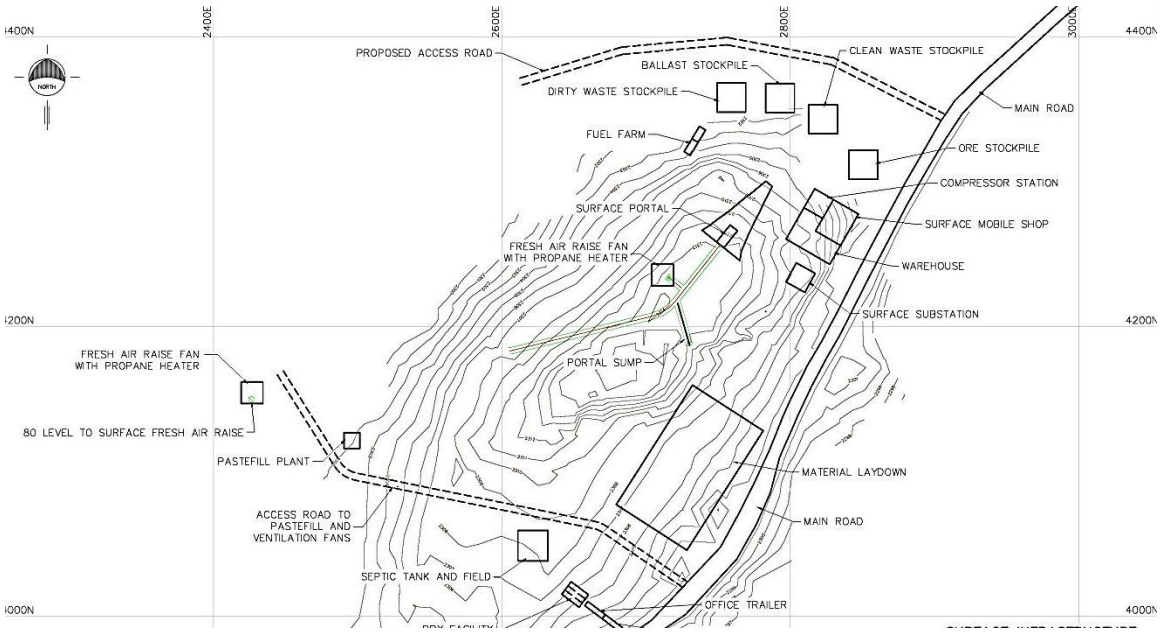
18.0 PROJECT INFRASTRUCTURE

18.1 Surface Infrastructure

The majority of the surface facilities required to support the underground mine will be located near the access ramp portal area (Figure 18.1). These facilities include:

- Ramp portal entrance;
- Temporary contractor facilities and services;
- Electrical substation;
- Office and dry facilities;
- Compressor plant;
- Surface equipment maintenance facilities;
- Diesel fuel storage and dispensing;
- Process water storage and distribution;
- Materials laydown and storage;
- Ore storage stockpile;
- Waste storage stockpiles; and
- Road ballast stockpile.

Figure 18.1: Surface Site Plan – Underground Ramp Portal Area (representative only)



Other surface facilities include the collars for the ventilation raises, fans and heating plants, and paste backfill plant (backfill plant to be designed by others).

18.1.1 Office and Dry

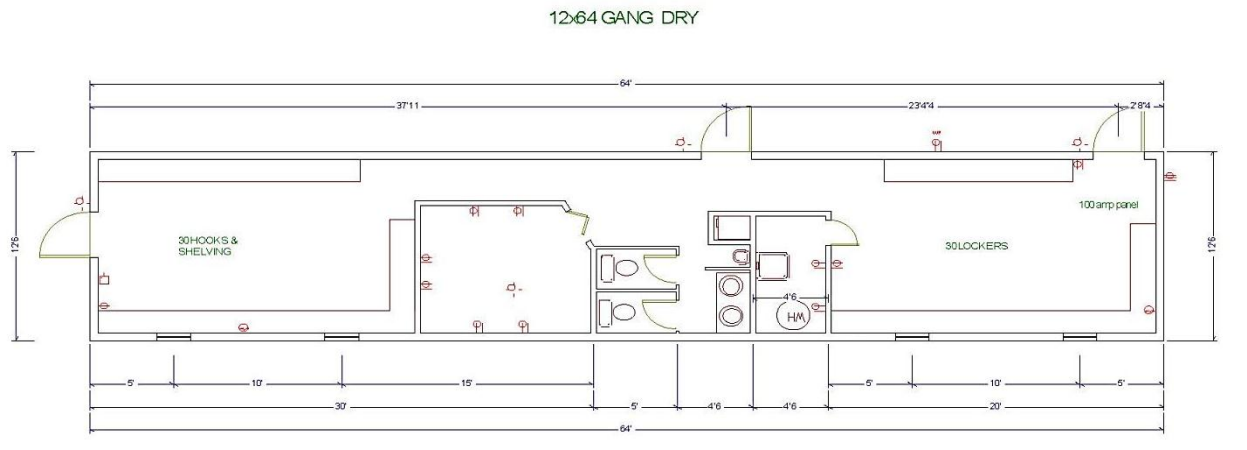
An office and dry facility will be established for the underground mine operation. This facility will serve the mine operations, maintenance, technical services personnel, and mine management. The facility will consist of trailers designed for this purpose and will be rented for the duration of the mine operations.

The facilities will consist of:

- Two trailer complex complete with offices, washroom facilities, cubical area, and potential conference room, along with a small office trailer; and
- Three 30 person capacity dry trailers complete with clean and dirty areas, showers and washroom (see Figure 18.2).

A septic system will be installed to handle grey-water and sewage from the office and dry facilities.

Figure 18.2: Gang Dry



18.1.2 Ramp Portal

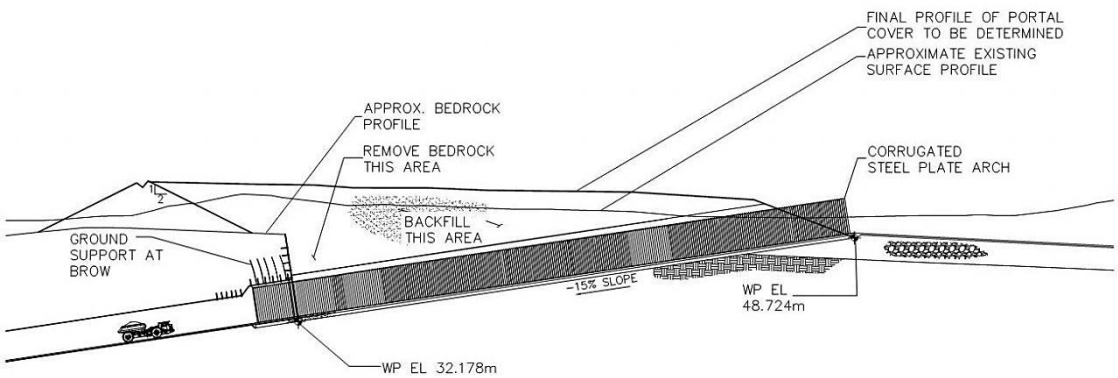
The ramp portal will consist of an open cut to expose a vertical rock face that will be 1.5 times the height of the ramp collar to be excavated. This face will have extensive ground support installed. Following completion of the initial 30 metres of ramp excavation, the portal structure (steel plate arch) will be installed and backfilling will be completed.

The portal construction will include pouring a concrete roadbed (foundation) from ground surface to the point where competent rock is encountered. The portal structure will include a concrete curb wall on each side of the roadbed, and an Armco (or similar) multi-plate corrugated steel arch structure. This structure would have a total length of

120 metres. After installation of the steel arch structure, the area outside the structure will be backfilled. The backfill will be completed to a level slightly above the surrounding ground in order to provide positive drainage of surface water away from the ramp portal.

The current plan in this study does not include the steel arch (culvert) and therefore is not included in the estimate. A section through a typical ramp portal (including the culvert) is shown in Figure 18.3.

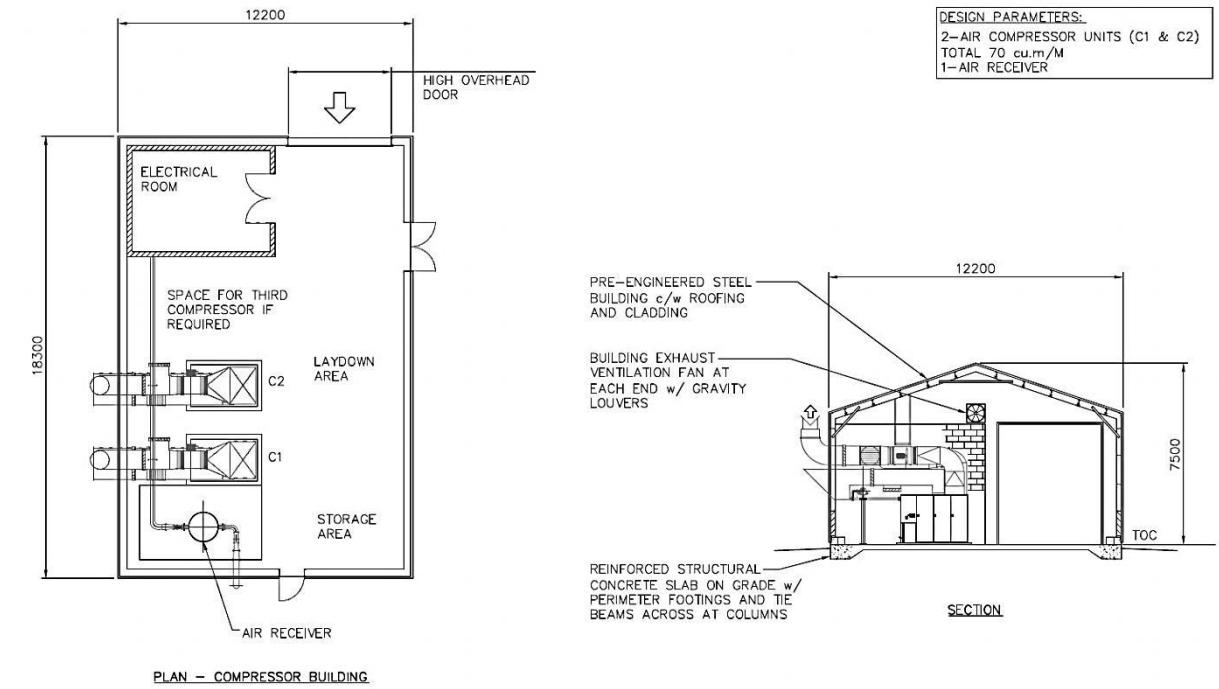
Figure 18.3: Access Ramp Portal (representative only)



18.1.3 Compressor Plant

A compressor plant will be constructed to provide compressed air to the underground mine as well as other surface facilities. This facility will include 2 x 35 m^3 per minute (1,250 cfm) compressors. One compressor will operate as the primary compressor while a second compressor will be used to provide peak load requirements as required. The compressor plant will have room for a third compressor should Liberty mines require it for future expansion.

Figure 18.4: Typical Surface Compressor Plant



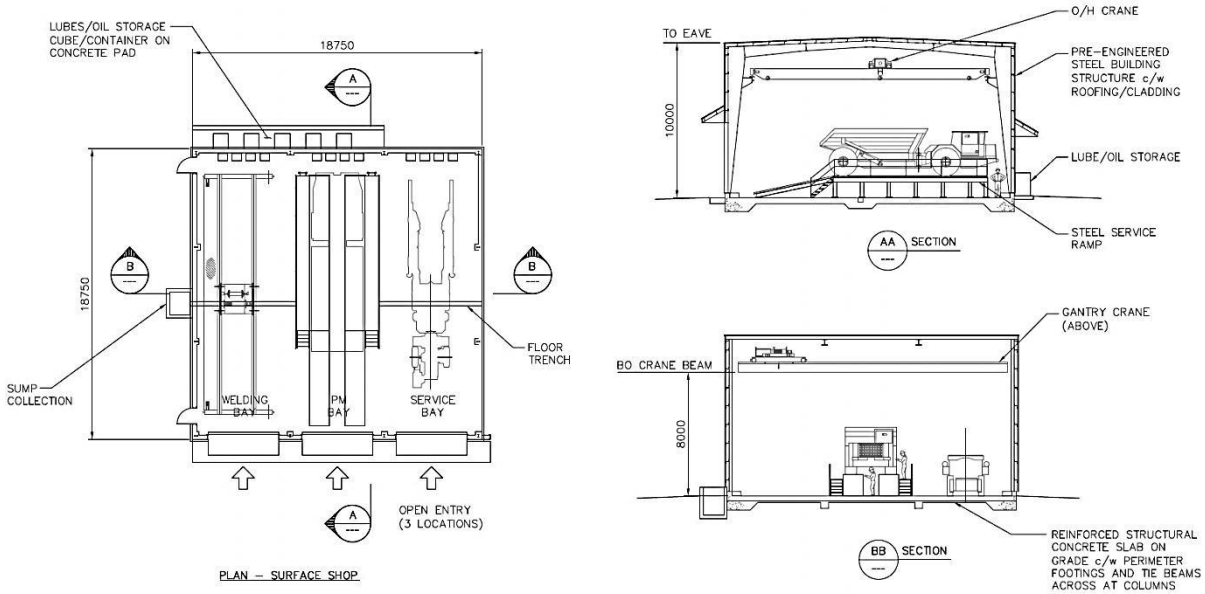
18.1.4 Surface Maintenance Facilities

The majority of mobile equipment maintenance will be completed in the surface maintenance facility. As a majority of the mine equipment including haulage trucks, LHD's, service vehicles, and support vehicles will travel to surface on a regular basis this will not require a significant amount of additional vehicle travel. As well as being less expensive to construct and equip, a surface maintenance facility has the advantage that the effective work shift is longer as travel time is not required for mechanics to travel to/from the work place. The surface maintenance crews will change shifts two hours prior to the operating crews, so that minor equipment service and repairs can be completed during the operating crew shift change period, while the equipment is parked on surface.

The surface maintenance facility includes three bays. One service bay will include a ramp to allow easy access underneath equipment. A separate shipping container(s) will be set up to serve as a drill doctor's work area and hydraulic hose manufacture/repair location.

The maintenance facility (Figure 18.5) will consist of a slab-on-grade foundation, steel support structure, an overhead crane and insulated steel siding and roof.

Figure 18.5: Surface Maintenance Facilities



An equipment wash bay will be included within the maintenance facility, allowing equipment to be washed prior to beginning maintenance work.

18.1.5 Surface Materials Storage

A surface materials storage area will be provided near the access ramp portal. Materials such as pipe, ground support supplies, ventilation duct, timber, electrical cable, etc. will be stored outside. A permanent structure will be erected to provide storage for larger equipment such as ventilation fans, electrical switchgear, motors, and similar items which need to be protected from the environment. Smaller materials which can be transported manually will be stored in a series of used shipping containers that have been modified with lighting, ventilation, and storage shelving.

18.1.6 Surface Ore and Waste Handling Facilities

Ore and waste rock from underground will be hauled using underground trucks to stockpiles located near the access ramp portal. There will be two separate waste pads (one for clean waste and one for PAG waste) and an ore storage pad. The PAG waste pad and ore pad will be designed to collect all run-off water, which will report to the mill for treatment.

A local contractor will be retained to load and haul waste and ore material from the surface stockpile areas to the waste disposal site and the surface ore crusher.

18.1.7 Surface Services

Electrical Power Supply

Electrical power will be provided to the mine site through existing 27 kV overhead power lines. Individual facilities designs will include transformers and switchgear installations as required.

Process Water Supply

Process water will be provided to the mine site as required. A storage tank will be included for peak capacity and fire suppression. A separate tank and supply will be required for the office and dry complex (potable water).

The supply of the process water is by others.

Underground Mine Water Discharge

Mine discharge water will be pumped from underground using a Victaulic-type steel pipeline to the large sump excavated inside the portal. From there the water will be pumped approximately five kilometres to the mill. The design of the surface pump and pipeline is by others.

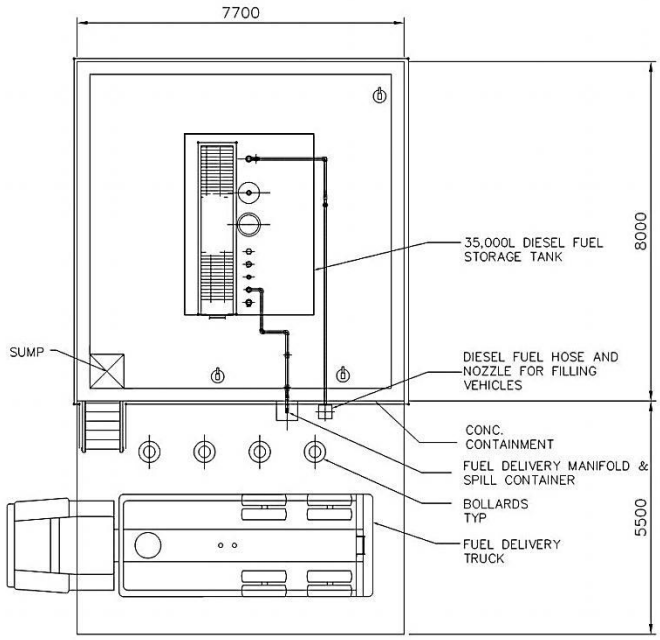
Diesel Fuel Supply and Dispensing

Diesel fuel will be delivered to a 35,000 litre storage tank located near the mine portal area (Figure 18.6). This facility will be surrounded by a spill containment structure and will be enclosed in a heated building.

Two fuel dispensing pumps will be provided, one with a regular nozzle for fuelling of small equipment such as Toyota trucks, and the other with a large Wiggins-type nozzle for rapid fuelling of haulage trucks, LHD's, etc.

The pad for vehicle parking when fuelling will have a spill collection sump which will discharge to the spill containment area surrounding the fuel storage tank.

Figure 18.6: Diesel Fuel Storage and Dispensing (Representative Only)



18.2 Underground Infrastructure

18.2.1 Ore and Waste Handling - Infrastructure

During steady state operations, the ore and waste rock will be trucked to surface using 45 tonne capacity diesel haulage trucks. These haulage trucks will be loaded (using LHD's) on the level near the ramp access and adjacent to the level re-muck.

At 750 tonnes per day, two LHD's will be required to muck the stopes to the re-muck and to load the trucks, plus any ongoing development needs. During a four year period, with peak development and ramping up and achieving full production, three LHD's are required.

The 45 tonne haulage trucks will transport ore and waste rock to surface stockpiles located near the access ramp portal. Each truck will haul an average load of 35 tonnes per trip. Truck cycle times (round trip) have been calculated as follows:

- From 80 Level: 20 minutes
- From 270 Level: 31 minutes
- From 410 Level: 58 minutes
- From 550 Level: 77 minutes

A maximum of three trucks are required to maintain the haulage needs as the centre of mine production moves deeper over time. Maintaining the availability of these ore haulage trucks as high as possible will be the top priority for maintenance crews.

Traffic control and roadbed maintenance in the haulage ramp will be critical to establishing an efficient truck haulage system. The haulage trucks will have priority for travel in the access ramp. A dedicated communication channel will be set up for all vehicle traffic in the ramp and haulage trucks which will regularly report position and direction of travel by radio in order to notify other ramp traffic. A grader will be used to complete regular roadbed maintenance in the haulage ramp. This grader will typically operate on night shift when other ramp traffic is reduced.

A local contractor will be retained to haul ore from the surface ore stockpile located near the access ramp portal to the Redstone Mill. As well, the contractor will haul waste rock to the designated waste rock disposal site, and will provide crushed rock to serve as roadbed material when required.

18.2.2 Underground Mine Backfill

The design, costs, and construction schedule for the paste fill plant will be provided by others. The following is a summary description of the mine backfill system as it impacts on the mine operations only.

- A paste fill plant will be constructed on surface. This plant will produce a suitable paste fill from the process plant tailings. The fill will be distributed via an inclined borehole to the 65 Level, and then through a series of boreholes to active mine production levels below. Lateral pipelines will be installed on the levels in order to reduce line pressures in the distribution system and to deliver paste fill to the individual production stopes as required.
- A construction crew will be designated to complete piping installations, construct fill barricades, and monitor the paste fill process as required. It is expected that these crews will be able to use existing mine service vehicles to complete this work.

Paste fill activities will be completed on all shifts, with fill pours running through shift change if required. All filling activities will be monitored at the paste fill plant using remote cameras and pipeline pressure/flow monitors.

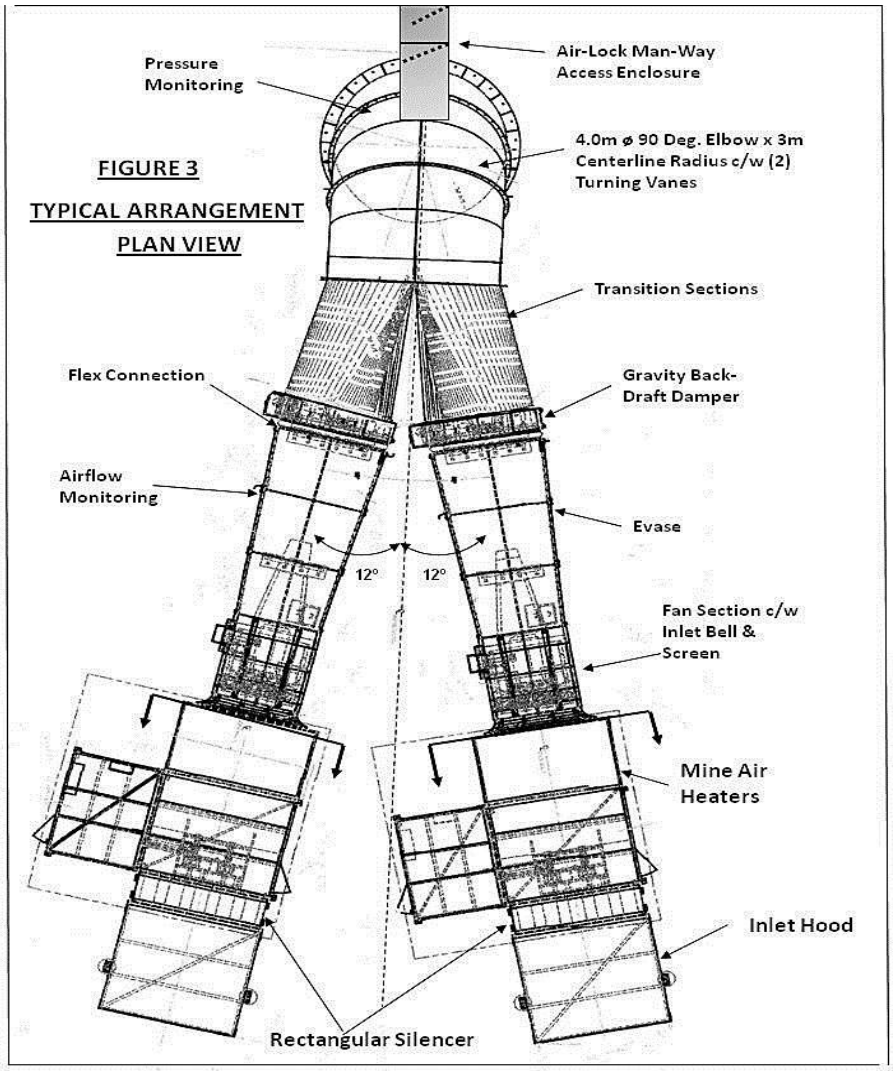
18.2.3 Ventilation and Heating

The mine ventilation system will be developed in phases:

- Initial ramp development from surface to approximately 80 Level will include twin 1.2 metre diameter ventilation ducts and 4 x 100 HP auxiliary fans to provide 40m^3/second (85,000 cfm) to the face.
- Near the portal entrance area a temporary ventilation raise will be driven to surface and equipped with one of the final 400 hp fans and heater facilities. This fan will operate well below full duty in this temporary arrangement but will provide heated air underground once the main fresh air raise from 80 Level is commissioned.
- After completion of the fresh air raise from Surface to 80 Level, the ramp ventilation fans will be moved to 80 Level to provide fresh air to the ramp face and new fans installed for level development (40m^3/second for the ramp and 20m^3/second for the level development).
- The fresh air raises will be extended downward in stages as mine development progresses. At each stage, the ventilation fans and ductwork for the ramp development will be relocated to suit.
- Once the fresh air raise is complete to the 410 Level, the fans will need to accommodate the total inflow of air. The fans located above the fresh air raise will be equipped with variable frequency drives and will be adjustable to allow for a staged increase in air volumes.
- In the final design, the total mine ventilation capacity will be 157 m^3/second which is based on:
  - The underground mine diesel equipment fleet (motor kW adjusted for equipment availability and utilization).
  - The required ventilation airflows for the access ramp (service vehicle traffic and haulage trucks), underground facilities, mine development and mine production crew activities, general mine ventilation, and losses.

The mine ventilation is a push system with the main fans located on surface at the fresh air raise.

Figure 18.7: Mine Permanent Fresh Air Fan Installation



A schematic section showing the ventilation air distribution throughout the mine is shown in Figure 18.8. Fresh air to the mine will be delivered through the fresh air raise (157 m³ per second). The access ramp is designed to handle all 157 m³ per second of air as exhaust.

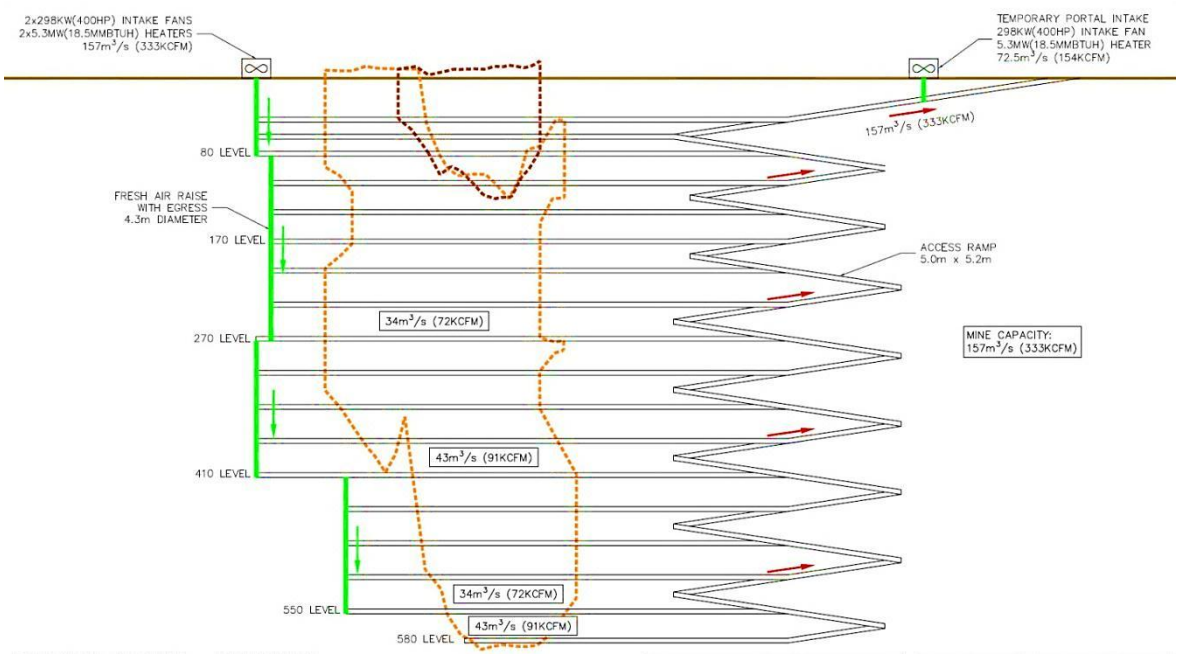
The main surface fresh air fans will consist of two axial-type fans in parallel, with each fan having a capacity to handle 80 m³ per second. Each fan will be equipped with a 298 kW (400 HP) motor and will operate at 2,370 Pa with 82% efficiency. For the early development a raise near the portal will be excavated and equipped with one of the permanent 298 kW fans. When the fresh air raise from 80 Level to surface is excavated, the second permanent 298 kW fan will be installed and commissioned. At this time the fan located above the portal raise will be disconnected and moved to the fresh air raise collar.

The installation will include back-draft dampers in the ductwork leading to each fan. By closing the damper to one fan, the second fan can still operate in order to provide reduced ventilation airflows (110 m³ per second) to the mine.

A heating plant will be required on surface in order to provide heating for the ventilation air feeding the underground operations. Temporarily a separate heating plant is required for the portal fresh air raise, but will be relocated to the fresh air raise for the permanent installation. The fresh air raise and portal intake system will each be equipped with a 5.3 MW (18.5 MMBTUH) plant until the fresh air from surface to 80 level is completed and equipped at this point the portal heating until will be relocated. The system will be to heat the air to +5 degrees Celsius from -45 degrees Celsius.

The complete ventilation and heating design is described in the document titled “Hart Mine Ventilation System – Revision 1” included in Appendix E.

Figure 18.8: Overall Ventilation Schematic



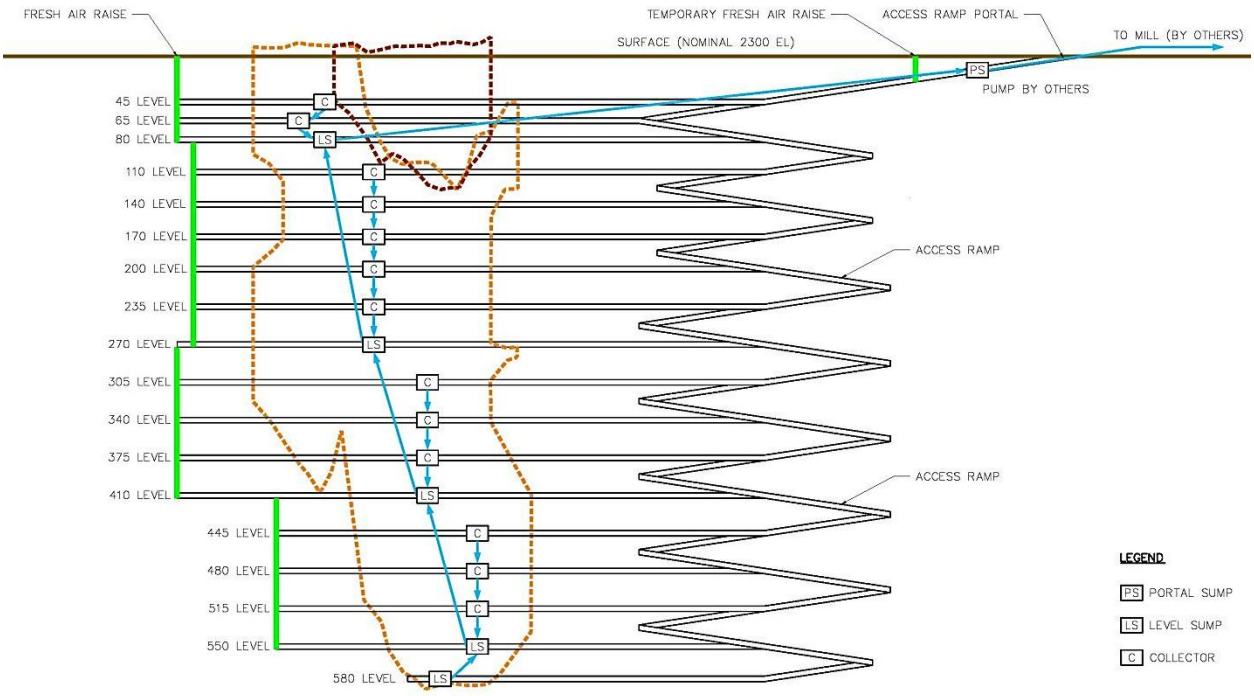
18.2.4 Underground Mine Dewatering

Ground water inflow to the mine is estimated at 545 m³ per day (100 USgpm), as estimated in the 2010 scoping study. Additional sources of mine water will include process water introduced through development and production drilling, water sprays for dust suppression, general water use (washing down and clean-up), and flush water used to clean the paste fill distribution pipelines. In total, these additional sources of water will add 820 m³ per day (150 USgpm) to the mine water inflows; bringing the total mine water inflow to 1,360 m³ per day (250 USgpm).

The mine dewatering system is designed to store and handle the total anticipated water inflow of 1,360 m³ per day over a 16 hour pumping period (pumping rate of 375 USgpm).

- Water inflows attributed to underground operations will initially be at a significantly lower rate and will increase as mine development and the number of mine production areas increase.
- It is expected that water inflows will be higher in development and production areas located closer to surface, and as such the 20 Level (Portal Sump) and 80 Level sumps will have larger capacity.

Figure 18.9: Mine Dewatering Schematic



Mine Dewatering During Initial Development

During the initial ramp development period, mine dewatering will be accommodated using submersible pumps located in redundant re-muck bays along the completed ramp. A small pump will be used to dewater the ramp face, pumping back to a re-muck located some distance up the ramp (at least two muck bays behind the face, as the closest remuck will be used to handle waste rock). A larger submersible pump (±11 kW) will be used to pump water from this sump to another sump located at a higher elevation in the ramp. This cascade process will be repeated until the water is discharged into the large sump at the 20 Level sump. This sump will be sized to handle all run of mine water and any surface inflows that might occur prior to covering the portal. The water from this sump will be delivered to the mill, located approximately five kilometres away. This portion of the dewatering system will be designed by others.

When mine development reaches the 80 Level, a permanent sump and pumping station will be established. After this station is completed, the re-muck bay pumps located in the upper portion of the ramp will be re-used during development of the ramp to 270 Level in order to pump water from the ramp face up to the 80 Level sump. At 270 Level, a second permanent sump and pumping station will be established and the process repeated for development of the ramp to the 410 Level, where a third permanent sump will be established. The process will be repeated again on the 550 Level where the final permanent sump will be constructed.

Main Sump and Pump Stations

A dirty water pumping system using hard metal centrifugal pumps has been selected for mine dewatering. The selected 75 kW pumps can work effectively to a total head of approximately 200 metres. As a result, four main sump and pump stations are required.

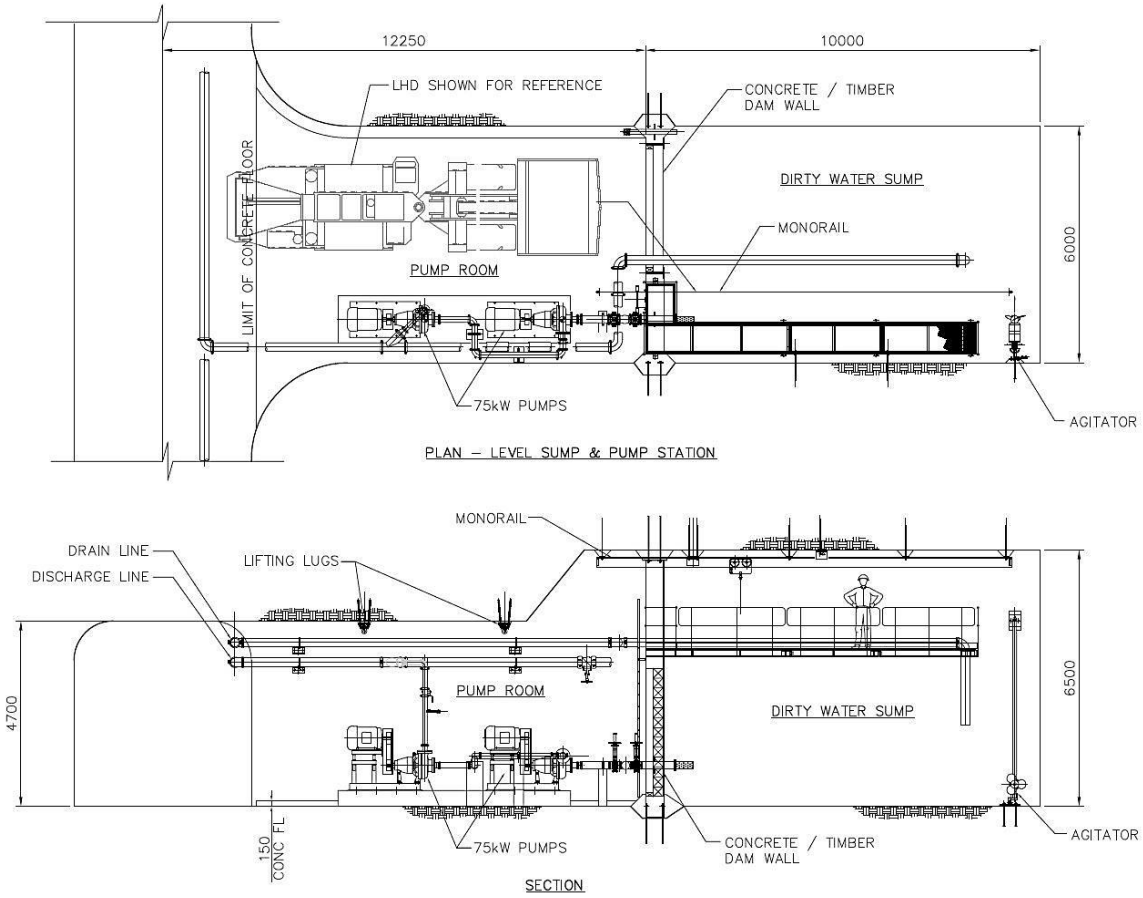
The upper sump and pump station will be located at the 80 Level. This system will pump to the portal sump (20 Level) and from there pumped through a surface pipeline to the mill. The 80 Level dewatering station will be required to handle the full mine water discharge flows (1,360 m^3 per day), as all water collected above this level and pumped from lower mining areas will be directed to this sump. The calculated pump sizes are 30 kW with one operating and one spare, but for consistency throughout the system, 75 kW pumps (identical to the lower pump stations) have been selected. The 80 Level system will be designed to pump at a rate of 85 m^3/hr (375 USgpm) operating at a head of 60 metres. The pumps will handle the normal mine water inflows in 16 hours of operation per day, allowing some capacity to handle temporary surges in water inflow rates, short term electrical power outages, and maintenance to the pumps and pumping system.

In the event that actual water inflows are higher than presently expected, the capacity of this station will need to be increased. This can be accomplished by increasing the size of the sump, adding a third pump (two operating and one spare set), and the installation of a second discharge line from the sump to surface.

Lower main sump and pumping stations will be located at 270 Level, 410 Level, and 550 Level. The system will pump in stages from the 550 Level to the 80 Level, and will handle flows of 1,110 m^3 per day. The pump system (two 75 kW pumps, one operating and one spare) is designed to pump at a rate of 69 m^3/hr (300 USgpm) operating at a head of 180 metres. The pumps will handle the normal mine water inflows in 16 hours of operation per day, allowing some capacity to handle temporary surges, short term electrical power outages, and maintenance to the pumps and pumping system.

A typical main sump and pump station design is shown in Figure 18.10.

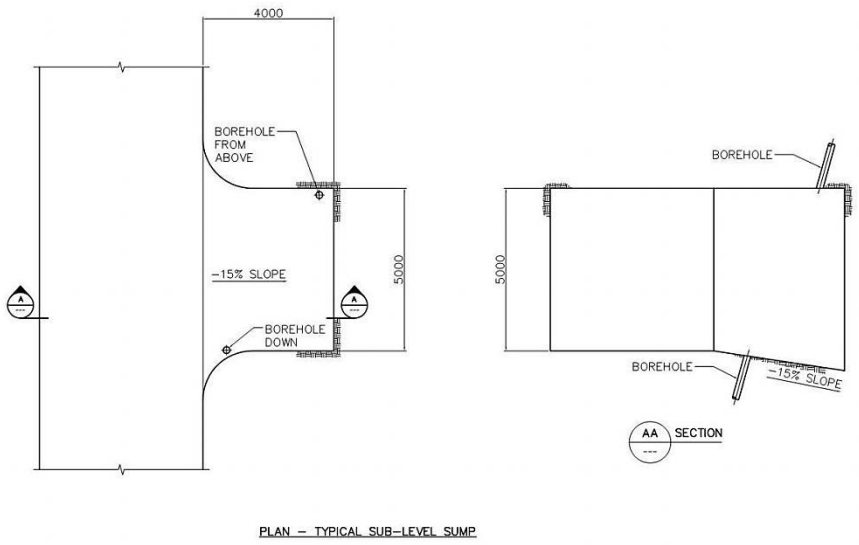
Figure 18.10: Typical Permanent Sump and Pump Station (representative only)



Level Sumps and Drainage

Level development will generally be graded to provide drainage to small local collection and drainage sumps. A drainage borehole will be drilled to connect to the sump below. In this manner, a series of level sumps will be connected such that all water flows via drain holes to a main level sump (80 Level, 270 Level, 410 Level, and 550 Level). At these levels, water will be collected and pumped to the sump on the main level above or ultimately to the 20 Level portal sump.

Figure 18.11: Level Sump (representative only)



Slimes Handling

With the exception of ramp development, most mine water inflows will be collected on the mining levels. The water will flow via ditches to a small collection sump located near the haulage ramp. A drain hole located at this collection sump will collect overflow water and deliver it by gravity to a main sump. The collection sump will also collect the majority of the coarse solids included in the ditch water.

A mine service tractor with backhoe attachment will be used to muck slimes from the collection sumps to a mine truck or small LHD.

The fine materials which are not settled in the level collection sumps will remain suspended in the water and be pumped to the main sump and pump stations. Agitators are included in the main sump designs to ensure this fine material remains in suspension and is pumped to surface, thus minimizing settling in the main sumps.

Mine Water Discharge on Surface

The mine dewatering system, including pump selection, sump sizing and overland pipeline design is by others and has not been included in this study.

18.2.5 Other Underground Mine Infrastructure

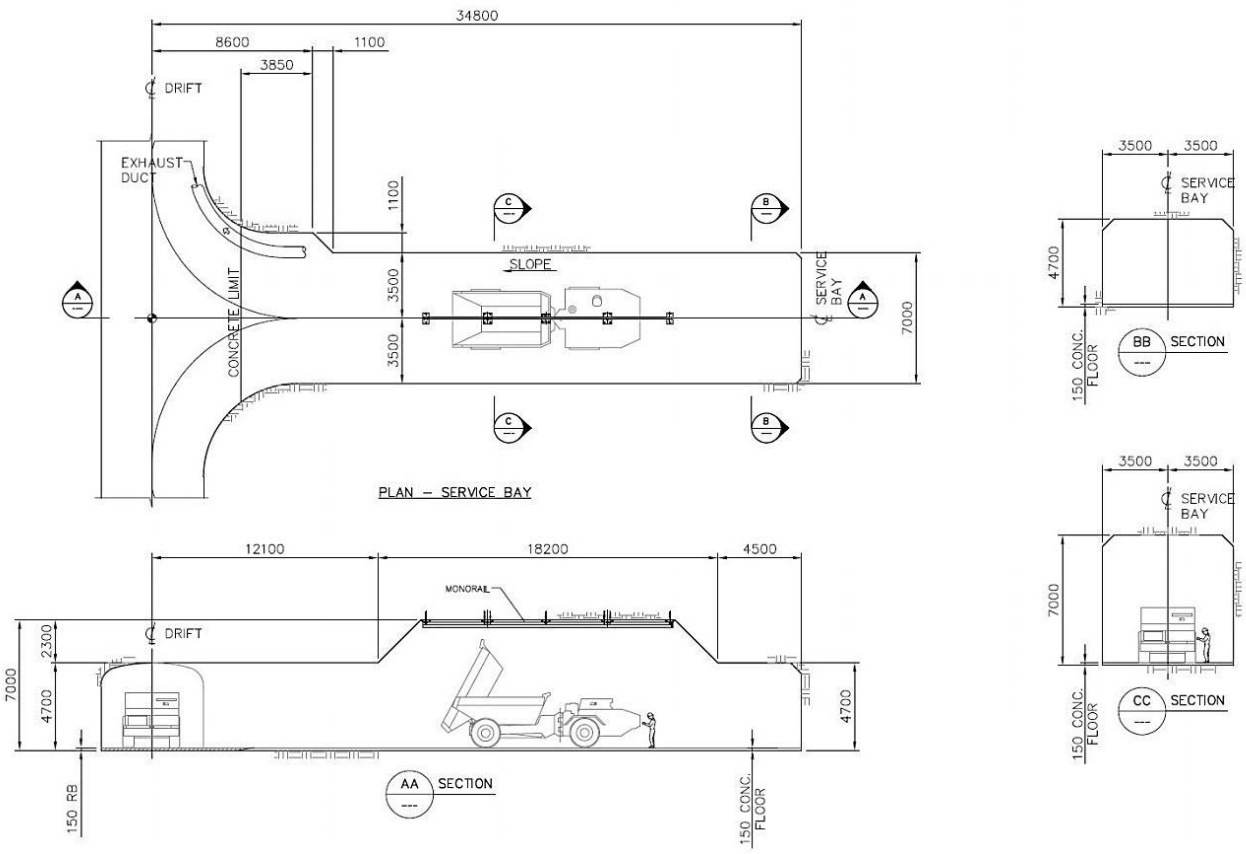
Underground Service Bay

The majority of the maintenance for the underground equipment will be completed in the surface maintenance facility. Of the total mine equipment fleet, approximately 70% of the units will consist of haulage trucks, service vehicles, and personnel vehicles which will make regular trips to surface. Maintenance personnel located on surface will be

more productive as travel time will not be required to/from the underground and there will be easier access to spare parts.

An underground service bay will be established on 410 Level and staffed by a small underground maintenance crew. This facility will complete emergency repairs on underground equipment (including tire changes, hydraulic hose repairs, etc.) as well as providing maintenance on equipment such as jumbos and production drills. The underground service shop will consist of a single bay as shown in Figure 18.12.

Figure 18.12: Underground Service Bay (representative only)



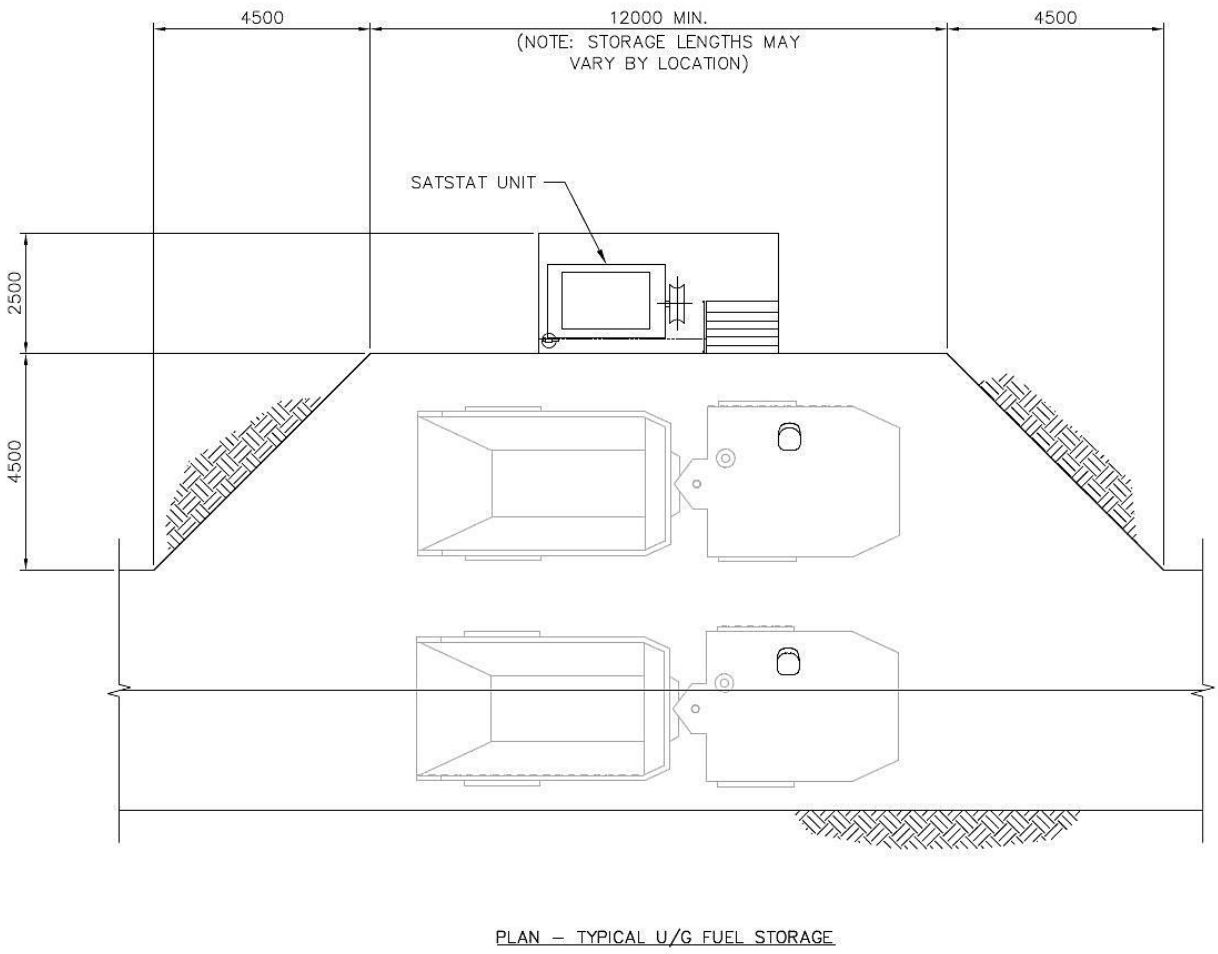
As well, a combination fuel/lube truck will be operated by maintenance personnel to complete minor equipment adjustments and repairs as required while making the normal rounds to fuel equipment throughout the mine.

Underground Fuel and Lubricant Storage/Dispensing

Most of the mobile equipment will be fuelled on surface at the start of each shift. This will include haulage trucks, LHDs, and service vehicles.

The equipment fleet includes a fuel/lube truck. This truck will be used to deliver diesel fuel to the underground as well as to remote fuelling facilities (SatStat fuel station) located on the 410 Level near the underground maintenance facility, and in the active production areas. A schematic of a SatStat fuel station is shown in Figure 18.13. The fuel truck will also provide lubricants to underground mine equipment.

Figure 18.13: Underground Fuel Dispensing Station (representative only)



Explosives and Detonator Storage

Underground explosives storage will initially be established on the 80 Level, and later relocated to the 375 Level (Figure 18.14). Underground storage capacity will be up to five days' supply of development and stope blasting materials. Liberty has an agreement in place with an explosives supplier with a facility in South Porcupine.

A small storage facility for detonators will also be constructed on 80 Level and ultimately on the 375 Level (Figure 18.15).

Figure 18.14: Underground Powder Magazine (representative only)

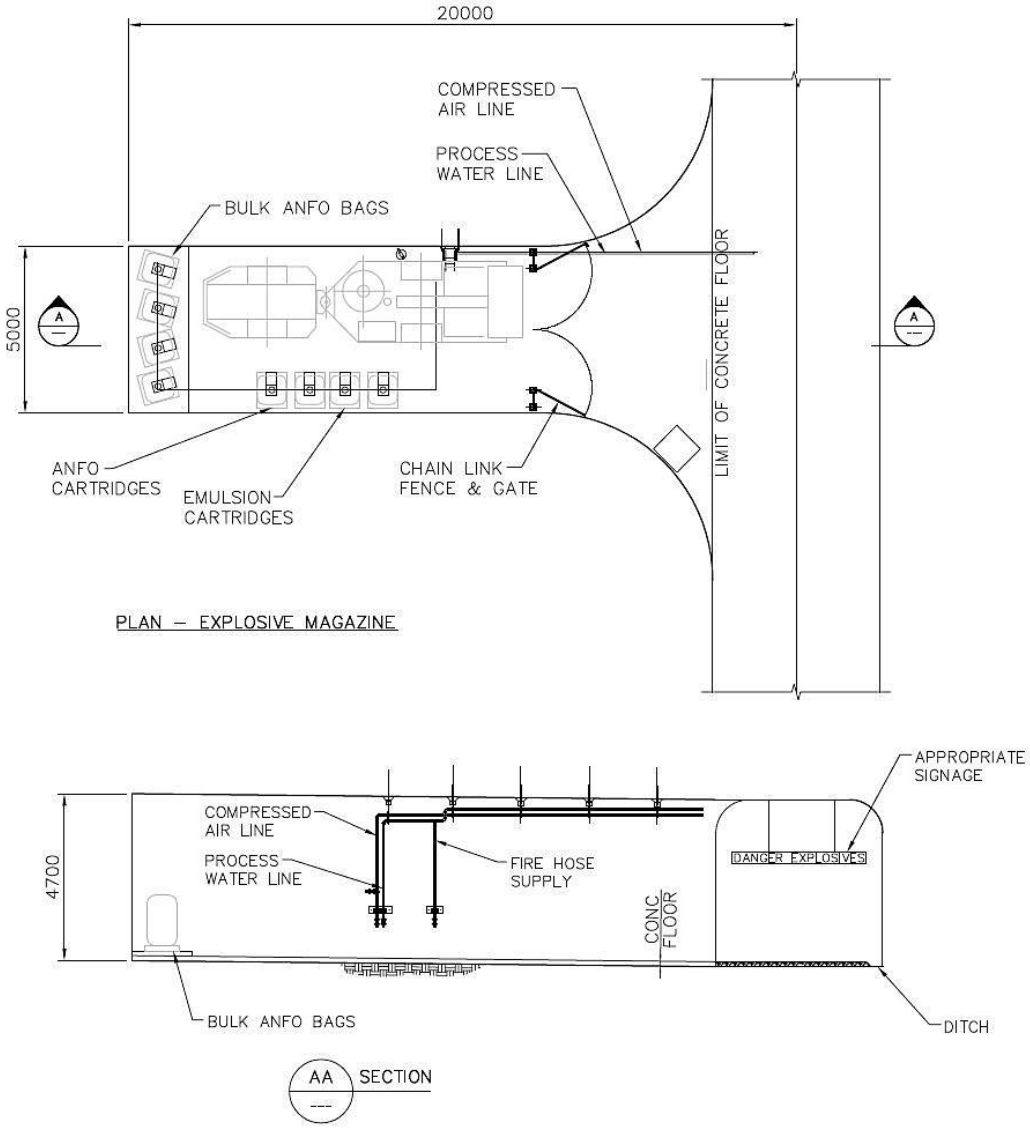
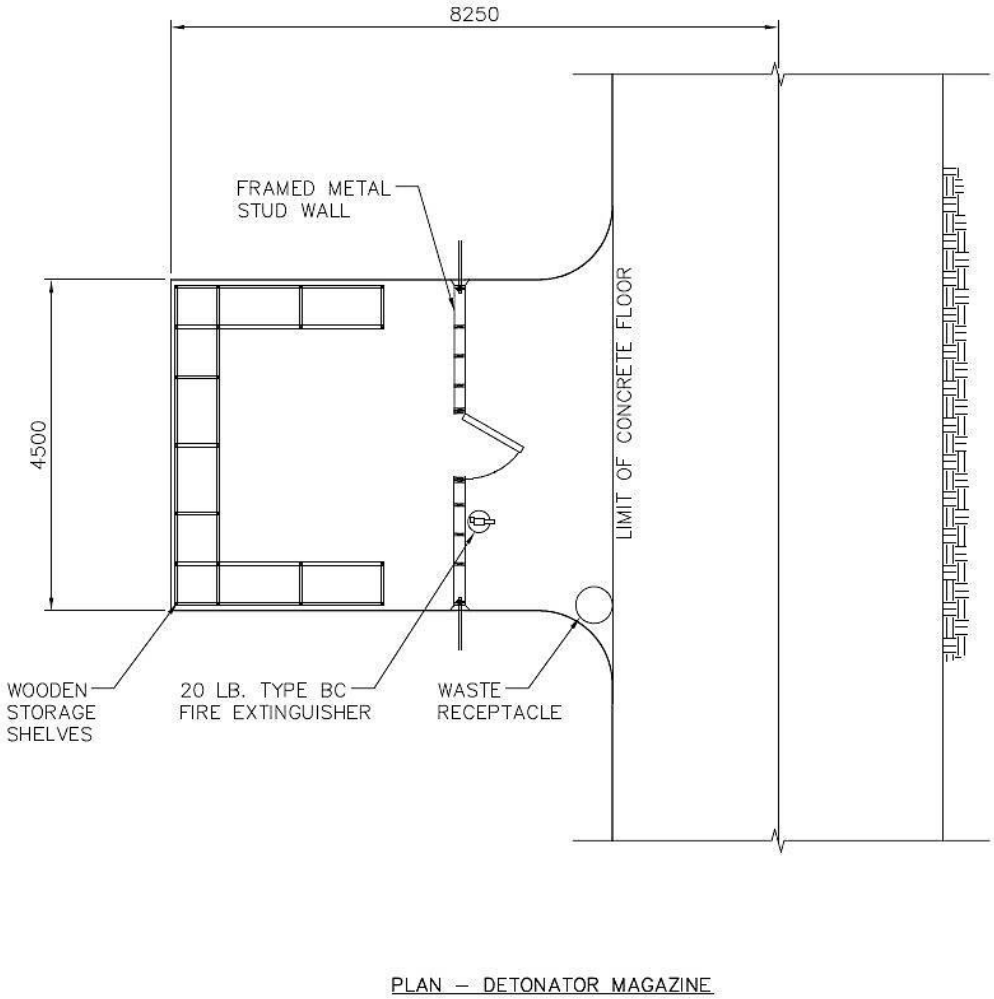


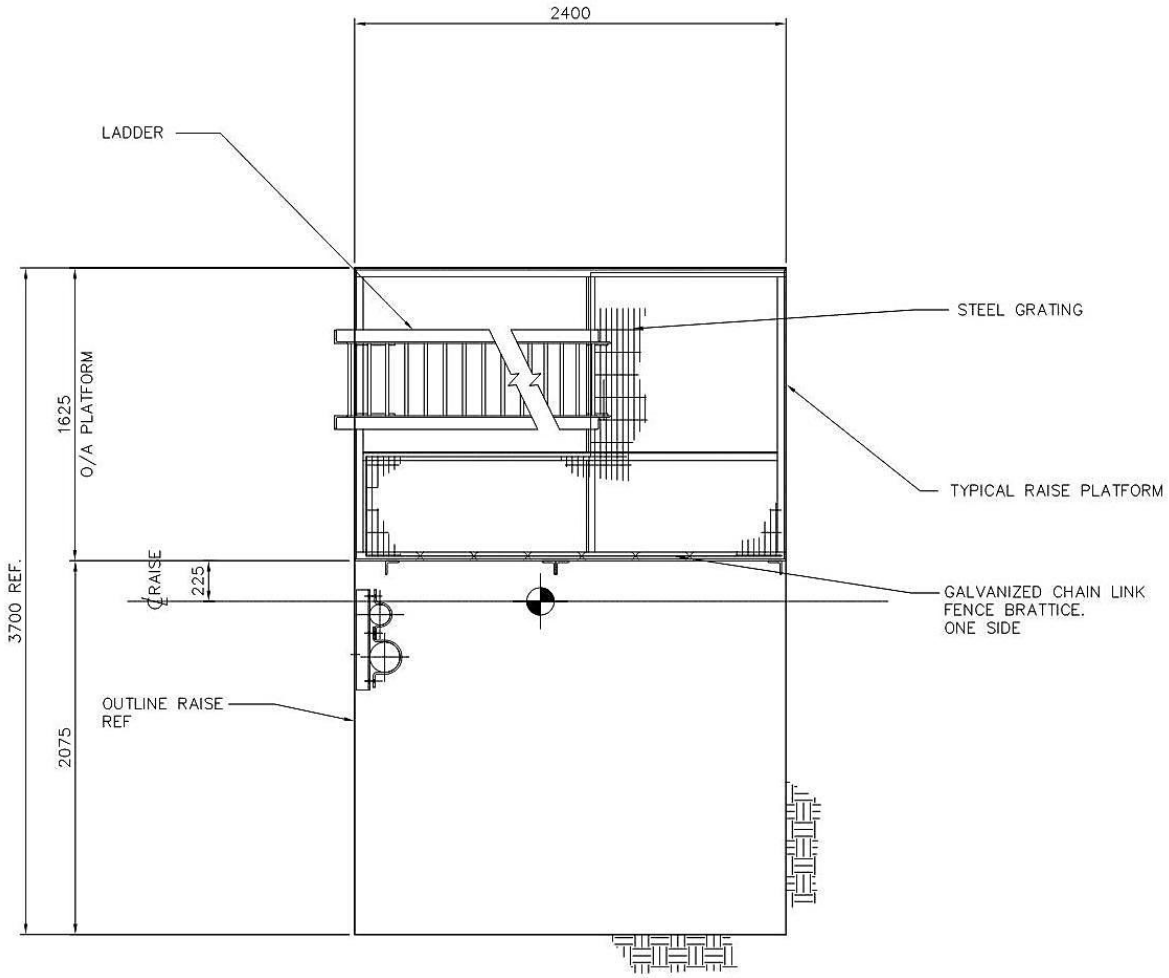
Figure 18.15: Underground Detonator Storage (representative only)



Second Egress

Second egress will consist of a manway installed in the 3.0 metre x 3.0 metre fresh air intake raise located near the access ramp. Approximately 1.5 metres of this raise will be left open to provide a ventilation airway. The other portion of the raise will have a manway installed as shown in Figure 18.16.

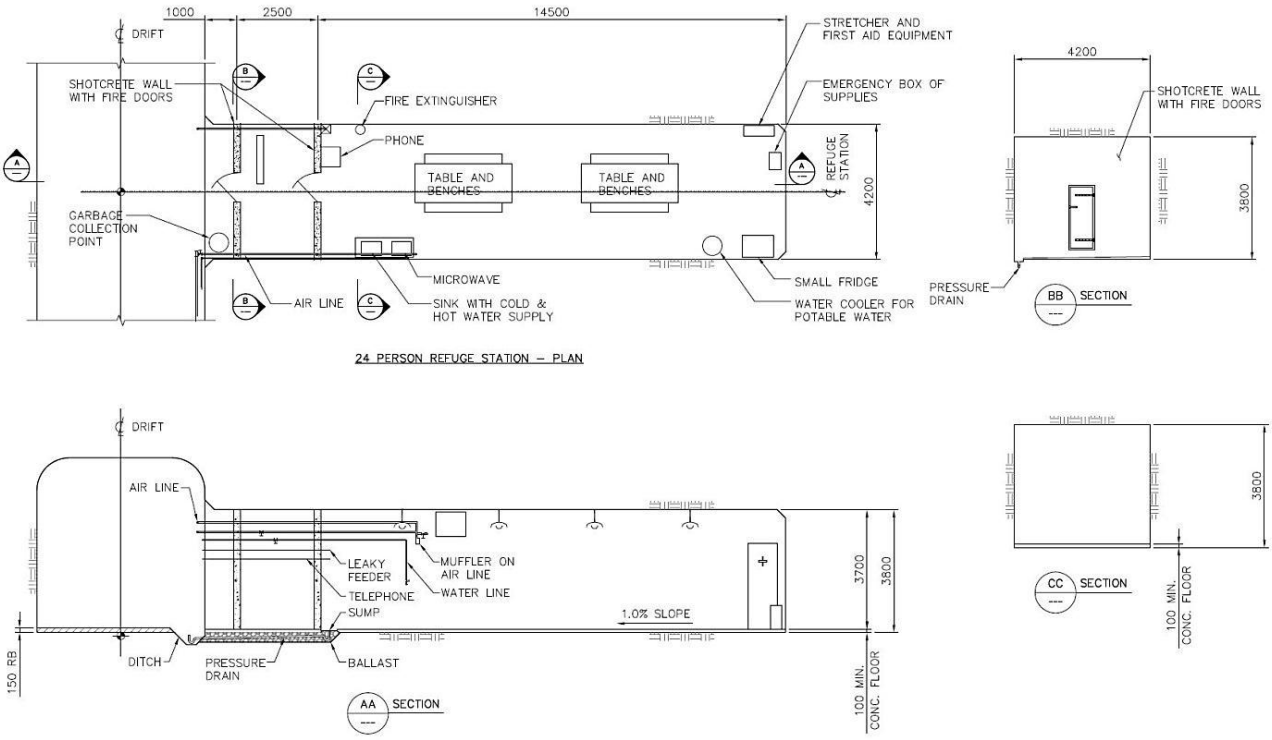
Figure 18.16: Second Egress (representative only)



Refuge Stations

Permanent refuge stations will be located underground on the 65, 200, and 410 Levels (Figure 18.17). The refuge stations will serve the development and production crews working in these areas, as well as the maintenance crews working in the underground service bay.

Figure 18.17: Underground Refuge Station (representative only)



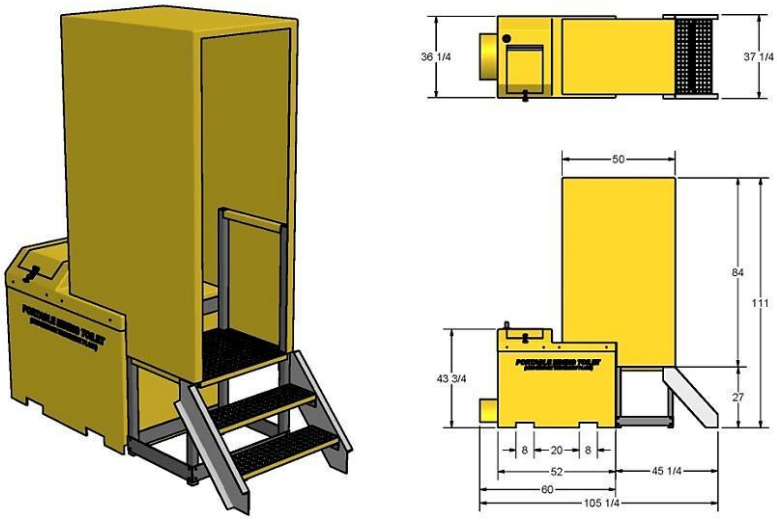
Three portable refuge stations will be purchased. As mine development and production moves into new mining areas, an existing cut-out will be used to set up a temporary refuge station (Figure 18.18).

Figure 18.18: Portable Refuge Station (representative only)

Sanitary Systems

Portable sanitary systems (Rezplast or similar) will be provided near the refuge station locations (Figure 18.19).

Figure 18.19: Sanitary System (representative only)



18.2.6 Underground Mine Services

Roadbed Ballast Delivery

Maintaining good roadbed conditions in all travel ways is important to overall productivity and mobile vehicle maintenance, and will be essential for efficient high-speed vehicle travel on the ramp.

Roadbed ballast for the underground will be obtained by crushing waste rock on surface (contractor to provide this service as required) and stockpiling in the general area of the ramp portal. As required, the 45 tonne haulage trucks will be used to haul roadbed material to an underground storage area where the back will be slashed to allow the truck to dump.

A grader is included in the mobile equipment fleet. It is anticipated that most personnel/materials transferred will occur during day shift, and the grader will operate on night shift to maintain the ramp in good operating condition. This will include the placement and spreading of additional roadbed ballast as required.

Materials Handling

All materials, including explosives, pipe, ground support, ventilation duct and fans, etc. will be transported via ramp to various storage locations throughout the mine. This will be accomplished primarily through the use of flat-deck trucks equipped with Hiab lift booms. A dedicated crew will be used to ensure efficient handling of materials.

Personnel Transport

The mobile equipment fleet includes a personnel transport vehicle. This will be used to provide transport for development miners, drillers, and maintenance personnel at the start and end of each shift. Depending on mine requirements, the personnel transport vehicle may also be used to provide transport at additional scheduled times during the shift.

Haulage trucks and LHD's will typically be brought to surface at shift change. As well, there are 13 service vehicles including boom truck, fuel/lube truck, and utility pickup trucks (supervisors, technical staff, and maintenance), etc. Generally, these vehicles will also report to surface at the end of each shift.

Scrap Removal

Scrap material storage bins will be located underground near the explosives storage area, underground maintenance shop, and each refuge station location. Similar bins will also be located on surface at the office/dry area, surface maintenance shop, and other sites as appropriate. Separate bins will be provided for scrap paper and garbage, wood

products, and steel. Used oil will be collected in the same containers used to deliver new oil.

The final disposal of scrap material will be according to the program in place for the overall mine site.

Underground Electrical Power Distribution

The voltage will be transformed from 25kV (supplied by existing power lines) to 13.8kV and will be distributed to the underground via two, 3 conductor 4/0 TECK 13.8kV electrical cables. Initially a cable will be installed in the access ramp for development, but as sections of the fresh air raise/manway are completed, a permanent electrical distribution cable will be installed in the raise and the cable in the ramp will be removed/re-used.

Portable and fixed mine load centres will be installed as required throughout the mine. These load centres will include a step down transformer from 13.8kV to 600V as required for local equipment loads. Single line drawings showing the overall surface and underground power distribution and electrical equipment installations are included in Appendix H for reference.

Underground Communication System

Underground communication systems will include:

- A leaky feeder radio system will be installed throughout the mine. This will be used to provide radio communications as well as video monitoring of paste fill pour locations. A minimum of four channels will be provided, including:
  - Mine underground operations and maintenance channel
  - Ramp traffic control channel
  - Underground emergency channel
  - Centralized blasting

In the event of an emergency, stench gas (ethyl mercaptan) will be injected into the portal fresh air raise and into the mine compressed air lines. Ethyl mercaptan will not be injected into the ventilation raise containing the secondary egress manway.

Instrumentation, Automation, and Control

The Programmable Logic Controller (PLC) Networking will operate over the leaky feeder system using the appropriate interfacing devices (Ethernet). There will be a PLC local to each level sump pump to monitor the status of the pumps.

Mine Process Water Distribution

Water will be distributed throughout the mine via 50 mm and 100 mm diameter pipelines (Victaulic) installed in the access ramp. Pressure reducers will be installed in the lines in order to maintain water pressures at a maximum of 100 psi working pressure.

Compressed Air Distribution

A main compressor plant will be established on surface, in the general area of the ramp portal. A temporary compressed air line will be installed in the access ramp during development. As development progresses and the fresh air raise is completed, a permanent compressed air line will be installed in the ventilation/escapeway raise in order to minimize the length of the compressed air distribution system.

Central Blasting System

Development blasting will occur during the shift as long as proper clearing and guarding procedures are followed. Development rounds may also be blasted at the end of the shift using a central blasting system.

All production blasts will occur at the end of shift using a central blasting system over the leaky feeder system.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Markets

The current market conditions for nickel are expected to remain steady for the next 12 – 18 months from Liberty's point of view with more attractive prices for the metal in the next 5 – 7 years. The analyses of this report have used a base metal price of $10 per pound of nickel as an average for the life of mine.

19.2 Contracts

There are no contracts in place at the moment.

19.2.1 Ore Sale and Purchase Agreement

The ore from the Hart project will be processed and reduced to concentrate containing 20% nickel. This concentrate will then be shipped to Xstrata's processing facilities in Sudbury, Ontario under the current off take agreement between Liberty Mines and Xstrata. This agreement expires in December of 2013. Negotiations with Xstrata will commence shortly to extend the agreement for another five years and beyond.

19.2.2 Lateral and Vertical Development Contract

There are currently no Lateral or Vertical Development contracts in place.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Studies

Application for a mining lease at Hart was granted with the approval of Lease 108569 as of 01 January 2011 for a term of 21 years. Mine operating permits including a Closure Plan, Certificate of Approval - Air, and Amended Permit to Take Water (along with McWatters mine site) have been obtained for the proposed mine development. An application to allow use of the McWatters containment pond by mine water discharge from the Hart site continues to be under review with the Ontario Ministry of the Environment (MOE) since early 2012. When approved, this permit will be a Certificate of Approval – Industrial Sewage.

The Redstone Mill Complex and tailings areas have already been approved for environmental permitting. The mill is in operation currently processing McWatters and Redstone ore.

20.2 Environmental Liabilities

Underground mining operations will be accessed by a ramp extending from a portal at surface. Bulk mining with Alimak mining methods will be utilized. All plant feed will be brought to surface using the mine's mobile truck fleet where it will be temporarily stockpiled, loaded into highway trucks and hauled to the Redstone nickel concentrator at the Redstone Mine site.

Liberty has prepared a Spill Prevention and Contingency Plan for use at McWatters and Redstone Mines. This same plan will be extended to apply to Hart Mine.

The purpose of this plan is to help prevent or reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result. This is achieved through detailed information and guidance on actions important for the prevention of spills and procedures to detect and respond to them when they occur. The structure of the plan is designed in accordance with the requirements of Ontario Regulation 224/07 – Spill Prevention and Contingency Plans. Table 20.1 lists risk agents and corresponding Reporting Thresholds.

Table 20.1: Reporting Thresholds

Risk Agent	Reporting Threshold
Cement / Concrete / Asphalt	Spill of Cement /Concrete/ Asphalt in surface water is reportable. Release on land is not reportable unless within 50 m from surface water during the extreme rainfall and flooding. No threshold is defined.
Sewage	Release of raw or partially treated sewer to surface water is reportable. Release to the land is reportable if larger than 20 m3.
Ammonium nitrate	Spill of ammonium nitrate in surface water is reportable. Release on land of less than 2300 kg is not reportable unless within 50 m from surface water during the extreme rainfall and flooding. Release of more than 2300 kg is reportable, very low probability event.
Ore leachate	Uncontrolled leachate from failed or overtopped detention ponds which releases to surface water is reportable. No threshold for quantity is defined.
Water treatment reagents	Spill of reagent in surface water is reportable. Release on land of less than 2300 kg is not reportable unless within 50 m from surface water during the extreme rainfall and flooding. Release of more than 2300 kg is reportable, very low probability event.
Water treatment reagent solution	Uncontrolled release of more than 20 m^3 from failed or overtopped tanks is reportable. Very low frequency event.
Organic reagents / solvents	Spill of solvent in surface water is reportable. Release on land of less than 450 kg is not reportable unless within 50 m from surface water during the extreme rainfall and flooding. Release of more than 450 kg is reportable, very low probability event.
Organic reagents / solvents	Release of 100 kg and less is not reportable unless it is released within 50 m of surface water during an extreme rainfall event.
Sulphuric acid	Release of more than 450 kg is reportable, very low probability event. Release of 454 kg and less is not reportable unless it is released within 50 m of surface water during an extreme rainfall event.
Wastewater	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Wastewater	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Wastewater	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Off-spec treated water	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Off-spec treated water	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Off-spec treated water	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Off-spec treated water	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Treated / fresh water	Release according to permit is not reportable
Tailings slurry	Uncontrolled release of more than 20 m^3 from failed or overtopped tanks is reportable. Very low frequency event.
Process water in tailings slurry	Uncontrolled release of more than 20 m^3 from failed or overtopped tanks is reportable. Very low frequency event.
Tailings leachate	Uncontrolled leachate to surface water is reportable. No threshold for quantity is defined.
Tailing	Uncontrolled tailings to surface water are reportable. No threshold for quantity is defined.
Tailing	Uncontrolled tailings to surface water are reportable. No threshold for quantity is defined.
Potassium hydroxide	Release of more than 450 kg is reportable, very low probability event. Release of 454 kg and less is not reportable unless it is released within 50 m of surface water during an extreme rainfall event.
Potassium hydroxide solution	Uncontrolled release of more than 20 m3 from failed or overtopped tanks is reportable. Very low frequency event.
Diesel fuel / gasoline	Release to water is reportable. Regulation exempts less than 100 L of fuel under circumstances. Release less than 100 L to the land is not reportable unless it is released within 50 m of surface water during an extreme rainfall event. Release to the land of larger than 100 L of fuel is reportable. Very low frequency event.
Vehicle oils, lubricants, antifreeze and fuels	Release to water is reportable. Regulation exempts less than 100 L of fluid under circumstances. Release less than 100 L to the land is not reportable unless it is released within 50 m of surface water during an extreme rainfall event. Release to the land of larger than 100 L of fuel is reportable. Very low frequency event.
Ethylene glycol	Release to the land of larger than 100 L of glycol is reportable. Very low frequency event. Release less than 100 L to the land is not reportable unless it is released within 50 m of surface water during an extreme rainfall event.
Lubricating oils and greases	Release to water is reportable. Regulation exempts less than 100 L of oil under circumstances. Release less than 100 L to the land is not reportable unless it is released within 50 m of surface water during an extreme rainfall event. Release to the land of larger than 100 L of fuel is reportable. Very low frequency event.
Bunker C fuel oil	Release to water is reportable. Release less than 100 L to the land is not reportable unless it is released within 50 m of surface water during an extreme rainfall event. Release to the land of larger than 100 L of fuel is reportable. Very low frequency event.
Hazardous and liquid wastes	Release to water is reportable. Release of 10 kg and less is not reportable unless it is released within 50 m of surface water during an extreme rainfall event. Release to the land of larger than 10 kg of waste is reportable. Very low frequency event.

Waste generated or created on site at Hart will be stored in approved containers. All waste oil will be pumped into and stored in a 1,100 litre steel tank located beside the McWatters maintenance shop. All other wastes (contaminated soil, oil filters, and waste chemicals) from Hart will be stored in 200 litre waste material drums to be removed from site by a certified waste hauler and disposer.

Waste ammonium nitrate from explosives at Hart (contaminated or non-contaminated) will be stored in waste ammonium nitrate bins where it will be picked up by Nordex Explosives Ltd. and transported to the Nordex site for disposal.

20.3 Emergency Response Plan

An Emergency Response Plan (ERP) has been developed for McWatters and Redstone Mines. That plan will be extended to include Hart Mine as appropriate. The plan was developed to identify potential worst-case emergency situations and responses, to outline the responsibilities of employees during these emergencies, and to ensure that all requirements of applicable laws are met.

E1 – Emergency Level 1
Emergency Level 1 corresponds to elevated contaminant concentrations within the footprint of the mine water settling pond. Contaminant elevations consist of any level exceeding the regulated monthly average threshold for each contaminant (i.e. copper, nickel, arsenic, zinc, lead, total suspended solids, ammonia, and radium 226).

E2 – Emergency Level 2
Emergency Level 2 corresponds to elevated contaminant concentrations within the footprint of the mine water treatment pond. Contaminant elevations consist of any level exceeding the regulated monthly average threshold for each contaminant (i.e. copper, nickel, arsenic, zinc, lead, total suspended solids, ammonia, and radium 226).

E3 – Emergency Level 3
Emergency Level 3 corresponds to elevated contaminant concentrations from the treatment pond discharge weir. Contaminant elevations consist of any level exceeding the regulated monthly average threshold for each contaminant (i.e. copper, nickel, arsenic, zinc, lead, total suspended solids, ammonia, and radium 226).

Sampling is undertaken daily at the settling pond at McWatters and Redstone. If any results exceed the thresholds, various actions are taken by the environmental staff to contain the water in one or all of the noted areas. For example, a Level E3 emergency requires the installation of stop logs in the treatment pond discharge channel to contain

the water within the treatment pond. If it is apparent that the ponds will fill to maximum water heights before the concentration is reduced, the mine water system will have to be shut down. This will effectively halt the mining activities until the problem has been rectified.

20.4 Acid Rock Drainage

Acid rock drainage at Hart is expected to be similar to that found at McWatters Mine. Four main rock types can be identified at the McWatters site: footwall intermediate volcanics, mineralized ultramafic flows, felsic dykes, and mafic dykes. Each rock type was sampled according to the Guidelines and Recommended Methods for the Prediction of Metal leaching (ML) and Acid Rock Drainage (ARD) at mine sites in British Columbia. The samples were then sent to the ALS Chemex lab in Vancouver for analysis of total sulphur, paste pH, and Acid Base Accounting (ABA).

Testing revealed that the rock types to be extracted during mining show pH values that are non-acid generating, both from ABA and Shake Flask tests. Neutralizing Potential Ratio (NPR) values and sulphide-S percentages also show that, on aggregate, these rocks are unlikely to be acid generating as they average NPR>>4 and sulphide-S %<0.3. The few samples of andesitic composition with NPR<4 and sulphide-S %>0.3 yielded an average pH of 9, indicating that they are unlikely to have a negative impact on the overall ML and ARD potential of the rock type.

20.5 Environmental Permits

Liberty has obtained the following permits for the Hart Project.

- Permit to Take Water to dewater the mine and use water.
- Certificate of Approval for Air for the operation of the site with respect to fugitive emissions from the mine portal that discharges the return air in the mine handling mineralization and waste; a surface plant feed storage pile; a surface waste rock pile; and haul road. In addition, the permit will request approval for use of a propane fired mine heater having a maximum heat input of 15,360,000 kilojoules per hour used to heat intake fresh air, exhausting into the atmosphere; propane fired heating equipment having a total maximum heat input of 1,688,000 kilojoules per hour exhausting into the atmosphere; maintenance welding exhausting into the atmosphere; one standby diesel generator set having a rating of 1,100 kilowatts, to provide power during emergency situations, exhausting into the atmosphere; and fuel storage tanks used to refuel on site vehicles, exhausting into the atmosphere.

- An application for a Certificate of Approval for Industrial Sewage Works for the collection, transmission, treatment, and disposal of sewage from Hart Mine was submitted in early 2012 and remains in review by the Ontario Ministry of the Environment (MOE) at time of writing.

20.6 Environmental Monitoring

Liberty has developed and implemented environmental monitoring programs to address its regulatory obligations under the Ontario Environmental Protection Act for McWatters and Redstone Mines including the Metal Mining Effluent Regulations (MMER) of the Fisheries Act. These programs will also be developed for the Hart Project.

The program currently consists at the other two sites, of twice monthly monitoring of receiving water quality upstream of the discharge points, downstream of the discharge points, and any tributary mixing zones and locations.

Periodic (typically once every three years) sampling of sediment chemistry (metals, TOC, moisture content) and of benthic invertebrates at these locations is also performed.

Effluent monitoring is conducted as per MMER regulations at maximum specified frequency for the duration of mine life (i.e. pH, TSS, and deleterious substances weekly; acute toxicity monthly; chronic toxicity twice yearly; effluent characterization four times per year).

Hart will be treated the same as Redstone or McWatters Mines where waste water is pumped from underground and/or open pit workings to water treatment plants. In conjunction with settlement and treatment ponds, the water is treated to below regulatory limits and discharged. Monitoring is done at the treatment ponds and discharge weir.

Domestic sewage generated from the mine dry and underground will be directed to a septic system on site. The dry is equipped with a potable water system fed from a well. It is equipped with softening, sulphur and UV systems. Domestic water is monitored for E.Coli and coliform bacteria. Fugitive emissions from haul roads and rock piles are monitored and treated with water as necessary to control dust.

To date at Redstone and McWatters Mines, there have been no values exceeding any MISA/MMER threshold. There were some values above the amount of water allowed to be dewatered from the underground mine during the spring and summer of 2009 due to a very rainy season and the encounter of a fault structure while extending the ramp. The approved amended Permit to Take Water and the application for an amended Certificate

of Approval for Industrial Sewage Works is in progress which has a higher maximum dewatering and discharge limits to allow for atypical situations.

20.7 Redstone Nickel Concentrator and Tailings Ponds

The Redstone Mill can process up to 2,000 tonnes per day of altered komatiite nickel bearing feed. Tailings are pumped from the mill to the tailings basin.

The plant feed from Hart Mine would be milled at the Redstone Mill. As such, the tailings produced would be kept at the Redstone tailings pond. A 12 metre diameter deep cone paste thickener in the mill is capable of producing a paste consisting of 60% solids for discharge into the tailings basin or into ready-mix trucks for return to Hart's proposed pastefill plant.

Fresh water will be pumped from the Redstone River to the Redstone Mine and to the mill. The Redstone Mine utilizes the water for drilling, washing of stopes and general cleaning. The mill uses the water for general purposes within the crushing and grinding circuits. Recycled water is pumped into the mill process via the recycle pond.

The water is utilized for process water requirements (e.g. chemical mixing, ball mill feed, pump glands etc.) thus minimizing the use of river water.

20.8 Closure Plan

The Hart Closure Plan was filed by the Ontario Ministry of Northern Development and Mines on 17 May 2012.

21.0 CAPITAL AND OPERATING COSTS

21.1 Underground Mine Capital Cost Estimate

21.1.1 Accuracy of Estimate

All costs are estimated in 2nd Quarter 2011 Canadian dollars and are to a prefeasibility level of accuracy of ±25%. Costs have been calculated from first principle, or based on recent experience for similar installations at other project sites. Equipment and material purchase prices are based on recent vendor quotes.

21.1.2 Definition of Cost

Capital Costs are defined as all costs (direct and indirect) incurred up to the end of the Project Period (December 2017). Capital Costs incurred after this date are included in Sustaining Capital Costs. For this study, the end of the project period is defined by steady state production achieved for three months and the completion of the majority of the construction projects.

Sustaining Capital Costs include all the remaining capital development (level and infrastructure development), raise development, mine facilities construction, capital equipment purchases, and all major equipment replacement purchases after the project period is complete. Sustaining capital development costs include direct costs only.

Operating Costs include all mine costs, other than Sustaining Capital Costs, incurred after the end of the project period. During the mine operating period, all indirect costs are included in the Operating Cost estimates.

Capitalized Operating Costs include all operating costs (as previously described) which occur during the project period.

Sources of Data

Table 21.1 identifies the sources of key cost data used in the estimate.

Table 21.1: Sources of Estimate Data

Item	Source of Data
Labour	
Contractor	Stantec
Liberty	Stantec
Materials	
Diesel Fuel	Supplier Quotes
Propane	Supplier Quotes
Electric Power	Liberty
Ventilation Ducting	Supplier Quotes
Explosives	Supplier Quotes
Ground Support Supplies	Supplier Quotes
Spare Parts and Tires	Recent Stantec Experience
Pipe and Fittings	Supplier Quotes
Concrete	Recent Stantec Experience
Freight to Site	Recent Stantec Experience
Capital Purchases	
Mobile Equipment	Recent Stantec Experience, Supplier Quotes
Fans and Pumps	Recent Stantec Experience, Supplier Quotes
Heating Plant	Recent Stantec Experience, Supplier Quotes

Base Date and Exchange Rate

The estimate baseline date is the 2nd Quarter 2011. All costs are estimated in Canadian dollars. For quotes received in US dollars an exchange rate of Canadian $1.00 = US $0.95 was applied as directed by Liberty.

Escalation

Escalation has not been considered in the estimate.

21.1.3 WBS Estimate Format

The Work Breakdown Structure (WBS) as used in the estimate is shown in Table 21.2.

Table 21.2: Estimate Work Breakdown Structure (WBS)

WBS Level	WBS Element	Description
1	1	Hart Mine
2	1.1	Surface Construction
2	1.2	Underground Construction
2	1.4	Ramp
2	1.5	Lateral Waste Development
2	1.6	Raises
2	1.3	Boreholes
2	1.7	Production
2	1.8	Indirects
2	1.9	Equipment – Purchase
2	1.1	Equipment – Renting
2	1.11	Equipment Spares

21.1.4 Description of Direct and Indirect Costs

Direct Costs include labour, equipment, and material costs directly associated with construction, development, and production activities. This includes operating labour, operating supplies, (mobile) equipment operating, and maintenance activities/costs required in order to complete the work.

Indirect Costs include all mine costs not directly associated with actual physical completion of work, including supervision, technical and administrative support staff, site overhead costs, support mobile equipment, and similar items. These costs are typically expressed in terms of cost/day or cost/month, and are considered to be fixed over a period of time, regardless of the actual activities which take place on any given day.

21.1.5 Description of Capital Costs

Capital Costs include all project costs for site construction, excavations, fixed and mobile equipment, and labour up to the end of the Project Period. Indirect costs including site general and administrative costs associated with completion of this work are included.

Also included in these costs are Capitalized Operating Costs. These costs include the direct cost for underground development which has been classed as “operating development” and production completed during the Project Period. This development includes all development of the “orebody” (over-cut and under-cut drifts) in waste and in ore starting at a distance of 15 metres from the capitalized level development. Any production stoping is also included.

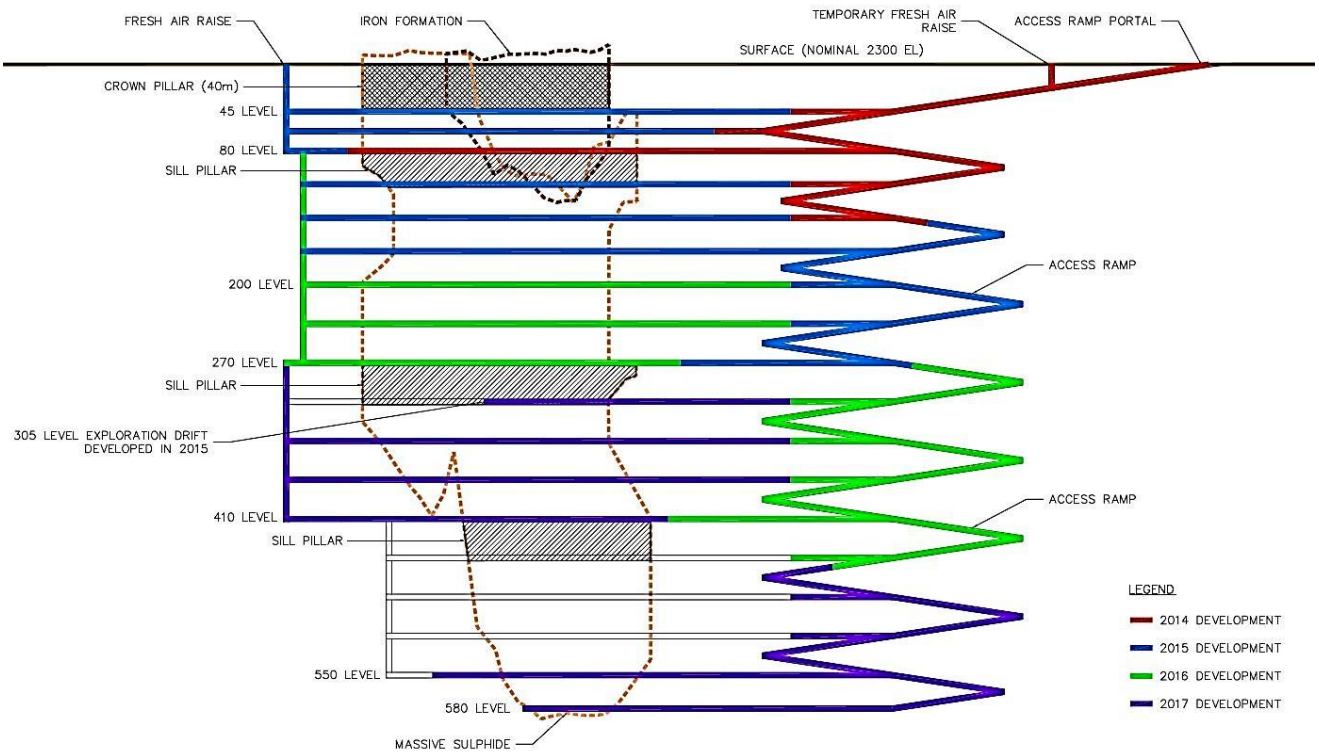
21.1.6 Description of Sustaining Capital Costs

At the end of the Project Period (December 2017), the access ramp will be complete, the surface facilities will be installed and commissioned, the surface fans and heating plants will be installed and operating near capacity, and the majority of the underground infrastructure will be completed.

Remaining capital items will include, but may not be limited to lateral development and related construction on the 550, 515, 480, 445, and 305 Levels, ventilation raises from the 550 level, and any equipment purchases.

Figure 21.1 illustrates the remaining sustaining capital development/construction.

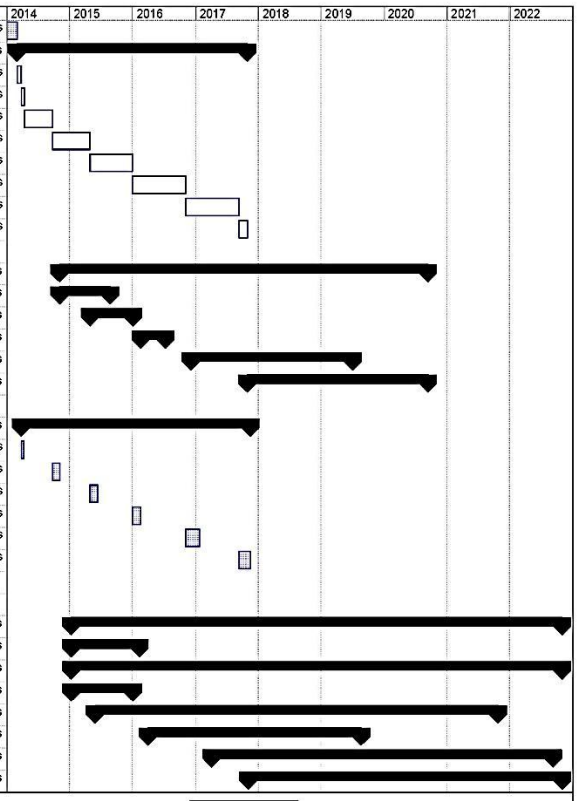
Figure 21.1: Mine Development Sequence



A high level summary of the development and production schedule is shown in Figure 21.2. The complete schedule is included in Appendix I.

Figure 21.2: High Level Development and Production Schedule

ID	Task Name	Quantity	Rate	Duration
1	Portal			60 days
2	**RAMP**			**1293 days**
3	Portal to Ramp Raise	48	2	24 days
4	Ramp Raise to Sump	60	3	20 days
5	Sump TO 80 Level	811	5	163 days
6	80 Level TO 170 Level	1010	5	202 days
7	170 Level TO 270 Level	1152	5	231 days
8	270 Level TO 410 Level	1543	5	309 days
9	410 Level TO 550 Level	1475	5	295 days
10	550 Level TO 580 Level	245	5	49 days
11				
12	**Lateral Waste Development**			**2049 days**
13	**80 Block**			**279 days**
17	**170 Block**			**234 days**
22	**270 Block**			**142 days**
26	**410 Block**			**896 days**
33	**550 Block**			**1004 days**
40				
41	**Raises**			**1288 days**
42	FA near Portal	25	2.4	16 days
43	FA 80 L to Surface	83	2.4	41 days
44	FA 170 L TO 80 L	91	2.4	44 days
45	FA 270 L TO 170 L	104	2.4	49 days
46	FA 410 L TO 270 L	147	2.4	67 days
47	FA 550 L TO 410 L	148	2.4	68 days
48				
49				
50	**Production**			**2747 days**
51	**Iron Formation**			**381 days**
57	**Massive**			**2747 days**
58	**80 Block**			**343 days**
64	**170 Block**			**2251 days**
72	**270 Block**			**1192 days**
79	**410 Block**			**1907 days**
89	**550 Block**			**1748 days**



Project: Very Preliminary dev and prod
Date: 08-16-12

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

Page 1

21.1.7 Contingency

A contingency of 30% is recommended for the Capital Cost and for the Sustaining Capital Cost based on typical values used in similar prefeasibility studies. A contingency has not been included with the costs presented in this report but will be included in the Economic Analysis Section of this report.

21.2 Underground Capital Cost Estimate

21.2.1 Basis of Estimate

The Hart Project is presented as a stand-alone option for the extraction of ore from the underground. The opportunity to share common site facilities, services, and personnel with the other Liberty properties has been limited in this study, and there may be opportunities to further utilize existing facilities and personnel.

Costs required to operate the other Liberty operations (Redstone Mill and McWatters Mine) are not included in this report.

All fixed equipment (fans, compressors, pumps, etc.) will be purchased new on a competitive bid basis. All Liberty "owned" and operated mobile equipment will be purchased new. The equipment required to develop the ramp by the selected contractor will be purchased new by Liberty, but operated and maintained by the contractor. The second set of equipment required by the contractor for the one year period will be provided by the contractor at a monthly rental rate of 3.5% of the value of the equipment. Construction and mining activities will be awarded to contractors based on competitive bids for defined packages of work.

Direct development and production unit rates include:

- Direct labour;
- Direct consumables;
- Explosives;
- Ground support supplies;
- Lubricants and fuels;
- Tires and spare parts;
- Services including piping, ventilation duct, electrical cables; and
- Miscellaneous materials;

Haulage of ore and waste to surface is included as a separate unit rate. Cost items for the haulage estimate are developed from a combination of several haulage distances.

Costs for ground support are based on the recommended ground support methods as described in Section 16.1 – Geotechnical Assessment.

The cost per metre of ramp development by a contractor is shown in Table 21.3.

Table 21.3: Ramp Development Cost per Metre

	5 m/day $/m
Total	**$2,840.52**
Labour	**$1,384.72**
Lead Miner	$361.08
Miner	$1,023.64
Materials (see material details)	$1,044.68
Hand Held Drilling	$32.06
Jumbo Drilling	$258.85
Explosives	$145.00
Ground Support	$205.76
1.2 m (48”) Flex Duct – All Inclusive – Double	$110.00
Air – 200 mm (8”) Steel Pipe SCH40	$101.36
Dewatering – 150 mm (6”) Steel Pipe SCH40	$71.31
Water – 100 mm (4”) Steel Pipe SCH40	$38.85
Electrical Cables	$46.76
Ballast	$29.00
Cable Bolt – 3.6 m	$5.72
Equipment Operating (see equipment details)	**$411.12**
4.5 M^3 LHD	$124.38
Scissorlift	$69.10
Boom Truck	$9.72
2 Boom Jumbo	$207.92

Spare parts will be included with the equipment purchase price (as per vendor recommendations for commissioning and critical spare parts).

An allowance is included for the first fill of inventory supplies on site including drill supplies, ground support supplies, pipe, explosives, and ventilation duct. This allowance amounts to 10% of the total materials purchased during 2017. The access ramp and some initial lateral development (capital development period) will be completed using a suitably qualified contractor.

Crews will work 10.5 hours per shift (8.83 hours effective time after allowances for travel to and from the work site, lunch, and safety meetings), seven days per week. The mine will operate 355 days per year. The development and production schedules indicate a shut-down over the Christmas period, but this is an allowance for unscheduled operations shut-down due to weather conditions and other unanticipated disruptions.

The underground mine development and construction estimates are based on the mine designs and general arrangement facilities drawings included in Appendix G and Appendix H respectfully. Based on previous Stantec experience, an allowance for miscellaneous development of 15% of the access ramp and 20% of the main level

development is included. This allowance does not apply to facilities excavations or to excavations in ore. This allowance is not considered a contingency.

The scope of work in the Capital Cost and Sustaining Capital Cost estimates includes:

- Capital Period – Capital Costs:
  - The development contractor will be provided with mobile equipment in order to complete this work. The contractor will be responsible for proper operation and maintenance of the equipment;
  - For estimating purposes the mobile equipment will be purchased new by Liberty as previously described, except for the contractors second set of gear. The company and contractor maintenance crews will be responsible for proper operation and maintenance of the equipment;
  - Liberty will purchase all fixed equipment;
  - Construction and commissioning of surface facilities required to support the underground mine construction and operation;
  - Mobilization of the underground mine contractor;
  - Establishment of a ramp portal at surface, development of the access ramp to the 580 Level, and development of the numerous levels. This includes development of the six legs of fresh air raise from 550 Level to surface, and equipping the raise to serve as secondary egress from the mine. Three return air raises will be completed;
  - Construction and commissioning of the portal sump, and the 80, 270, and 410 Level main sumps; and
  - Other underground and surface facilities construction completed prior to end of 2017 (end of the project period).
- Capital Period – Capitalized Operating Costs:
  - The majority of the development of stope over-cut and under-cut drifts; and
  - Production from stopes from the 80 block, and limited production from the 270 and 410 blocks.

During the Capital and Capitalized Operating Cost periods, all direct and indirect project costs are included in the Capital Cost estimate.

- Sustaining Capital Period:
  - Completion of all level development and development for mine facilities and infrastructure, including completion of ventilation exhaust raises. Development to access the ore zone from the level, and development in ore is included in the mine Operating Cost estimate.
- Construction of remaining mine facilities including:
  - Main dewatering sump facilities on 550 Level; and

  - Other miscellaneous facilities such as electrical sub-stations, local area sumps, fixed ventilation controls, refuge stations, and manway extensions.
- Remaining mobile equipment purchases / replacements for development and mine production.

During the Sustaining Capital period, all indirect costs are included in the mine Operating Cost estimate.

The following items are not included in the Capital, Sustaining Capital, and Operating Cost estimates:

- Liberty's General and Administrative (G & A) costs, which may include but are not limited to the following:
  - Senior Liberty personnel that will not be solely working on the Hart Project (such as Chief Geologist, Chief Mine Engineer, Procurement, etc.);
  - Overall area management and administrative personnel and facilities not directly required for the underground mine construction and operation; and
  - Operation of Liberty site facilities which are required for other operations, but are also used (in part) by mine operations including common site facilities such as access road, mill, site warehouse facilities, etc. and site waste disposal, process plant tailings, and water discharge facilities.
- Surface haulage of ore and waste from the Hart Project site to final destination.
- Geological and engineering work and studies completed to date (including completion of this study).
- Future engineering, geological, and geotechnical studies and work required to provide "for construction" designs and services required to allow procurement of equipment, retention of suitable contractors, and construction of the underground mine and associated facilities.
- Any upgrades required to existing Liberty Mine facilities.
- Backfill Plant (designed by others).
- Surface water management, including pumps and water lines on the Hart Project site, and pump and water to and from the Redstone mill to the Hart Project site.
- Outside consulting services including EPCM as deemed appropriate, geotechnical, geological, environmental, and hydrogeology.
- Contingency.
- Closure costs.

21.2.2 Labour and Labour Rates

The number of personnel required for the Hart Project will vary annually based on the amount of development, production and ongoing construction. Table 21.4 summarizes the contractor personnel on annual basis including hourly and staff, while Table 21.5 illustrates Liberty personnel.

Table 21.4: Annual Summary of Contractor Personnel – On-Payroll

Position	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Labour										
Operations Labour										
Production/Development Labour										
Development Crew	0	4	12	12	12	12	8	0	0	0
Production LHD Operator	0	0	0	0	2	4	5	4	4	4
Blasting Lead	0	0	0	4	4	4	4	4	4	4
Haulage Truck Operator	0	0	0	4	12	12	12	12	12	8
Underground Construction	0	4	8	8	8	8	8	8	8	8
Sub-Total	**0**	**8**	**20**	**28**	**38**	**40**	**37**	**28**	**28**	**24**
Support Labour										
Purch/Material/Contract	Liberty's Mines Existing Staff (G&A Cost)									
Warehouse	0	1	1	1	1	1	1	1	1	1
Material Handling	0	5	5	5	5	5	5	5	5	5
Surface support labour	2	4	4	4	4	4	4	4	4	4
Dryman	2	2	2	2	2	2	2	2	2	2
Backfill Plant (Costs inlcuded with Backfill)	0	0	4	4	4	4	4	4	4	4
Sub-Total	**4**	**12**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Maintenance Labour										
Mobile Mechanic	0	5	6	9	12	13	13	12	10	9
Electrician/Instrumentation Tech	0	6	6	6	6	6	6	6	4	2
Industrial Mechanic	0	1	1	1	1	1	1	1	0	0
Sub-Total	**0**	**12**	**13**	**16**	**19**	**20**	**20**	**19**	**14**	**11**
Sub-total Labour	**4**	**31**	**48**	**60**	**73**	**75**	**72**	**62**	**57**	**50**
Training/Absent/Vacation	1	4	6	7	9	9	9	8	7	6
Total Labour	**5**	**35**	**54**	**67**	**82**	**85**	**81**	**70**	**64**	**56**
Staff										
Supervision										
Mine Superintendent	1	1	1	1	1	1	1	1	1	1
Maintenance Superintendent	Liberty's Mines Existing Staff (G&A Cost)									
Maintenance Planners	0	1	1	1	1	1	1	1	1	1
Shift Boss	0	4	4	4	4	4	4	4	4	4
Safety / Training	0	1	1	1	1	1	1	1	1	1
Security / First Aid	Liberty's Mines Existing Staff			4	4	4	4	4	4	4
Clerk	1	1	1	1	1	1	1	1	1	1
Sub-Total Management/Safety/Admin	**2**	**8**	**8**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
Engineering	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chief Mine Engineer	Liberty's Mines Existing Staff (G&A Cost)									
Senior Engineer	1	1	1	1	1	1	1	1	1	1
Mine Planner	1	1	1	1	1	1	1	1	1	1
Geological Technician	0	1	1	1	1	1	1	1	0	0
Technologist/Surveyor/Ventilation	1	1	1	1	1	1	1	1	1	1
Chief Mine Geologist	Liberty's Mines Existing Staff (G&A Cost)									
Beat Geologist	0	1	1	1	1	1	1	1	1	0
Sub-Total Engineering	**3**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**4**	**3**
Sub-Total Staff	**5**	**13**	**13**	**17**	**17**	**17**	**17**	**17**	**16**	**15**
Grand Total	**10**	**48**	**67**	**84**	**99**	**102**	**98**	**87**	**80**	**71**

Table 21.5: Annual Summary of Liberty Personnel – On-Payroll

Position	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Labour										
Operations Labour										
Production/Development Labour										
Development Crew	0	4	12	12	12	12	8	0	0	0
Production LHD Operator	0	0	0	0	2	4	5	4	4	4
Blasting Lead	0	0	0	4	4	4	4	4	4	4
Haulage Truck Operator	0	0	0	4	12	12	12	12	12	8
Underground Construction	0	4	8	8	8	8	8	8	8	8
Sub-Total	**0**	**8**	**20**	**28**	**38**	**40**	**37**	**28**	**28**	**24**
Support Labour										
Purch/Material/Contract	Liberty's Mines Existing Staff (G&A Cost)									
Warehouse	0	1	1	1	1	1	1	1	1	1
Material Handling	0	5	5	5	5	5	5	5	5	5
Surface support labour	2	4	4	4	4	4	4	4	4	4
Dryman	2	2	2	2	2	2	2	2	2	2
Backfill Plant (Costs inlcuded w ith Backfill)	0	0	4	4	4	4	4	4	4	4
Sub-Total	**4**	**12**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Maintenance Labour										
Mobile Mechanic	0	5	6	9	12	13	13	12	10	9
Electrician/Instrumentation Tech	0	6	6	6	6	6	6	6	4	2
Industrial Mechanic	0	1	1	1	1	1	1	1	0	0
Sub-Total	**0**	**12**	**13**	**16**	**19**	**20**	**20**	**19**	**14**	**11**
Sub-total Labour	**4**	**31**	**48**	**60**	**73**	**75**	**72**	**62**	**57**	**50**
Training/Absent/Vacation	1	4	6	7	9	9	9	8	7	6
Total Labour	**5**	**35**	**54**	**67**	**82**	**85**	**81**	**70**	**64**	**56**
Staff										
Supervision										
Mine Superintendent	1	1	1	1	1	1	1	1	1	1
Maintenance Superintendent	Liberty's Mines Existing Staff (G&A Cost)									
Maintenance Planners	0	1	1	1	1	1	1	1	1	1
Shift Boss	0	4	4	4	4	4	4	4	4	4
Safety / Training	0	1	1	1	1	1	1	1	1	1
Security / First Aid	Liberty's Mines Existing Staff			4	4	4	4	4	4	4
Clerk	1	1	1	1	1	1	1	1	1	1
Sub-Total Management/Safety/Admin	**2**	**8**	**8**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
Engineering	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chief Mine Engineer	Liberty's Mines Existing Staff (G&A Cost)									
Senior Engineer	1	1	1	1	1	1	1	1	1	1
Mine Planner	1	1	1	1	1	1	1	1	1	1
Geological Technician	0	1	1	1	1	1	1	1	0	0
Technologist/Surveyor/Ventilation	1	1	1	1	1	1	1	1	1	1
Chief Mine Geologist	Liberty's Mines Existing Staff (G&A Cost)									
Beat Geologist	0	1	1	1	1	1	1	1	1	0
Sub-Total Engineering	**3**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**4**	**3**
Sub-Total Staff	**5**	**13**	**13**	**17**	**17**	**17**	**17**	**17**	**16**	**15**
Grand Total	**10**	**48**	**67**	**84**	**99**	**102**	**98**	**87**	**80**	**71**

Table 21.6: Combined Annual Labour Count – On Payroll

Employer	Year									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Liberty	10	48	67	84	99	102	98	87	80	71
Contractor	2	32	58	52	47	9	5	5	5	5
Total	**12**	**81**	**125**	**136**	**146**	**111**	**103**	**91**	**85**	**76**

The labour rates were developed by Stantec and are based on recent discussions with local area contractors. The rates are all encompassing (including wages, bonuses, burdens and mark-ups where applicable). The staff labour rates are illustrated in Table 21.7.

Table 21.7: Salary Labour Rates

	Wages/ Yearly	Wages Daily	Bonus in %	Bonus in $	Total Pay	Burden 28.83%	Total Payroll Cost
Project Manager	$110,000	$426.36	100%	$224.00	$650.36	$187.50	$837.85
Mine Superintendent	$90,000	$348.84	100%	$224.00	$572.84	$165.15	$737.99
Maintenance Superintendent	$100,000	$387.60	100%	$224.00	$611.60	$176.32	$787.92
Shift Boss	$80,000	$310.08	100%	$294.00	$604.08	$174.16	$778.23
Chief Mine Engineer	$80,000	$310.08	75%	$168.00	$478.08	$137.83	$615.91
Senior Engineer	$80,000	$310.08	50%	$112.00	$422.08	$121.68	$543.76
Surveyor	$60,000	$232.56	50%	$112.00	$344.56	$99.34	$443.89
Technician	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Chief Mine Geologist	$80,000	$310.08	75%	$168.00	$478.08	$137.83	$615.91
Geological Technician	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Beat Geologist	$60,000	$232.56	50%	$112.00	$344.56	$99.34	$443.89
Clerk	$45,000	$174.42	25%	$56.00	$230.42	$66.43	$296.85
Warehouse	$65,000	$251.94	50%	$147.00	$398.94	$115.01	$513.95
Administrator	$65,000	$251.94	25%	$56.00	$307.94	$88.78	$396.72
Safety/Trainer	$70,000	$271.32	75%	$168.00	$439.32	$126.66	$565.97
Security/First Aid	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Surface Support Labour	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Backfill Plant Operator	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Maintenance Planner	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Industrial Mechanic	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Mine Planner	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Purch/Material/Contract	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Construction Superintendent	$110,000	$426.36	100%	$192.00	$618.36	$178.27	$796.63

The staff burden of 28.83% consists of WCB (4.96%), EI (2.16%), CPP (1.65%), Stat Holiday (5.77%), Vacation Pay (4.00%), Group Insurance (3.29%) and Pension Pay (7.00%).

The hourly labour rates are illustrated in Table 21.8.

Table 21.8: Hourly Labour Rates

	Wages	OT 0.0%	Bonus in %	Bonus in $	Total Pay	Burden 21 to 25%	Total Payroll Cost
Lateral Development							
Lead Miner	$32.41	$ -	100%	$28.00	$60.41	$7.41	$67.82
Miner 1 (dev't)	$29.30	$ -	100%	$28.00	$57.30	$6.79	$64.09
Miner 2 (truck)	$27.22	$ -	75%	$21.00	$48.22	$6.38	$54.60
Raise Development							
Lead Miner	$32.41	$ -	100%	$35.00	$67.41	$7.41	$74.82
Miner 1 (Development)	$29.30	$ -	100%	$35.00	$64.30	$6.79	$71.09
Construction							
Lead Miner	$32.41	$ -	100%	$24.00	$56.41	$7.41	$63.82
Construction Miner 1	$29.30	$ -	100%	$24.00	$53.30	$6.79	$60.09
Maintenance							
Lead Mechanic	$35.52	$ -	100%	$28.00	$63.52	$8.03	$71.55
Lead Electrician	$28.41	$ -	100%	$28.00	$56.41	$6.62	$63.03
Mechanic/Welder	$33.45	$ -	75%	$21.00	$54.45	$7.62	$62.06
Electrician	$29.61	$ -	75%	$21.00	$50.61	$6.86	$57.46
Miscellaneous							
Nipper/Grader Operator	$24.30	$ -	25%	$7.00	$31.30	$5.81	$37.10
Material Handling	$27.22	$ -	50%	$14.00	$41.22	$6.38	$47.60
Backfill Plant	$31.01	$ -	50%	$14.00	$45.01	$7.13	$52.14
Dry Men	$18.60	$ -	10%	$2.80	$21.40	$4.68	$26.08

The hourly burden consists of WCB (4.96%), EI (2.16%), CPP (1.65%), Stat Holiday (5.77%), Vacation Pay (4.00%), Group Insurance (3.29%) and Pension Pay ($1.00 per hr.).

21.2.3 Productivities

Productivities for development activities and for surface/underground construction have been developed from first principles, and based on Stantec experience.

For mine development, cycle times have been determined for the various excavation sizes and advance rates have been calculated for situations where single headings and where multiple headings are available to the crews. The mine development is anticipated to be completed in competent ground conditions. A ground support design as described in Section 16.1 - Geotechnical Assessment has been used in calculating development productivity rates.

An allowance has not been included in the development productivity rates for the drilling of test-holes ahead of the development face (to identify potential zones of water inflow), or for grouting of areas of high water inflow prior to development through the area.

Table 21.9: Typical Productivities

Item	Productivity		
Development			
Ramp	2 to 5	m/d	Initial ramp up to steady state
	5	m/d	
Lateral	4 to 5	m/d	
Alimak Raise	2.4	m/d	
	6	days	Setup
Raisebore	2.4	m/d	Pilot and Ream
	10	days	Setup
Production			
Drilling	160	m/d	For 89 mm (3.5") dia. holes
	140	m/d	For 114 mm (4.5") dia. holes
Blasthole Loading	4,000	kg/shift	For <30 m high stopes
	5,000	kg/shift	For >30 m high stopes
LHD Mucking	375	Tonnes per shift	
Filling	100	Tonnes per hour	

21.2.4 Capital Cost Estimate

A summary of the total underground mine cost estimate is presented in Table 21.10. The costs are presented according to the primary Work Breakdown Structure (WBS) grouping

Table 21.10: Underground Mine Costs – Life of Mine

	Capital	Operating	Total
Direct Costs	**$52,148,433**	**$50,284,607**	**$102,433,041**
Surface Construction	$8,625,420		$8,625,420
Underground Construction	$8,943,041		$8,943,041
Ramp	$20,701,800		$20,701,800
Lateral Waste Development	$8,750,752	$1,295,474	$10,046,225
Raises	$4,092,421		$4,092,421
Boreholes	$1,035,000		$1,035,000
Production	$0	$48,989,133	$48,989,133
Indirect Costs	**$29,588,860**	**$59,318,224**	**$88,907,084**
Propane	$1,003,326	$4,344,544	$5,347,870
Power	$3,593,911	$9,860,354	$13,454,265
Labour	$19,689,159	$33,957,940	$53,647,100
Mobile Equipment	$2,111,537	$5,273,647	$7,385,184
Supplies	$1,523,662	$3,401,463	$4,925,125
Facility Rentals	$637,664	$1,429,876	$2,067,540
Diamond Drilling	$1,029,600	$1,050,400	$2,080,000
Equipment Purchase	$19,013,500	**$0**	**$19,013,500**
Equipment Renting	**$0**	**$0**	**$0**
Equipment Spares	**$0**	**$0**	**$0**
Total	**$100,750,793**	**$109,602,831**	**$210,353,625**

A summary of the total annual costs is presented in Table 21.11.

Table 21.11: Annual Total Cost Summary

		Project Period					Operating Period				
Area	**Area Total**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Hart Project Total	**$210,353,625**	**$5,913,292**	**$28,280,025**	**$28,613,226**	**$30,726,828**	**$31,515,107**	**$22,991,838**	**$18,551,482**	**$17,080,464**	**$15,699,374**	**$10,981,988**
Surface Construction	**$8,625,420**	$4,058,982	$4,208,234	$358,204	$0	$0	$0	$0	$0	$0	$0
Underground Construction	**$8,943,041**	$0	$2,352,957	$2,329,752	$1,500,611	$1,740,438	$979,807	$39,476	$0	$0	$0
Ramp	**$20,701,800**	$0	$4,123,548	$5,497,196	$6,033,088	$5,047,968	$0	$0	$0	$0	$0
Lateral Waste Development	**$10,046,225**	$0	$425,270	$1,965,925	$1,541,264	$3,837,229	$1,430,676	$615,386	$230,476	$0	$0
Raises	**$4,092,421**	$0	$725,938	$615,933	$1,406,680	$1,343,870	$0	$0	$0	$0	$0
Boreholes	**$1,035,000**	$0	$10,500	$271,500	$249,000	$231,000	$273,000	$0	$0	$0	$0
Production	**$48,989,133**	$0	$0	$3,313,757	$4,633,483	$5,893,316	$7,339,879	$7,681,641	$7,752,522	$7,173,004	$5,201,532
Indirects	**$88,907,084**	$1,854,310	$9,023,579	$10,742,460	$12,471,701	$12,194,286	$9,911,476	$9,304,979	$9,097,466	$8,526,370	$5,780,457
Equipment Purchase	**$19,013,500**	$0	$7,410,000	$3,518,500	$2,891,000	$1,227,000	$3,057,000	$910,000	$0	$0	$0

A summary of the project period capital cost is presented in Table 21.12.

Table 21.12: Capital Cost – Project Period

		Project Period				
Area	**Area Total**	**2013**	**2014**	**2015**	**2016**	**2017**
Capital Total	**$93,511,714**	**$5,913,292**	**$28,029,637**	**$20,657,051**	**$19,918,552**	**$18,993,182**
Surface Construction	$8,625,420	$4,058,982	$4,208,234	$358,204	$0	$0
Underground Construction	$7,923,758		$2,352,957	$2,329,752	$1,500,611	$1,740,438
Ramp	$20,701,800		$4,123,548	$5,497,196	$6,033,088	$5,047,968
Lateral Waste Development	$6,770,956		$355,354	$1,513,066	$1,352,888	$3,549,648
Raises	$4,092,421		$725,938	$615,933	$1,406,680	$1,343,870
Boreholes	$762,000		$10,500	$271,500	$249,000	$231,000
Indirects	$29,588,860	$1,854,310	$8,843,107	$6,552,901	$6,485,285	$5,853,257
Equipment Purchase	$15,046,500		$7,410,000	$3,518,500	$2,891,000	$1,227,000

21.2.5 Contractor's Indirect Costs

The underground mine contractor's indirect costs are calculated as a daily cost based on the contractor's personnel and equipment estimated to be on site during the various stages of the project. The contractor's indirect costs include:

- Contractor indirect labour including supervision, maintenance/tradesmen, safety/training, technical staff, and administration personnel;
- Support equipment rental and operating costs; and
- Supporting services.

The quantities and costs will vary according to the work being completed on site. The costs for two representative years are as shown in Table 21.14.

21.2.6 Liberty Indirect Costs

All project costs not directly related to capital and operating activities, and not part of the contractor's indirect costs, are included in Liberty's Indirect Costs. These costs include:

- Underground mine personnel including management, health and safety, technical support, general site maintenance, and site services personnel;
- Operation of mobile support equipment (grader, fuel truck, etc.);
- Electrical power (charged to the project at a rate of $0.097/kW-hour). Note that diesel fuel costs are included in the estimate as a direct cost (equipment operating);
- Propane consumption for heating the fresh air;
- Outside consulting services including geotechnical, geological, environmental, and hydrogeology (not included in this estimate);

- Site general and administrative (G & A) services including office operating expenses, mine rescue expenses, and safety supplies. Overall site G & A costs have not been included in this estimate;
- Warehouse inventory and first fill costs; and
- Commissioning costs.

Significant ongoing overhead cost items include the consumption of electric power to the underground operations, and the cost of propane at the mine site. Table 21.13 presents quantities and costs by year for these activities.

Table 21.13: Electrical Power and Propane

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Propane	Litre	$0	100,000	800,000	1,167,025	1,458,781	1,458,781	1,458,781	1,458,781	1,458,781	729,391
Propane cost	$0.53		$53,000	$424,000	$618,523	$773,154	$773,154	$773,154	$773,154	$773,154	$386,577
Electricity	kWh	0	1,861,201	2,879,483	3,147,451	3,257,975	3,167,941	3,004,738	2,831,439	3,063,860	2,171,317
Electricity Cost	$0.097		$986,437	$1,526,126	$1,668,149	$1,726,727	$1,679,009	$1,592,511	$1,500,663	$1,623,846	$1,150,798

Table 21.14 presents the overall contractor and Liberty's Indirect Costs as included in the capital cost estimates.

Table 21.14: Project Period Indirect Costs

	2013	2014	2015	2016	2017
Contractor Costs per Day					
Labour	$1,354	$5,895	$8,596	$8,596	$6,289
Equipment	$18	$131	$131	$131	$105
Total Contractor	**$1,372**	**$6,026**	**$8,727**	**$8,727**	**$6,394**
Liberty Costs per Day					
Labour	$3,339	$11,046	$7,075	$7,108	$7,031
Equipment	$230	$1,457	$1,342	$1,345	$1,229
Propane	$0	$146	$729	$906	$1,045
Electricity	$0	$2,723	$2,622	$2,443	$2,335
Supplies	$263	$1,525	$949	$809	$747
Facility Rentals	$19	$672	$419	$357	$329
Diamond Drilling	$0	$1,435	$0	$762	$703
Total Liberty	**$3,851**	**$19,005**	**$13,135**	**$13,730**	**$13,419**

21.3 Sustaining Capital Cost Estimate

After the end of the production period (December 2017), ongoing capital costs will be considered as Sustaining Capital costs. While a large portion of the sustaining capital activities will be a continuation of the capital activities, the Sustaining Capital costs will exclude indirect costs (both the contractor and Liberty). During the mine operating period, all indirect costs will be included with the Operating Costs. As well, the contractor's indirect costs will decrease as management of the remaining contractor

personnel on site will be minimal. The exception to this will be the development of the remaining ventilation raises which will be completed as typical development contract work.

The other major component of the Sustaining Capital costs will be the leasing of mine mobile equipment during the mine operating period. Table 21.15 shows the new mine equipment requirements during the Sustaining Capital period.

Table 21.15: Mine Mobile Equipment Purchases – Operating Period

Description	2018	2019	2020	2021	2022
Haulage Truck 30 t	0	0	0	0	0
Haulage Truck 42 t	**1**	**1**	0	0	0
LHD 6 m^3	1	0	0	0	0
LHD 4.5 m^3	0	0	0	0	0
Jumbo	0	0	0	0	0
Production Drills	**1**	0	0	0	0
Scissor Lift Truck	0	0	0	0	0
Scissor Lift Truck - Construction	0	0	0	0	0
Utility Pick-up	0	**2**	0	0	0
Personnel Carrier	0	0	0	0	0
Forklift	0	0	0	0	0
Boom Truck	0	0	0	0	0
Grader	0	0	0	0	0
Explosive Truck	0	0	0	0	0
Fuel/Lube Truck	0	0	0	0	0
Surface Payloader/Forklift	0	0	0	0	0
Surface Pick-up Trucks	**2**	**2**	0	0	0

A summary of the underground mine Sustaining Capital Cost is presented in Table 21.16.

Table 21.16: Underground Mine Sustaining Capital Cost Summary

		Operating Period				
Area	**Area Total**	**2018**	**2019**	**2020**	**2021**	**2022**
Capital Total	**$7,239,079**	**$5,508,175**	**$1,500,428**	**$230,476**	**$0**	**$0**
Surface Construction	$0	$0	$0	$0	$0	$0
Underground Construction	$1,019,283	$979,807	$39,476	$0	$0	$0
Ramp	$0	$0	$0	$0	$0	$0
Lateral Waste Development	$1,979,796	$1,198,368	$550,952	$230,476	$0	$0
Raises	$0	$0	$0	$0	$0	$0
Boreholes	$273,000	$273,000	$0	$0	$0	$0
Indirects	$0	$0	$0	$0	$0	$0
Equipment Purchase	$3,967,000	$3,057,000	$910,000	$0	$0	$0

21.4 Operating Cost Estimate

21.4.1 Basis of Estimate

The Hart Project is presented as a stand-alone option for the extraction of ore from the underground. The opportunity to share common site facilities, services, and personnel with the other Liberty properties has been limited in this study, and there may be opportunities to further utilize existing facilities and personnel.

Costs required to operate the other Liberty operations (Redstone mill and McWatters mine) are not included in this report.

The Project Period will end 31 December 2017. At that time, all remaining underground mine capital work will be completed as part of the underground mine Sustaining Capital Cost, and all other underground mine costs will be included in Operating Costs.

Liberty will operate the mine, relying on an underground contractor to provide ongoing contractor services for the excavation of ventilation raises and drilling of blastholes.

Crews will work 10.5 hours per shift (8.83 hours effective time after allowances for travel to and from the work site, lunch, and safety meetings), seven days per week. The mine will operate 355 days per year, the development and production schedules show a shut-down over the Christmas period, but this is an allowance for unscheduled operations shut-down due to weather conditions and other unanticipated disruptions.

Production will be via blasthole stoping. The project schedule indicates blasthole stoping will commence in June 2015 and be complete in November 2022.

The following items are not included in the Operating Cost estimates:

- Liberty's G & A costs, which include but are not limited to the following:
  - Overall area management and administrative personnel and facilities not directly required for the underground mine construction and operation: and
  - Operation of Liberty site facilities which are required for other operations, but are also used (in part) by mine operations including:
    - Common site facilities including access road, mill, site warehouse facilities, etc. and site waste disposal, process plant tailings, and water discharge facilities.
- Geological and engineering work and studies completed to date (including completion of this prefeasibility study).
- Future engineering, geological, and geotechnical studies and work required to provide "for construction" designs and services required to allow procurement of

equipment, retention of suitable contractors, and construction of the underground mine and associated facilities.

- Surface water management, including pumps and water lines on the Hart Project site, and pump and water to and from the Redstone mill to the Hart Project site.
- Outside consulting services including EPCM, geotechnical, geological, environmental, and hydrogeology.

21.4.2 Labour Rates

The labour rates were developed by Stantec and are based on recent discussion with local area contractors and agreed upon by Liberty personnel. The rates are all encompassing (including wages, bonuses, burdens and mark-ups where applicable). The staff labour rates are illustrated in Table 21.17.

Table 21.17: Salary Labour Rates

	Wages/ Yearly	Wages Daily	Bonus in %	Bonus in $	Total Pay	Burden 28.83%	Total Payroll Cost
Project Manager	$110,000	$426.36	100%	$224.00	$650.36	$187.50	$837.85
Mine Superintendent	$90,000	$348.84	100%	$224.00	$572.84	$165.15	$737.99
Maintenance Superintendent	$100,000	$387.60	100%	$224.00	$611.60	$176.32	$787.92
Shift Boss	$80,000	$310.08	100%	$294.00	$604.08	$174.16	$778.23
Chief Mine Engineer	$80,000	$310.08	75%	$168.00	$478.08	$137.83	$615.91
Senior Engineer	$80,000	$310.08	50%	$112.00	$422.08	$121.68	$543.76
Surveyor	$60,000	$232.56	50%	$112.00	$344.56	$99.34	$443.89
Technician	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Chief Mine Geologist	$80,000	$310.08	75%	$168.00	$478.08	$137.83	$615.91
Geological Technician	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Beat Geologist	$60,000	$232.56	50%	$112.00	$344.56	$99.34	$443.89
Clerk	$45,000	$174.42	25%	$56.00	$230.42	$66.43	$296.85
Warehouse	$65,000	$251.94	50%	$147.00	$398.94	$115.01	$513.95
Administrator	$65,000	$251.94	25%	$56.00	$307.94	$88.78	$396.72
Safety/Trainer	$70,000	$271.32	75%	$168.00	$439.32	$126.66	$565.97
Security/First Aid	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Surface Support Labour	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Backfill Plant Operator	$70,000	$271.32	75%	$220.50	$491.82	$141.79	$633.61
Maintenance Planner	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Industrial Mechanic	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Mine Planner	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Purch/Material/Contract	$65,000	$251.94	50%	$112.00	$363.94	$104.92	$468.86
Construction Superintendent	$110,000	$426.36	100%	$192.00	$618.36	$178.27	$796.63

The staff burden of 28.83% consists of WCB (4.96%), EI (2.16%), CPP (1.65%), Stat Holiday (5.77%), Vacation Pay (4.00%), Group Insurance (3.29%) and Pension Pay (7.00%).

The hourly labour rates are illustrated in Table 21.18.

Table 21.18: Hourly Labour Rates

	Wages	OT 0.0%	Bonus in %	Bonus in $	Total Pay	Burden 21 to 25%	Total Payroll Cost
Lateral Development							
Lead Miner	$32.41	$ -	100%	$28.00	$60.41	$7.41	$67.82
Miner 1 (dev't)	$29.30	$ -	100%	$28.00	$57.30	$6.79	$64.09
Miner 2 (truck)	$27.22	$ -	75%	$21.00	$48.22	$6.38	$54.60
Raise Development							
Lead Miner	$32.41	$ -	100%	$35.00	$67.41	$7.41	$74.82
Miner 1 (Development)	$29.30	$ -	100%	$35.00	$64.30	$6.79	$71.09
Construction							
Lead Miner	$32.41	$ -	100%	$24.00	$56.41	$7.41	$63.82
Construction Miner 1	$29.30	$ -	100%	$24.00	$53.30	$6.79	$60.09
Maintenance							
Lead Mechanic	$35.52	$ -	100%	$28.00	$63.52	$8.03	$71.55
Lead Electrician	$28.41	$ -	100%	$28.00	$56.41	$6.62	$63.03
Mechanic/Welder	$33.45	$ -	75%	$21.00	$54.45	$7.62	$62.06
Electrician	$29.61	$ -	75%	$21.00	$50.61	$6.86	$57.46
Miscellaneous							
Nipper/Grader Operator	$24.30	$ -	25%	$7.00	$31.30	$5.81	$37.10
Material Handling	$27.22	$ -	50%	$14.00	$41.22	$6.38	$47.60
Backfill Plant	$31.01	$ -	50%	$14.00	$45.01	$7.13	$52.14
Dry Men	$18.60	$ -	10%	$2.80	$21.40	$4.68	$26.08

The hourly burden consists of WCB (4.96%), EI (2.16%), CPP (1.65%), Stat Holiday (5.77%), Vacation Pay (4.00%), Group Insurance (3.29%) and Pension Pay ($1.00 per hour).

21.4.3 Productivities

Productivities for mine operating activities have been developed from first principles, and are based on Stantec experience, see Table 21.9 for a breakdown of the productivities.

The cost per tonne for a typical stope (30 metres high) is shown in Table 21.19.

Table 21.19: Cost per Tonne Typical 30 m High Stope

Typical 30 m Stope	$20.67
Cable Bolting Total	**$0.36**
Labour	$0.09
Materials	$0.16
Equipment Operating	$0.11
Drilling Total	**$3.86**
Labour	$0.48
Drilling Materials	$2.62
Drilling Equipment Operating Total	$0.76
Blasting Total	**$2.13**
Labour	$1.10
Materials	$1.03
Equipment Operating	$0.00
Mucking Total	**$5.55**
Mucking Labour	$2.17
Equipment Operating	$3.38
Filling Total	**$2.06**
Labour	$2.06
Backfill	**$6.71**

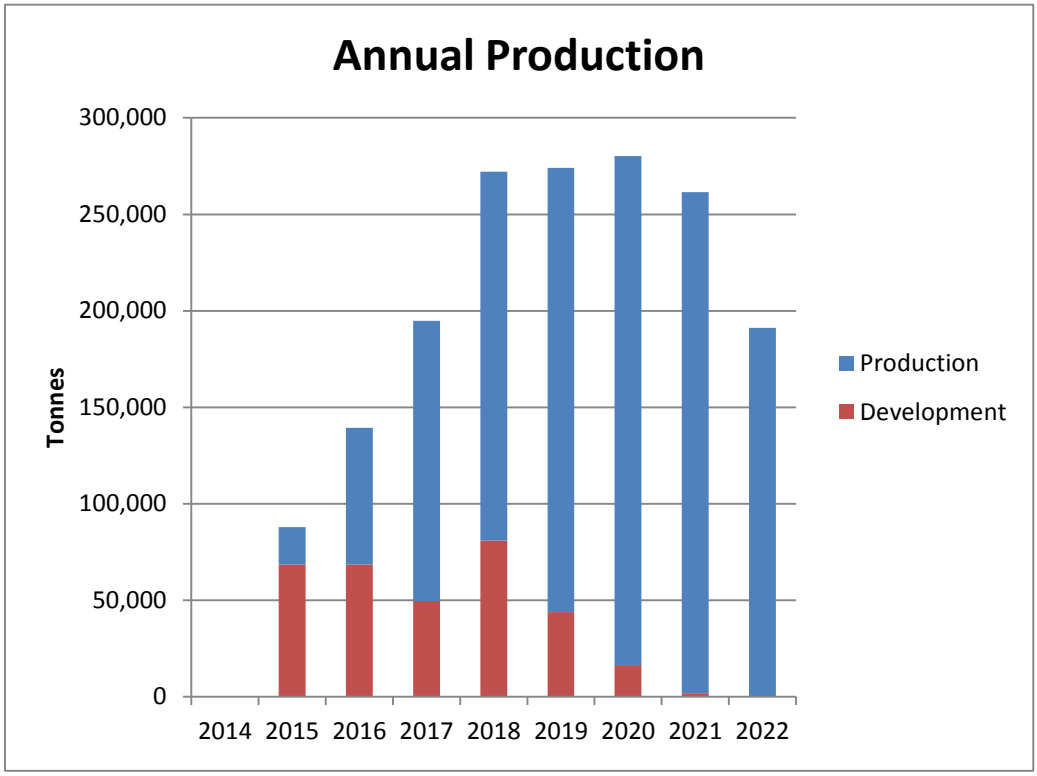
21.4.4 Operating Cost Estimate

The mine production schedule is shown in Table 21.20.

Table 21.20: Mine Production Schedule – Life of Mine

Level	Production Type	2014	2015	2016	2017	2018	2019	2020	2021	2022
45	Development	0	13,325	0	0	0	0	0	0	0
	Stoping	0	0	0	0	0	0	0	0	0
65	Development	0	13,413	0	0	0	0	0	0	0
	Stoping	0	0	28,899	0	0	0	0	0	0
80	Development	0	12,306	0	0	0	0	0	0	0
	Stoping	0	19,292	0	0	0	0	0	0	0
110	Development	0	1,121	18,036	0	0	0	0	0	0
	Stoping	0	0	0	0	0	0	0	15,929	0
140	Development	0	13,626	0	0	0	0	0	0	0
	Stoping	0	0	0	0	0	0	28,143	20,659	0
170	Development	0	14,729	0	0	0	0	0	0	0
	Stoping	0	0	0	0	0	23,592	32,389	0	0
200	Development	0	0	15,114	0	0	0	0	0	0
	Stoping	0	0	0	2,846	26,287	17,375	0	0	0
235	Development	0	0	17,692	0	0	0	0	0	0
	Stoping	0	0	0	65,140	0	0	0	0	0
270	Development	0	0	17,597	0	0	0	0	0	0
	Stoping	0	0	41,994	47,943	0	0	0	0	0
305	Development	0	0	0	0	17,446	17,816	0	0	0
	Stoping	0	0	0	0	0	0	0	0	65,955
340	Development	0	0	0	2,023	17,984	0	0	0	0
	Stoping	0	0	0	0	0	0	23,471	87,393	2,996
375	Development	0	0	0	20,919	0	0	0	0	0
	Stoping	0	0	0	0	3,147	78,683	57,551	0	0
410	Development	0	0	0	17,849	0	0	0	0	0
	Stoping	0	0	0	29,359	100,957	0	0	0	0
445	Development	0	0	0	0	0	19,628	16,316	1,736	0
	Stoping	0	0	0	0	0	0	0	0	85,423
480	Development	0	0	0	0	12,388	6,456	0	0	0
	Stoping	0	0	0	0	0	0	0	108,955	36,717
515	Development	0	0	0	0	16,885	0	0	0	0
	Stoping	0	0	0	0	0	0	97,173	26,915	0
550	Development	0	0	0	0	16,267	0	0	0	0
	Stoping	0	0	0	0	0	94,981	25,142	0	0
580	Development	0	0	0	8,787	0	0	0	0	0
	Stoping	0	0	0	0	60,693	15,573	0	0	0
Total	Development	0	68,520	68,439	49,578	80,970	43,900	16,316	1,736	0
	Stoping	0	19,292	70,893	145,287	191,085	230,203	263,870	259,850	191,092
	Combined	0	87,812	139,332	194,866	272,055	274,103	280,186	261,585	191,092
Overall Grade	Ni (%)	0.00%	0.64%	0.93%	1.25%	1.34%	1.32%	1.30%	1.28%	1.29%
	Cu (%)	0.00%	0.05%	0.06%	0.08%	0.09%	0.08%	0.08%	0.08%	0.08%

Figure 21.3: Mine Production Schedule – Life of Mine



A summary of the total underground mine Operating Cost estimate is presented in Table 21.21 through Table 21.24.

Table 21.21: Underground Mine Operating Costs – Project Period

		Project Period				
Operating Costs	**Total**	**2013**	**2014**	**2015**	**2016**	**2017**
Direct						
Development in Waste	$998,732	$0	$69,916	$452,859	$188,375	$287,581
Development in Ore	$6,393,088	$0	$0	$2,639,709	$2,328,377	$1,425,002
Production	$7,447,468	$0	$0	$674,048	$2,305,106	$4,468,313
Direct Totals	**$14,839,287**	**$0**	**$69,916**	**$3,766,616**	**$4,821,859**	**$6,180,897**
Indirect						
Company Labour	$6,718,976	$0	$80,029	$1,605,681	$2,329,358	$2,703,907
Contractor Labour	$3,857,629	$0	$41,852	$1,190,102	$1,464,740	$1,160,935
Indirect Supplies	$778,671	$0	$11,045	$215,377	$265,079	$287,169
Propane	$865,351	$0	$1,060	$165,360	$296,891	$402,040
Power	$2,313,527	$0	$19,729	$595,189	$800,712	$897,898
Mobile Equipment Operating	$1,289,447	$0	$11,484	$322,846	$463,108	$492,008
Facility Rentals	$343,476	$0	$4,872	$95,004	$116,928	$126,672
Diamond Drilling	$530,400	$0	$10,400	$0	$249,600	$270,400
Indirect Totals	**$16,697,476**	**$0**	**$180,472**	**$4,189,559**	**$5,986,416**	**$6,341,029**
Total Operating Costs	**$31,536,764**	**$0**	**$250,388**	**$7,956,175**	**$10,808,275**	**$12,521,926**

Table 21.22: Underground Mine Operating Costs – Operating Phase

		Project Period				
Operating Costs	**Total**	**2018**	**2019**	**2020**	**2021**	**2022**
Direct						
Development in Waste	$296,742	$232,308	$64,434	$0	$0	$0
Development in Ore	$4,012,644	$2,276,152	$1,222,757	$498,605	$15,130	$0
Production	$31,135,934	$5,063,727	$6,458,884	$7,253,917	$7,157,874	$5,201,532
Direct Totals	**$35,445,320**	**$7,572,187**	**$7,746,075**	**$7,752,522**	**$7,173,004**	**$5,201,532**
Indirect						
Company Labour	$23,381,336	$5,315,486	$5,315,486	$5,199,822	$4,505,543	$3,045,000
Contractor Labour	$0	$0	$0	$0	$0	$0
Indirect Supplies	$2,622,792	$552,249	$552,249	$552,249	$552,249	$413,798
Propane	$3,479,193	$773,154	$773,154	$773,154	$773,154	$386,577
Power	$7,546,827	$1,679,009	$1,592,511	$1,500,663	$1,623,846	$1,150,798
Mobile Equipment Operating	$3,984,200	$838,779	$838,779	$838,779	$838,779	$629,084
Facility Rentals	$1,086,400	$232,800	$232,800	$232,800	$232,800	$155,200
Diamond Drilling	$520,000	$520,000	$0	$0	$0	$0
Indirect Totals	**$42,620,748**	**$9,911,476**	**$9,304,979**	**$9,097,466**	**$8,526,370**	**$5,780,457**
Total Operating Costs	**$78,066,067**	**$17,483,663**	**$17,051,054**	**$16,849,988**	**$15,699,374**	**$10,981,988**

Table 21.23: Operating Costs per Tonne – Life of Mine

		Project Period			Operating Period				
Item Name	**Total**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Tonnes of Ore	**1,701,030**	**87,812**	**139,332**	**194,866**	**272,055**	**274,103**	**280,186**	**261,585**	**191,092**
Operating Costs									
Direct									
Development in Waste	$0.8	$5.2	$1.4	$1.5	$0.9	$0.2	$0.0	$0.0	$0.0
Development in Ore	$6.1	$30.1	$16.7	$7.3	$8.4	$4.5	$1.8	$0.1	$0.0
Production	$22.7	$7.7	$16.5	$22.9	$18.6	$23.6	$25.9	$27.4	$27.2
Direct Totals	**$30**	**$43**	**$35**	**$32**	**$28**	**$28**	**$28**	**$27**	**$27**
Indirect									
Company Labour	$17.7	$18.29	$16.72	$13.88	$19.54	$19.39	$18.56	$17.22	$15.93
Contractor Labour	$2.3	$13.55	$10.51	$5.96	$0.00	$0.00	$0.00	$0.00	$0.00
Indirect Supplies	$2.0	$2.45	$1.90	$1.47	$2.03	$2.01	$1.97	$2.11	$2.17
Propane	$2.6	$1.88	$2.13	$2.06	$2.84	$2.82	$2.76	$2.96	$2.02
Power	$5.8	$6.78	$5.75	$4.61	$6.17	$5.81	$5.36	$6.21	$6.02
Mobile Equipment Operating	$3.1	$3.68	$3.32	$2.52	$3.08	$3.06	$2.99	$3.21	$3.29
Facility Rentals	$0.8	$1.08	$0.84	$0.65	$0.86	$0.85	$0.83	$0.89	$0.81
Diamond Drilling	$0.6	$0.00	$1.79	$1.39	$1.91	$0.00	$0.00	$0.00	$0.00
Indirect Totals	**$35**	**$48**	**$43**	**$33**	**$36**	**$34**	**$32**	**$33**	**$30**
Total Operating Costs	**$64**	**$91**	**$78**	**$64**	**$64**	**$62**	**$60**	**$60**	**$57**

Table 21.24: Underground Mine Operating Costs per Tonne – Major Cost Items

Operating Costs		
Item Name	**Total**	**% of Total**
Direct		
Development in Waste	$0.76	1%
Development in Ore	$6.12	9%
Production	$22.68	35%
Direct Totals	$29.56	46%
Indirect		
Company Labour	$17.70	27%
Contractor Labour	$2.27	4%
Indirect Supplies	$2.00	3%
Propane	$2.55	4%
Power	$5.80	9%
Mobile Equipment Operating	$3.10	5%
Facility Rentals	$0.84	1%
Diamond Drilling	$0.62	1%
Indirect Totals	$34.87	54%
Total Operating Costs	**$64.43**	**100%**

21.4.5 Indirect Operating Costs

All project costs not directly related to capital and operating activities, and not part of the contractor's indirect costs are included in Liberty's Indirect Costs. These costs include:

- Underground mine personnel including management, health and safety, technical support, general site maintenance, and site services personnel.
- Operation of mobile support equipment (grader, fuel truck, etc.).
- Electrical power (charged to the project at a rate of $0.097/kW-hour). Note that diesel fuel costs are included in the estimate as a direct cost (equipment operating).
- Propane consumption for heating of the fresh air.
- Outside consulting services including EPCM, geotechnical, geological, environmental, and hydrogeology.
- Site general and administrative (G & A) services including office operating expenses, mine rescue expenses, and safety supplies. Overall site G & A expenses have not been included in these estimates.

Significant ongoing overhead cost items include the consumption of electric power, and propane to the underground operations. Table 21.25 presents quantities and costs by year for these activities.

Table 21.25: Electrical Power and Propane

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Propane	Litre	$0	100,000	800,000	1,167,025	1,458,781	1,458,781	1,458,781	1,458,781	1,458,781	729,371
Propane Cost	$0.53		$53,000	$424,000	$618,523	$773,154	$773,154	$773,154	$773,154	$773,154	$386,577
Electricity	kWh	0	1,861,201	2,879,483	3,147,451	3,257,975	3,167,941	3,004,738	2,831,439	3,063,860	2,171,317
Electricity Cost	$0.097		$986,437	$1,526,126	$1,668,149	$1,726,727	$1,679,009	$1,592,511	$1,500,663	$1,623,846	$1,150,798

During the operating period, all indirect costs will be included with the operating cost estimates. These costs will vary as production rates increase over time.

22.0 ECONOMIC ANALYSIS

A discounted cash flow financial model was constructed for the project. The basis of the model was the production schedule, discussed in Section 16.3.3 and the Capital and Operating Costs Estimates of Section 21. A discount rate of 8% was used for the base case of the evaluation and provincial and federal taxes were excluded from the evaluation at this stage of the study. All costs and analyses are done in CDN dollars.

Note: The economic analysis in this preliminary assessment contains inferred resources, considered too speculative geologically to have economic considerations applied to them that would enable characterization as mineral reserves. There is no certainty that the preliminary assessment estimates will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

22.1 Life of Mine Parameters and Assumptions

Table 22.1 shows the principal parameters used in the economic analyses.

Table 22.1: Economic Analyses - Principal Parameters

Parameters	Project Total
General	
Life of Mine	8 years
Production Rate (Steady State)	750 tpd
Recovery Rate	93%
Ni Concentrate	97,012 tonnes
Payable Ni	38,497,588 lbs
Market	
Discount Rate	8%
Ni Price	$10/lb
Royalty	1%

22.2 Economic Analyses Results

The results of the financial model concluded pre-tax NPV of $35.8 million using a discount rate of 8% and $10 per pound of nickel price. The project payback period is 4.5 years. Table 22.2 summarizes the results of the discounted cash flow model.

Table 22.2: Discounted Cash Flow Summary

Description	Project Total ($000's)
Revenue	
Gross Revenue	$406,214.19
Net Smelter Return	$349,309.27
Operating Costs	
Mining Costs	($109,603)
Haulage Costs	($5,954)
Milling Costs	($25,515)
G & A	($5,103)
Direct Operating Costs	**($154,925)**
Royalties	($3,493)
Total Direct Operating Costs	**($149,418)**
Capital Costs	**($100,751)**
Surface Construction	($8,625)
Underground Construction	($8,943)
Ramp	($20,702)
Lateral Waste Development	($8,751)
Raises	($4,092)
Boreholes	($1,035)
Indirects	($29,589)
Equipment Purchase	($19,014)
Free Cash Flow – Pre Tax	**$99,141**
Pre Tax NPV @ 8%	**$35,804**
Payback	**4.5 years**
IRR	**23%**

The price of nickel, as expected, is the largest contributing variable to the overall valuation and return of the project. The sensitivity of the price of the commodity has been demonstrated in Table 22.3.

Table 22.3: Sensitivity of the Price of the Commodity

USD Price of Nickel per Pound	NPV @ 8%
$9.00	$12,965,897
$10.00	$35,803,684
$11.00	$58,641,470
$12.00	$81,479,257
$13.00	$104,317,044
$14.00	$127,154,831

23.0 ADJACENT PROPERTIES

Liberty owns a large portion of the surrounding claims, including three of the four known deposits of the Shaw Dome. The McWatters Deposit is located in the central portion of Langmuir Township (Figure 7.2). The Redstone nickel deposit is located to the west in neighbouring Eldorado Township and is the westernmost deposit known to date. The Redstone Mine is currently in production and is equipped with concentrating facilities on site. Located between McWatters and Redstone, is the Hart nickel deposit, which lies entirely within Liberty's claim package. Langmuir #2, to the north, is shared with Inspiration Mining Corp. (Inspiration) who owns part of the claims containing the mineralized zone. Langmuir #1 is the fourth deposit, and lies within a claim group whose mining rights belong to Inspiration.

Liberty owns the Redstone deposit that contains a reported measured and indicted mineral resource of 418,931 tonnes at an average grade of 2.32 percent nickel (SRK, 2007). This resource estimate only reflects the nickel mineralization contained to a depth of 508 metres, where current mining activities are taking place. The neighbouring Liberty-owned McWatters deposit host an Indicated Mineral Resource of 714,870 tonnes at 0.94 percent nickel and an Inferred Mineral Resource of 13,829 tonnes at 3.39 percent nickel (Liberty Mines Inc. 2008). McWatters is currently in the pre-production mining stages. In addition to the known deposits in the area there are many other prospects, including the Galata showing and the recently discovered mineralized intervals by Golder Chalice Resources (Golder) to the east of the Hart deposit.

Both Langmuir #1 and Langmuir #2 are past producing mines with total reported production of 11,502 tonnes with an average grade of 1.74 percent nickel, and 1,133,750 tonnes with an average grade of 1.50 percent nickel respectively (undated Ministry of Northern Development and Mines Resident Geologist Report).

All nickel deposits of the Shaw Dome are hosted by ultramafic rocks, which have generally been interpreted as extrusive komatiitic flows, with the exception of McWatters. The latter deposit may be hosted by an ultramafic dyke that cross-cuts an iron formation.

24.0 OTHER RELEVANT DATA AND INFORMATION

This section is intentionally left blank.

25.0 INTERPRETAITON AND CONCLUSIONS

25.1 Interpretation

The Hart deposit is hosted by ultramafic rocks that form part of, or intrude, the Tisdale assemblage that flank the Shaw Dome and form part of the Abitibi Greenstone Belt. To date, five nickel-copper platinum group metals deposits have been discovered in the Shaw Dome (including the Hart deposit) and numerous showings have been identified. These five deposits occur in komatiitic rocks found within the Deloro assemblage near the base of the Tisdale assemblage.

Five main rock types have been identified from Hart diamond drill core and surface mapping; footwall intermediate to felsic volcanics, banded iron formation, ultramafic flows, felsic dikes, and mafic dikes. The Hart deposit sulphide zone can be subdivided in three distinct zones:

- An upper zone of nickel-enriched banded iron formation;
- A basal lower zone consisting of massive to semi-massive sulphides; and
- An interstitial zone of disseminated sulphides.

The komatiitic rocks, which host the nickel mineralization are serpentinized and locally altered to talc, chlorite, and carbonate. The main sulphide zone that comprises the majority of the mineral resource consists of komatiite hosted massive to semi-massive sulphides lying conformably on dacitic pyroclastic flows. Typical sulphide concentrations range from 60 to 80 percent pyrrhotite and 10 to 30 percent pentlandite. Other sulphide minerals include minor pyrite and chalcopyrite.

25.1.1 Geology and Mineral Resources

An appreciation of the geological controls determining the distribution of nickel mineralization at the Hart Deposit and the continuity of particularly the basal higher grade massive sulphide type mineralization has been gained from appropriately spaced drilling and from operational and exploration experience gained by Liberty on similar deposits in the Shaw Dome.

The current drill density has allowed the massive sulphide deposit to be extrapolated and modelled confidently down to approximately 450 metres below surface. Our understanding of the nickel grade distribution within the lower grade structurally–controlled disseminated type mineralization in the hanging wall has been limited by the discontinuous nature of mineralization and by a limited understanding of the structural elements that influence its continuity. The structurally distorted and variable grade iron

formation zone is seen as a lower priority target, despite its shallow location. The massive sulphide horizon is the primary target for underground mining.

Although exploration history at Hart dates back to the period 1960 to 1964, only verified data acquired in the period 2005 to 2008 has been applied for resource estimation purposes. This high quality dataset has facilitated resource modelling and estimation in this study. The exploration methodologies and protocols practiced by Liberty exploration staff conform to industry 'best practices'. Liberty management has applied a quality management system that compares well to industry standard. Sampling protocols, drilling procedures, database management and overall quality assurance and quality control are areas that have receive priority. The implementation of industry standard database management systems and 3D modelling software packages on Liberty have contributed considerably to the high exploration standards.

The geology model and classified resource estimate reflect current knowledge of the Hart mineralization continuity and associated grade trends. Modelled resources are classified as Indicated or Inferred. An opportunity exists to upgrade the resources in the deeper portion of the deposit (>450 metres) by increasing the drilling density as well as by increasing our understanding of the structural framework upon which the Hart deposit is based. Such an improved structurally based resource body will not only lead to upgraded resources but also to reduced risk in future mining decisions based on this model.

Although this first NI43-101 compliant resource estimate for Hart is the largest nickel resource identified to date at the Shaw Dome, it should serve as a starting point, which should be continually updated and enhanced as additional data and interpretations become available. The close proximity of the Hart Deposit to other existing Liberty mining and processing infrastructure should favourably impact future mining feasibility studies.

25.2 Conclusions

25.2.1 Geology and Mineral Resources

Significant nickel mineralization has been identified by Liberty on the Hart project. Confidence in estimating mineral resources at Hart is determined by various factors, including the following:

- An appreciation of the variables associated with komatiite-associated Ni-(Cu) deposits;
- An understanding of the 3D structural geological framework within which the nickel sulphide mineralization resides;

- The drilling density; and
- Quality control procedures used to collect exploration data.

SRK believes that there is a strong potential to increase the Inferred Resources at Hart particularly by drilling the depth extensions of the sulphide zones. Additional infill drilling is warranted to upgrade the Inferred mineral resources to an Indicated classification.

25.2.2 Mine Plan and Economics

The available data and the economic analyses indicate that the Hart project is technically and economically viable, contingent on nickel price. With the potential of additional resources at depth and along strike, the economics of the project improve further. The dip and width of the orebody, competent host rock, proximity to surface, and proximity to existing infrastructure at the nearby Redstone mine site and mill, are all positive to the viability of the Hart deposit. All indications that have arisen from the preparation of technical analysis contained within this report are that Hart deposit is a great mining asset and should be developed.

The economic viability is heavily dependent on the price of nickel, as expected. With the current resources, costs, and mining rates estimated, the breakeven price for the project is $8.43 per pound of nickel.

25.2.3 Environmental

- Liberty has prepared a Spill Prevention and Contingency Plan to help prevent or reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that may result at its Redstone and McWatters operations. It is Liberty's intent to extend this plan to Hart;
- Hart will inherit Liberty's Emergency Response Plan (ERP) from Redstone and McWatters Mine. The plan identifies potential worst-case emergency situations and responses, to outline the responsibilities of employees during these possible emergencies and to ensure that all requirements of applicable laws are met;
- Rock types at site are similar to Redstone and McWatters rock. Those rocks were sampled and subjected to analysis of total sulphur, paste pH, and Acid Base Accounting (ABA). Testing revealed that the rock types to be extracted during mining show pH values that are non-acid generating, both from ABA and Shake Flask tests. Neutralizing Potential Ratio (NPR) values and sulphide-S percentages also show that, on aggregate, these rocks are unlikely to be acid generating;
- Liberty has obtained the necessary permits to be able to conduct mining operations at the Hart project site; excepting the Certificate of Approval – Industrial Sewage, whose application is under review by the MOE at time of writing;

- Liberty intends to develop environmental monitoring programs to address its regulatory obligations under the Ontario Environmental Protection Act for the project and the Metal Mining Effluent Regulations (MMER) of the Fisheries Act; and
- Liberty has filed a closure plan in compliance with Mine Development and Closure under Part VII of the Mining Act and Ontario Regulation 240/00, including the Mine Rehabilitation Code of Ontario as set out in Schedule 1 of Ontario Regulation 240/00.

26.0 RECOMMENDATIONS

26.1.1 Geology and Mineral Resources

SRK recommends that Liberty consider the following for its future exploration work at Hart:

- Increase the drill density at depths between 450 to 600 metres below surface (Estimated at $675k from surface and $500k from underground);
- Undertake structural investigations to improve the understanding of the distribution of the sulphide mineralization improve the quality of the 3D geological model;
- Continue to model the intrusive dikes that occur in proximity to the sulphide zones of mineralization;
- Attempt to identify portions of the disseminated sulphide and ironstone hosted zones exhibiting higher nickel grades; and
- Update the resource model once the geological model has been updated.

26.1.2 Mining

The mine plan and mining methods of this report contain sufficient details and logistics to qualify for a Pre-feasibility study level except for the inclusion of the inferred resources in the mine plan. The economic assessment and mine plan in this study contains inferred resources. The total ratio of the inferred resources included to total number of resource tonnes is approximately 17%; which is considered to be a conservative number for a study of such nature. However, there is no certainty that these resources will be economically viable or realized unless additional infill drilling can upgrade them to a higher category resource. It is, therefore, recommended that for the next phase of the project, inferred resources contained within this mine plan are drilled sufficiently to categorize these materials as indicated resources and the mine plan is updated incorporating the updated resources. An alternative is that an updated mine plan could be prepared with the exclusion of the current inferred resources upon which the capital and operating cost estimates will have to be assessed and estimated to reflect the new mine plan.

It is also recommended that a detailed backfill study be undertaken for the next phase of this project. The backfill strategy for the Hart project will consist of using the existing and future tailings from processing at the Redstone mill which will reduce future capital costs associated with the expansion of the Tailings Storage Facilities at the Redstone site. The cost of this type of study will be approximately $75K and will include a detailed capital and operating cost estimate.

26.1.3 Economic Assessment

It is the recommendation of Liberty that the Hart Project is economically viable given the findings of this report. The capital and operating costs estimated herein presented are very conservative in nature and can be more accurately presented in the next phase of this project; more likely a Feasibility Study as the majority of the report contains sufficient data to qualify as a Pre-feasibility study except for the inclusion of the inferred resource as previously discussed.

The key driver of the economic viability of the project, as expected, is the price of nickel assumption and forecast for the duration of mine life. The economic assessment assumption is based on $10 per pound of nickel as an average baseline for the duration of the project. The breakeven price point is estimated at $8.43 per pound of nickel.

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APPENDIX A

HART PROPERTY MINING CLAIMS

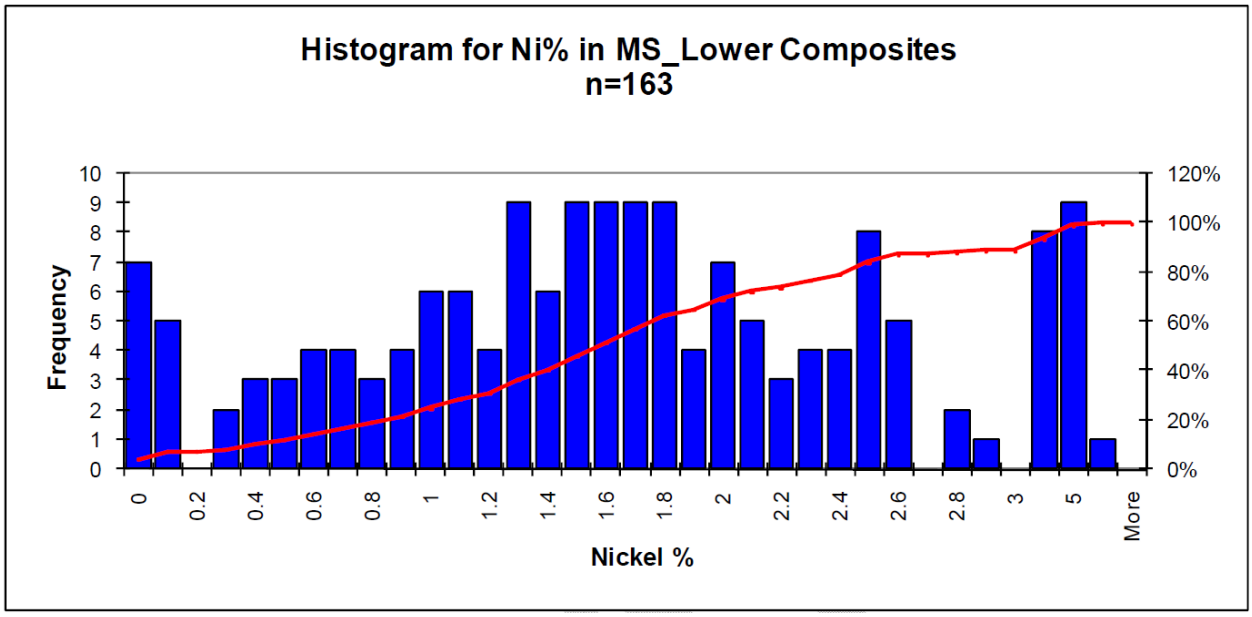
HART PROPERTY
PROPERTY SCHEDULE

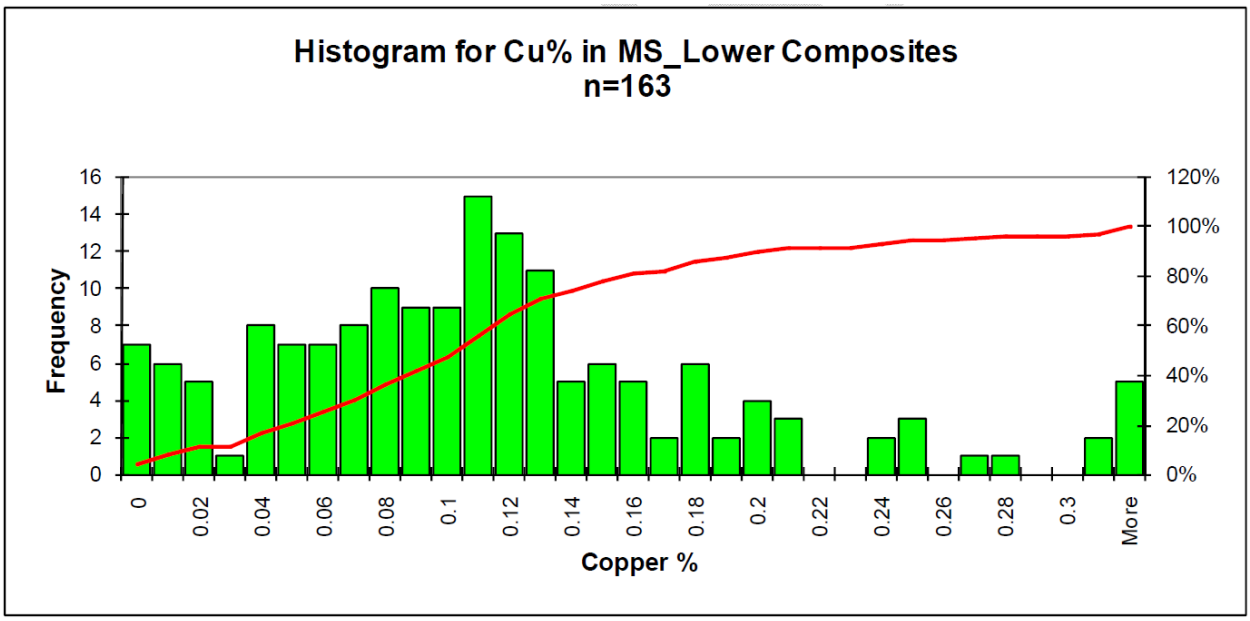
Perimeter Survey	Reference Plan	Unpatented Mining Claims			Including:	Rights	Converted to Lease No.	Date of Lease	Lease Term	Lease Due Date	Annual Lease Rent	Area (ha)	
CLM 475	Part 4 on 6R-8372	P	1248440		all	SR & MR	108569	January 1, 2011	21 years	January 1, 2032	$ 2,783.78	329.852	
		P	1248464		all	SR & MR							
		P	1248468		all	SR & MR							
		P	1243151		partial easement/reservation	SR & MR							
		P	1243283		partial easement/reservation	SR & MR							
		P	1248467		partial easement/reservation	SR & MR							
CLM 475	Parts 1 and 3 on 6R-8372	P	1243281		all	SR & MR						596.857	
		P	1243282		all	SR & MR							
		P	1247502		all	SR & MR							
		P	1247591		all	SR & MR							
		P	1247592		all	SR & MR							
		P	1247593		all	SR & MR							
		P	1247594		all	SR & MR							
		P	1248406		all	SR & MR							
		P	1248465		all	SR & MR							
		P	1248466		all	SR & MR							
		P	1247592		all	SR & MR							
		P	1247593		all	SR & MR							
		P	1247594		all	SR & MR							
		P	1248406		all	SR & MR							
		P	1248465		all	SR & MR							
		P	1248466		all	SR & MR							
		P	3001710		all	SR & MR							
		P	3001711		all	SR & MR							
		P	3001954		all	SR & MR							
		P	3005464		all	SR & MR							
		P	1243151		partial easement/reservation	SR & MR							
		P	1243283		partial easement/reservation	SR & MR							
		P	1248467		partial easement/reservation	SR & MR							
		P	3010638		partial easement/reservation	SR & MR							
CLM 475	Part 2 on 6R-8372	P	3010638		partial easement/reservation	MRO						1.216	
Total number of unpatented mining claims included in Lease 108569 =					21						Total Area =	927.925	ha

APPENDIX B

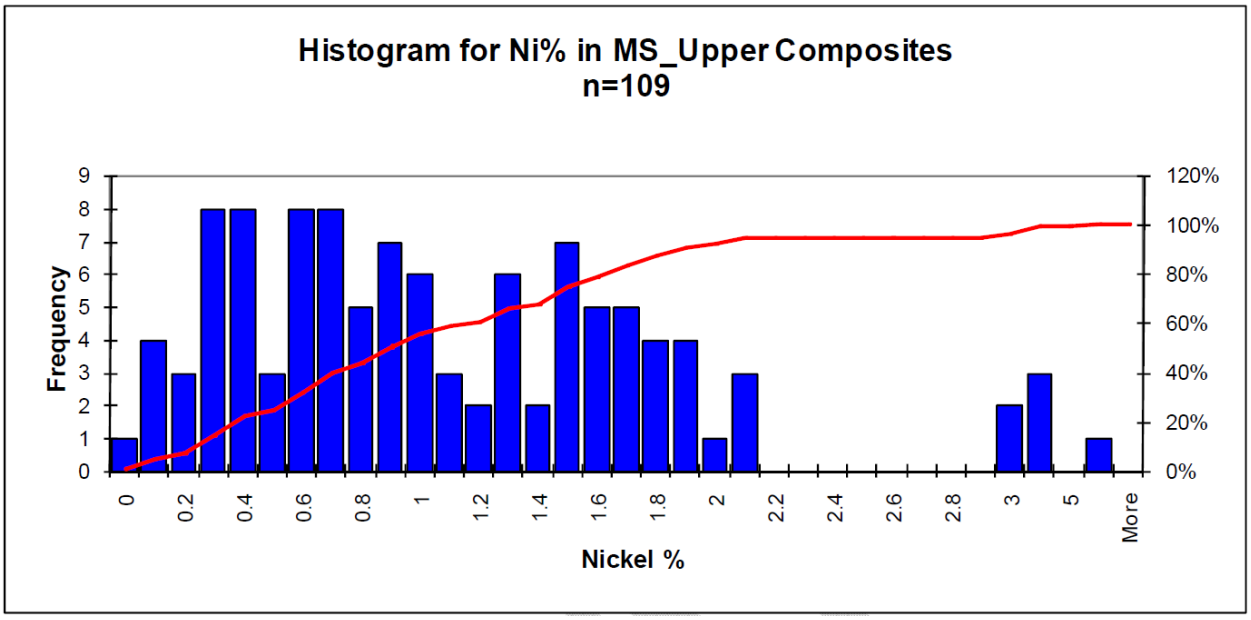
HISTOGRAMS FOR COMPOSITED DATA

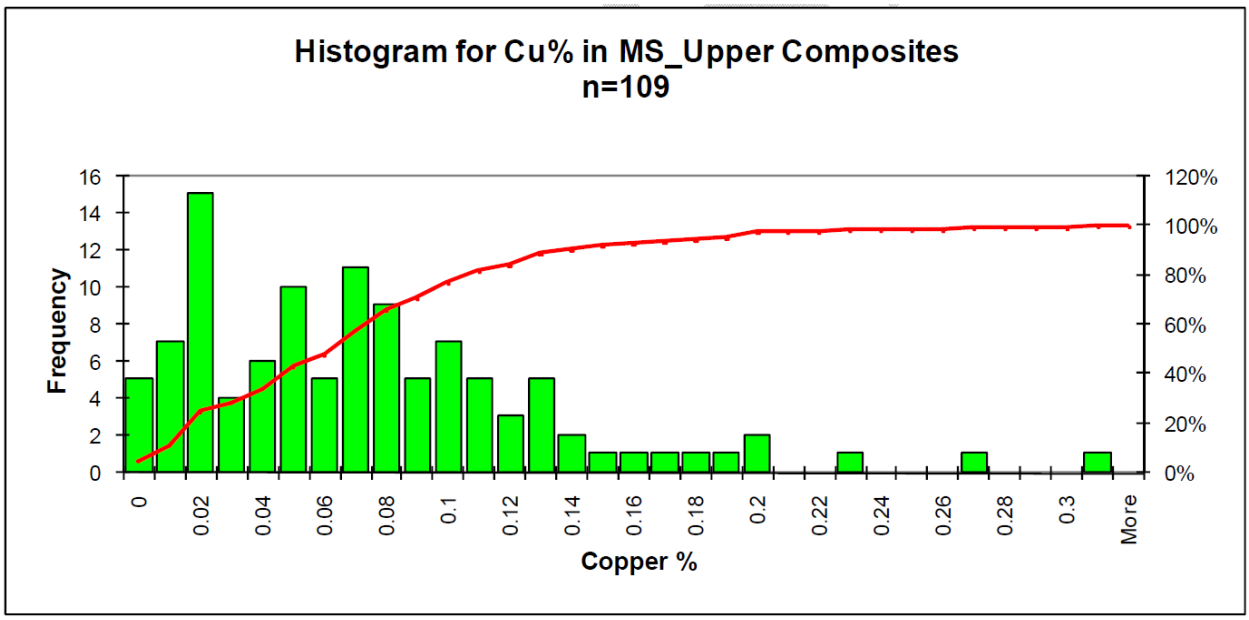
MASSIVE SULPHIDES
Lower Domain



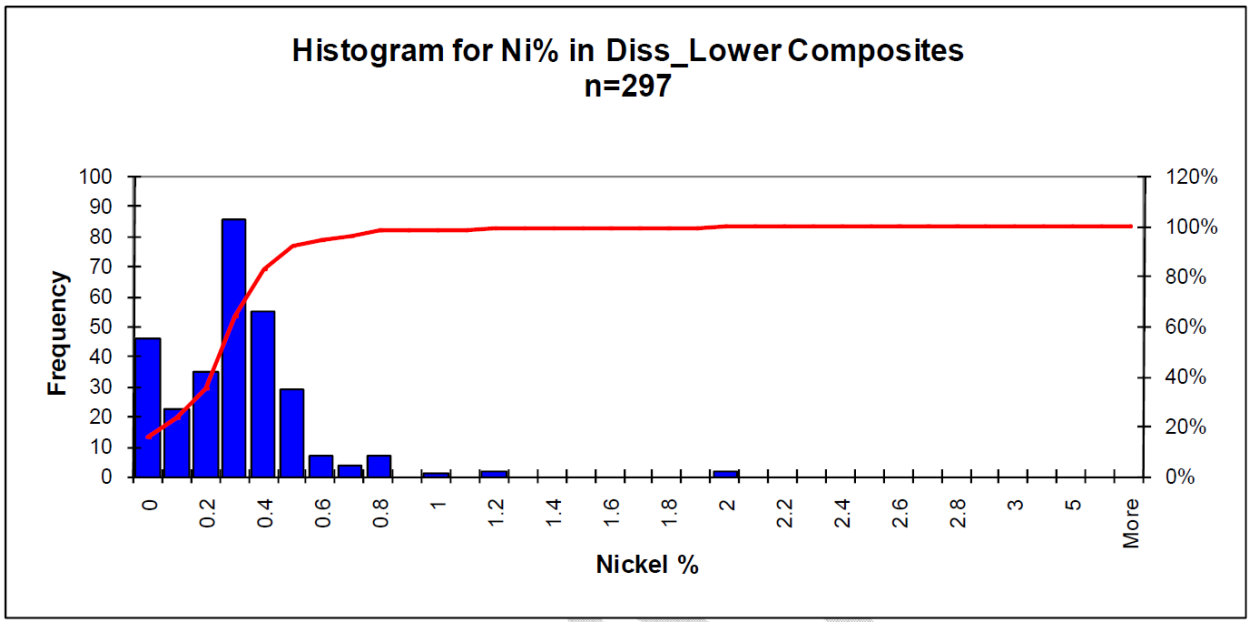


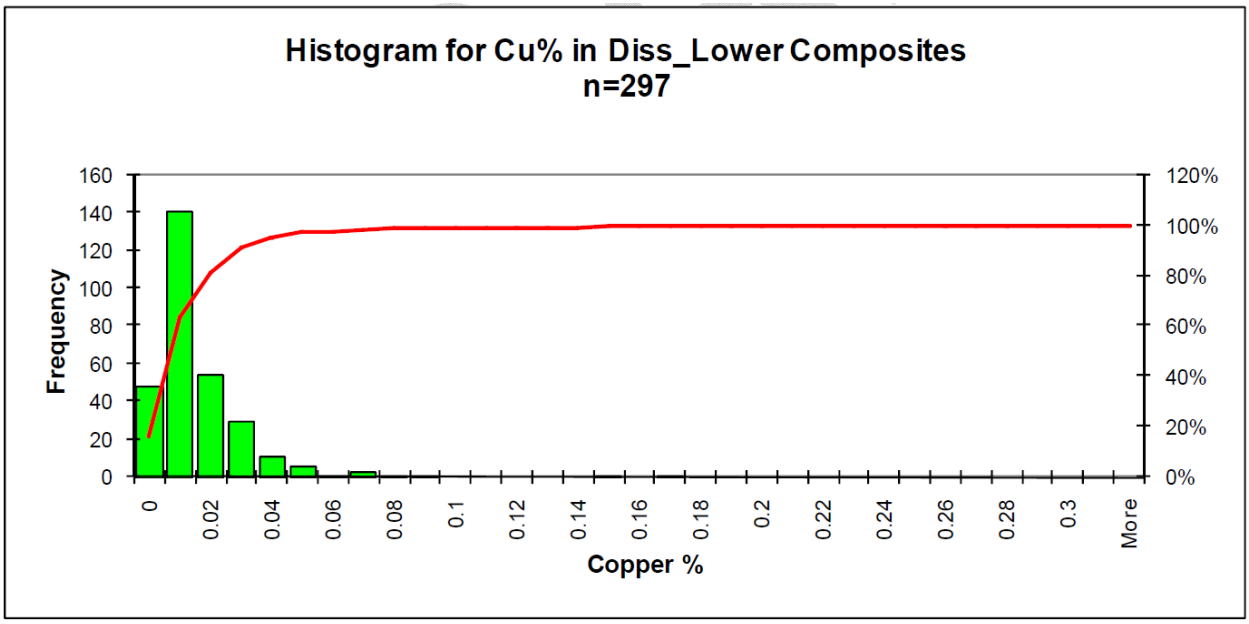
MASSIVE SULPHIDES
Upper Domain



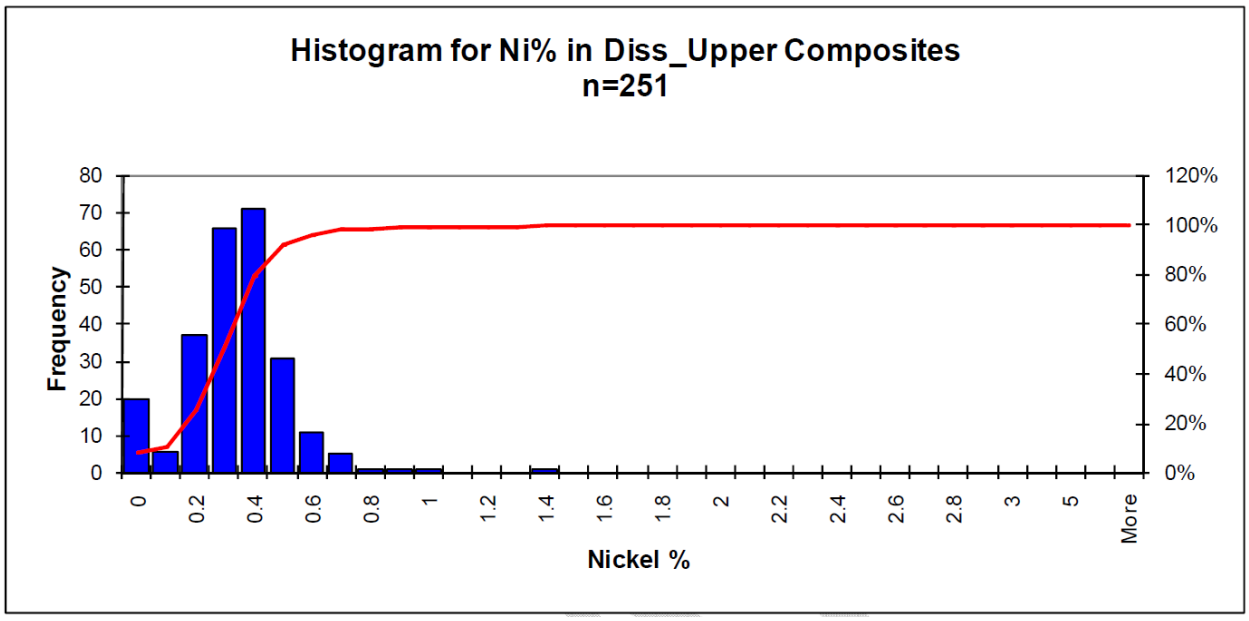


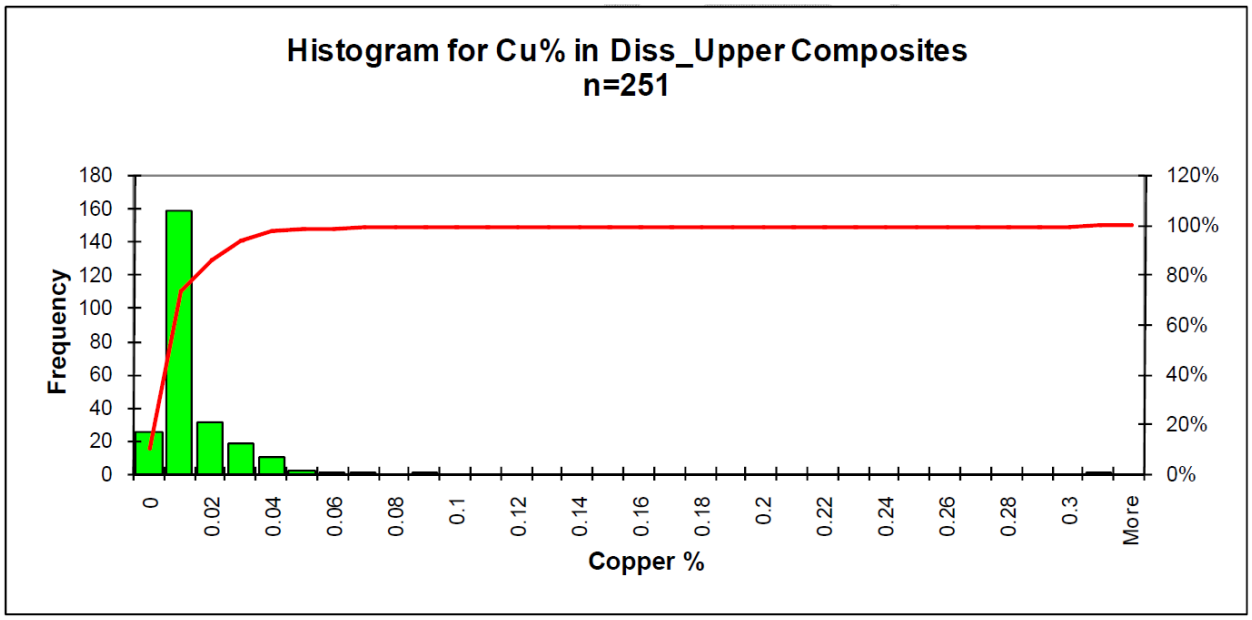
DISSEMINATED SULPHIDES
Lower Domain



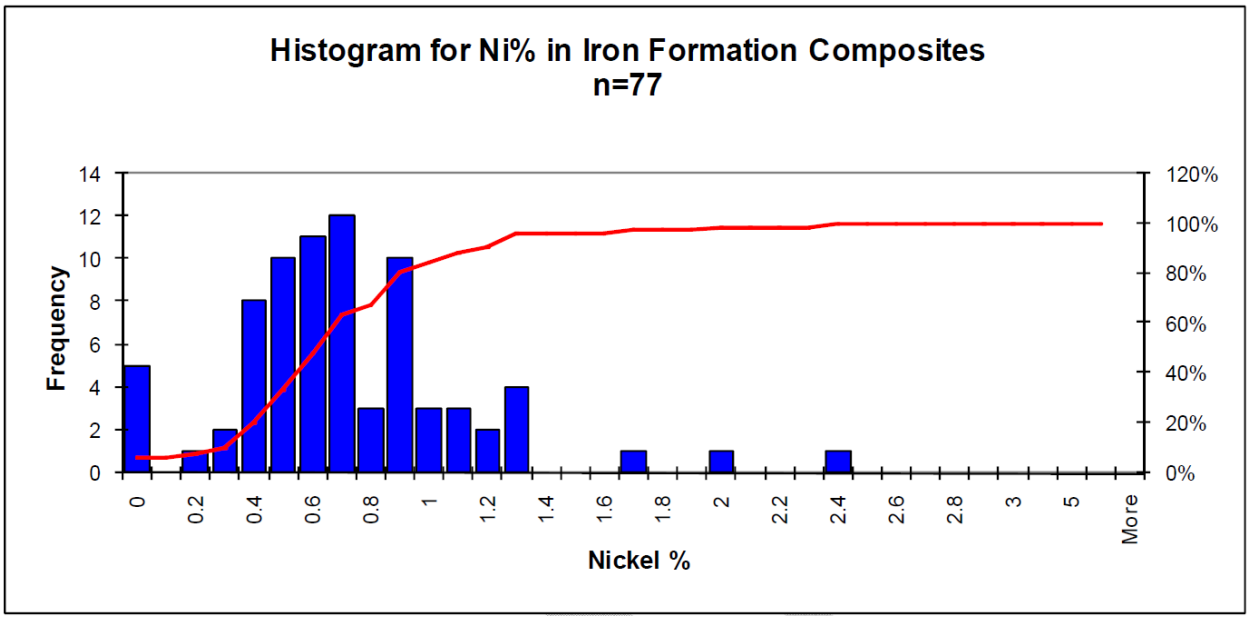


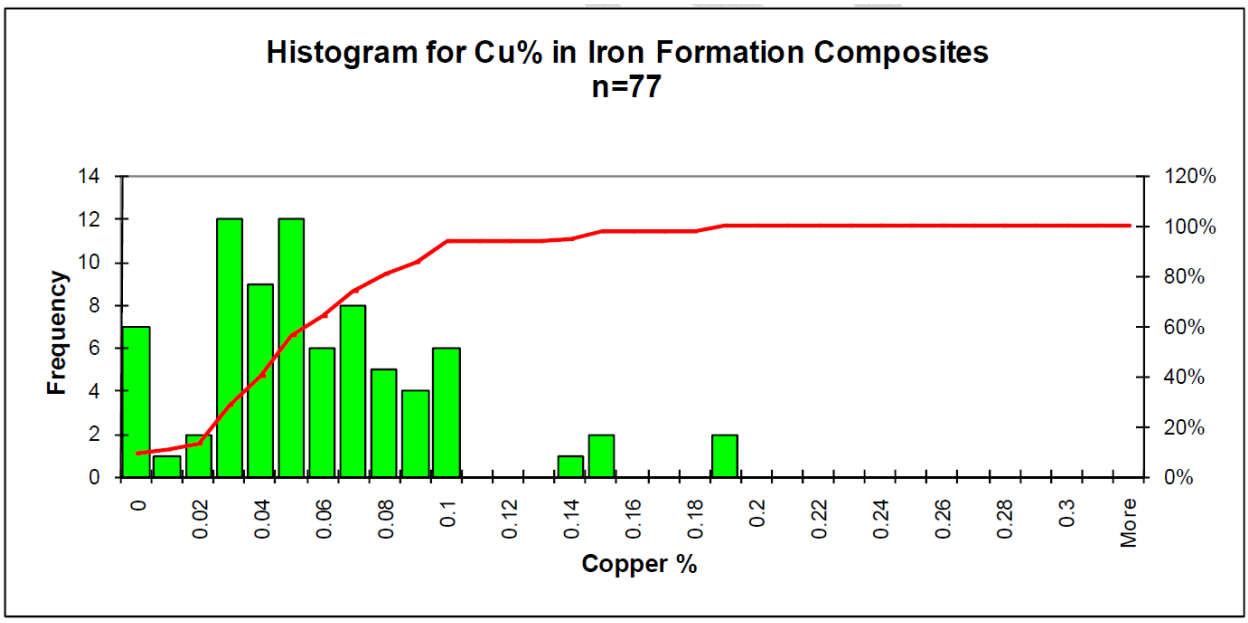
DISSEMINATED SULPHIDES
Upper Domain





IRONSONE HOSTED SULPHIDES





APPENDIX C

HART RESOURCE SENSITIVITY TABLES

INDICATED

Iron Formation			
Ni% Cut-off	Tonnes (t)	Ni%	Cu%
0.20	136,752	0.67	0.06
0.30	136,644	0.67	0.06
0.40	131,852	0.68	0.06
0.50	117,316	0.71	0.06
0.60	80,864	0.78	0.07
0.70	50,928	0.85	0.07
0.80	29,972	0.93	0.07
1.00	6,632	1.08	0.08
1.20	252	1.22	0.08
1.40			
1.60			
1.80			
2.00			

All Massives			
Ni% Cut-off	Tonnes (t)	Ni%	Cu%
0.20	1,433,374	1.44	0.10
0.30	1,410,298	1.46	0.10
0.40	1,378,287	1.49	0.10
0.50	1,319,971	1.53	0.10
0.60	1,288,949	1.55	0.11
0.70	1,258,507	1.58	0.11
0.80	1,226,315	1.60	0.11
1.00	1,105,313	1.67	0.11
1.20	932,632	1.78	0.12
1.40	649,709	1.99	0.13
1.60	442,331	2.22	0.15
1.80	361,654	2.33	0.16
2.00	274,331	2.47	0.17

All Disseminated			
Ni% Cut-off	Tonnes (t)	Ni%	Cu%
0.20	1,103,996	0.34	0.02
0.30	736,722	0.38	0.02
0.40	178,399	0.50	0.03
0.50	52,142	0.66	0.04
0.60	22,473	0.82	0.05
0.70	11,432	0.98	0.06
0.80	8,663	1.06	0.06
1.00	4,588	1.21	0.07
1.20	2,267	1.33	0.06
1.40	395	1.54	0.07
1.60	127	1.76	0.06
1.80	37	1.92	0.06
2.00			

INFERRED

Iron Formation			
Ni% Cut-off	**Tonnes (t)**	**Ni%**	**Cu%**
0.20	13,692	0.84	0.07
0.30	13,692	0.84	0.07
0.40	13,692	0.84	0.07
0.50	13,692	0.84	0.07
0.60	13,271	0.85	0.07
0.70	11,387	0.89	0.07
0.80	9,221	0.92	0.07
1.00	267	1.03	0.07
1.20			
1.40			
1.60			
1.80			
2.00			

All Massives			
Ni% Cut-off	**Tonnes (t)**	**Ni%**	**Cu%**
0.20	289,377	1.34	0.09
0.30	288,950	1.34	0.09
0.40	288,433	1.34	0.09
0.50	282,288	1.36	0.09
0.60	270,129	1.40	0.09
0.70	264,640	1.41	0.09
0.80	261,711	1.42	0.09
1.00	253,810	1.43	0.09
1.20	235,252	1.46	0.09
1.40	120,419	1.63	0.10
1.60	40,672	1.93	0.12
1.80	20,358	2.18	0.13
2.00	14,643	2.28	0.13

All Disseminated			
Ni% Cut-off	**Tonnes (t)**	**Ni%**	**Cu%**
0.20	638,606	0.32	0.02
0.30	375,833	0.37	0.02
0.40	75,269	0.46	0.02
0.50	13,426	0.56	0.02
0.60	2,679	0.65	0.02
0.70			
0.80			
1.00			
1.20			
1.40			
1.60			
1.80			
2.00			

APPENDIX D

GEOTECHNICAL ASSESSMENT OF CROWN PILLAR STABILITY

Geotechnical Assessment of Crown Pillar Stability

03 101042.00

Hart Mine, Timmins, Ontario

August 2010

Prepared for:
Liberty Mines Inc.
8925 51st Avenue, Suite 311A
Edmonton, Alberta T6E 5J3

Prepared by:
GENIVAR Consultants LP
294 Rink Street, Suite 103
Peterborough, Ontario K9J 2K2

Project No. 03 101042.00

GENIVAR

03 101042.00

August 16, 2010

Mr. Gary Nash, President
Liberty Mines Inc.
8925 51st Avenue, Suite 311A
Edmonton, Alberta T6E 5J3

Re: Geotechnical Assessment of Crown Pillar Stability
Hart Mine, Timmins, Ontario

Dear Mr. Nash:

We are pleased to submit a geotechnical assessment report on the stability of the proposed crown pillar for Liberty's Hart Mine, located near Timmins, Ontario. The assessment included a visit to Liberty's core storage facility to meet with the project geologist, obtain background information including selected cross-sections, maps and borehole logs, and to inspect some of the rock core from the mine exploration program. Further to this review, Liberty staff completed additional geotechnical logging and testing of rock core from the Hart crown pillar zone, to provide the required parameters for rock mass quality and index ratings.

The stability assessment of the Hart crown pillar was completed using the Empirical Analysis Model described in the *Rehabilitation of Mines Guidelines for Proponents, Ontario Ministry of Northern Development and Mines (November 1995)*.

Background and assessment details are presented herein, and we trust that this report satisfies your present requirements. If you have any questions, please contact us.

Yours truly,
GENIVAR Consultants LP

J. Stephen Ash, P. Eng., P. Geo.
Consulting Engineer/Branch Manager

294 Rink Street, Suite 103, Peterborough, Ontario K9J 2K2
Telephone: 705.743.6850 • Fax: 705.743.6854 • www.genivar.com

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Transmittal Letter
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Appendices

Appendix A Rock Mass Rating Method

1. Introduction

The Hart Mine is located approximately 28 km southeast of downtown Timmins, and is a Kambalda-type massive sulfide deposit with nickel-copper ore hosted in ultramafic komatiites flanking the Shaw Dome. The site location is indicated on Figure 1. The ore zone is approximately 220 m along strike, and dips at approximately 75 degrees to the proposed 540 m bottom level. The ore deposit is tabular-shaped and tapers from about 11 m wide at the 540 m level, to 3 m to 5 m wide at the 40 m level. Oblique views from economic modeling of the ore-body are shown on Figure 2.

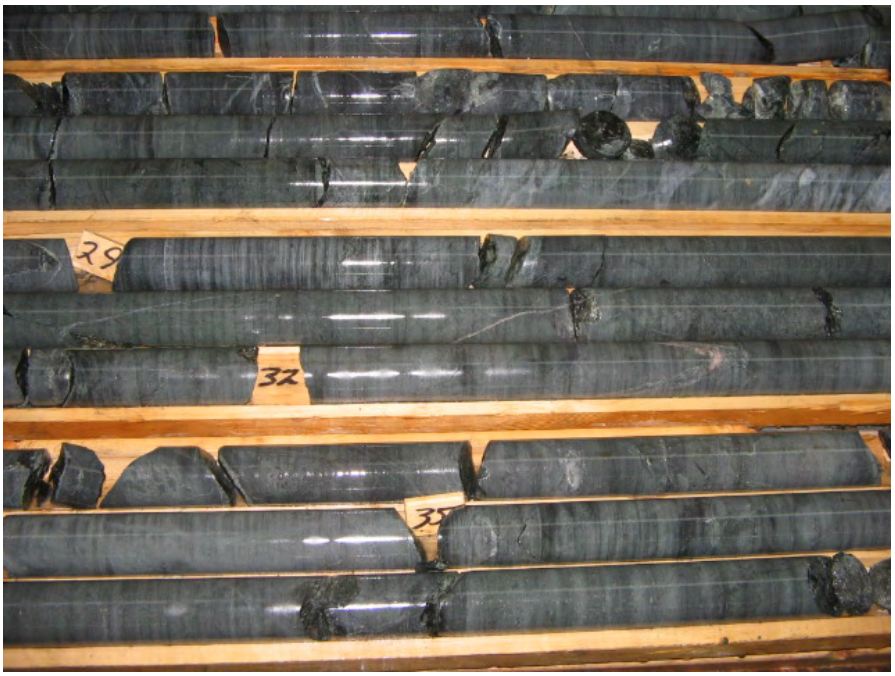
Ore will be mined using the Alimak Raise method across seven levels at 100 m intervals. The proposed upper level of the mine will be situated at 40 m below ground surface. A plan of the 40 m level is included as Figure 3. Stopes will be mined out in alternating sequence, and according to the feasibility report will be backfilled with cemented tailings. The crown pillar of the mine will be situated in the komatiitic hanging wall rocks, and it is estimated that stopes would be 3 to 5 m wide by 30 m long, prior to backfilling.

The Hart Mine is located within the limits of the City of Timmins on land that is classified as rural wilderness. Access to the mine is by the McWatters Mine Road that connects to the Town of South Porcupine. An operational powerline is located on the south side of the road. Upon mine closure, the site will be secured in accordance with the Mine Rehabilitation Code, and underground slopes are to be backfilled and isolated by a significant and stable crown pillar.

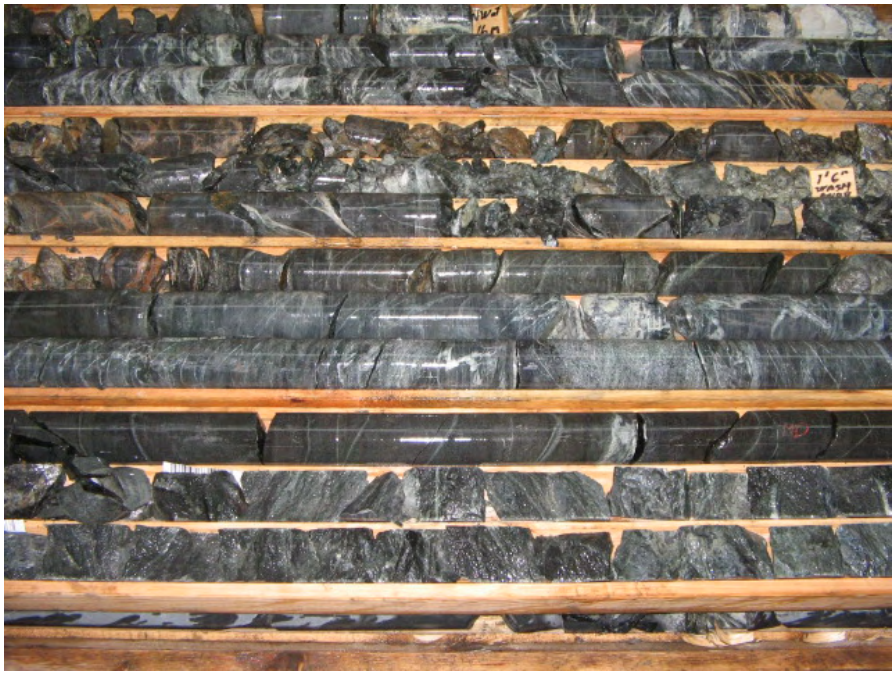
2. Estimated Rock Mass Conditions

No underground workings currently exist at Hart Mine. Liberty has advanced several exploration boreholes into the deposit, and has provided geological and geotechnical logs for five boreholes penetrating the crown pillar zone. These boreholes were inclined at 45 to 55 degrees to the horizontal and are identified as H-08-101, H-07-07, H07-18, H07-25, and H-08-75. Typical core recovery is presented in the following photographs.

Photograph 1: Core Section of Borehole H07-18



Photograph 2: Core Section of Borehole H07-18



Photograph 3: Core Section of Borehole H07-25

Photograph 4: Core Section of Borehole H07-25

For empirical crown pillar stability assessments, rock mass conditions are estimated from the Q index, developed by the Norwegian Geotechnical Institute (NGI), and the Rock Mass Rating (after Bieniawski, 1976). These two index ratings are defined as follows:

1. $Q = (RQD/J_n) \times (J_r/J_a) \times (J_w/SRF)$

   where: Q = rock tunnelling index; RQD = rock quality designation; J_n = joint set number; J_r = joint roughness number; J_a = joint alteration number; J_w = joint water reduction factor; SRF = stress reduction factor.

2. The Rock Mass Rating (RMR) is the sum of six rating factors: RQD, joint spacing, joint condition, groundwater, rock strength, and joint orientation. Determination of the rating factors is presented in Appendix A-.

RMR and the Q index may be related through the following mathematical expression:

$$RMR = 9\ln(Q) + 44$$

The *Rehabilitation of Mines Guidelines for Proponents* recommends that RMR and Q be calculated independently, and then compared using the above relationship. For analysis purposes, the lowest or average value should be used.

Geotechnical parameters for RMR and Q index determination for the crown pillar boreholes at Hart Mine are summarized in Tables 1 and 2, respectively. In summary, the crown pillar zone is situated in good to excellent quality rock with RQD values mainly in the 80 to 100 range. Diamteric point load test results for selected rock core samples were provided by Liberty, and uniaxial compressive strengths for the crown pillar zone are reported in the range of approximately 140 to 220 MPa. Rock strength ratings for RMR computations varied between 12 and 15. Liberty geological staff completed all geotechnical logging and provided the relevant joint factors to Genivar. Significant groundwater is not reported in the crown pillar zone, and the stope depth is relatively shallow indicating a low stress condition (i.e. SRF = 2.5).

For the five crown pillar boreholes considered, the average Q index is calculated as 17.8 and the average RMR is calculated as 71.1. There appears to be good agreement between these average values.

3. Crown Pillar Stability Assessment

Based on the suggested empirical analysis procedure, the scaled span (C_s) for the Hart Mine crown pillar is determined from the following calculation:

$$C_s = S\ \{SG/(T(1+S_r)(1-(0.4\cos\theta)\}^{0.5}$$

where: S = crown pillar span (m); SG = density of the rock mass (g/cm^3); S_r = crown pillar span/length ratio; θ = orebody dip angle; T = thickness of crown pillar (m)

Critical span (S_c) is then calculated as follows, for comparison to the scaled span:

$$S_c = 3.3Q^{0.43}\{\sinh(Q)\}^{0.0016}$$

Geometric factors for the Hart Mine stope and crown pillar, and calculations of the scaled span and critical span are presented in Table 3. Factors of Safety (FS), defined as the ratio of scaled span to critical span are provided, and are interpreted as follows:

- FS>2: crown pillar stable over long term; ground support in crown may be required; stope backfilling may not be required.
- 2>FS>1: crown pillar initially stable, but may become unstable with time; crown may require additional support (e.g. bolting); backfilling may not be necessary.
- FS<1: crown pillar likely to become unstable; stope backfilling required.

Scaled crown span (C_s) is plotted against Q in Figure 4. Crown pillar stability increases with reduced stope span and increased rock mass quality. The critical span (FS=1) is plotted for a range of Q values, and calculated values of the scaled crown span as a function of Q, for the proposed 40 m crown pillar, are plotted to demonstrate stability variance. A plot of FS versus ore zone span included as Figure 5 indicates that the 40 m Hart mine crown pillar will have long-term stability (FS>2) with minimal support required for ore zone spans of up to 17 m.

4. Discussion

Based on the guideline and empirical stability analysis completed for the planned narrow stope widths of up to 5 m, the proposed 40 m crown pillar for Hart Mine is expected to have a long term stability with minimal, if any, ground support requirements. It appears that backfill will not be required for crown pillar support, however, backfill may be required for mine rehabilitation reasons and to support the mining operations. Based on the assessment results, summarized in Table 3, there may be an opportunity to reduce the crown pillar thickness by mining an additional 20 m above the 40 m level.

5. Conclusion

At the request of Liberty Mines Inc., Genivar has completed a geotechnical stability assessment of the crown pillar for the Hart Mine near Timmins. This empirical assessment was completed according to the *Rehabilitation of Mines Guidelines for Proponents (MNDM, 1995)*. Genivar has relied on borehole logs and laboratory testing information provided by Liberty staff to complete this assessment.

The assessment indicates that the proposed 40 m thick by 3 m to 5 m wide crown pillar will be stable in the long-term with a Factor of Safety in excess of 2. As such, limited, if any, crown support should be required.

There may be opportunities to mine additional ore above the proposed 40 m level, depending on final design and operational criteria. Mining and lateral development will provide opportunities to obtain more detailed rock mass inspections and data to further refine the crown pillar design and mine support requirements.

Respectfully Prepared by:
GENIVAR Consultants LP

J. Stephen Ash, P. Eng., P. Geo.
Consulting Engineer/Branch Manager

Tables

Table 1 – RMR Analysis

Table 2 – Q Index Analysis

Table 3 – Stability Analysis

Table 1: RMR Analysis
Liberty Mines, Hart Mine Crown Pillar
03101042.00

Borehole ID	Depth (m)			RQD Value (%)	RQD Rating	Joint Spacing Rating	Joint Condition Rating	Groundwater Rating	Rock Strength Rating	Joint Orientation Rating	Calculated RMR
	From	To	Interval								
H-07-07	4.3	7	2.7	95	20	10	25	10	15	-12	68.0
H-07-07	7	10	3	97	20	15	30	15	15	-12	83.0
H-07-07	10	13	3	98	20	15	25	10	15	-12	73.0
H-07-07	13	16	3	96	20	10	30	15	15	-12	78.0
H-07-07	16	19	3	89	17	10	25	10	15	-12	65.0
H-07-07	19	22	3	97	20	10	25	10	15	-12	68.0
H-07-07	22	25	3	100	20	20	25	10	15	-12	78.0
H-07-07	25	28	3	94	20	15	25	10	15	-12	73.0
H-07-07	28	31	3	94	20	15	25	10	15	-12	73.0
H-07-07	31	34	3	95	20	10	30	15	15	-12	78.0
H-07-07	34	37	3	92	20	10	25	15	15	-12	73.0
H-07-07	37	40	3	97	20	20	30	15	15	-12	88.0
H-07-07	40	43	3	93	20	10	30	15	15	-12	78.0
H-07-07	43	46	3	93	20	10	30	15	15	-12	78.0
H-07-07	46	49	3	96	20	15	30	15	15	-12	83.0
H-07-07	49	52	3	97	20	10	25	10	15	-12	68.0
H-07-07	52	55	3	97	20	15	30	15	15	-12	83.0
H-07-07	55	58	3	94	20	15	25	7	15	-12	70.0
H-07-07	58	61	3	98	20	15	30	15	15	-12	83.0
H-07-07	61	64	3	98	20	15	30	15	15	-12	83.0
H-07-07	64	67	3	97	20	15	30	15	15	-12	83.0
H-07-07	67	70	3	99	20	20	30	15	15	-12	88.0
H-07-18	3	6	3	90	20	10	20	7	15	-12	60.0
H-07-18	6	9	3	93	20	10	25	10	15	-12	68.0
H-07-18	9	12	3	69	13	10	25	15	15	-12	66.0
H-07-18	12	15	3	84	17	10	25	15	15	-12	70.0
H-07-18	15	18	3	82	17	10	25	15	15	-12	70.0
H-07-18	18	21	3	87	17	10	25	10	15	-12	65.0
H-07-18	21	24	3	85	17	10	25	15	15	-12	70.0
H-07-18	24	27	3	73	13	10	25	15	15	-12	66.0
H-07-18	27	30	3	86	17	10	25	15	15	-12	70.0
H-07-18	30	33	3	87	17	10	25	10	15	-12	65.0
H-07-18	33	36	3	93	20	10	25	10	15	-12	68.0
H-07-18	36	39	3	71	13	10	25	10	15	-12	61.0
H-07-18	39	42	3	98	20	15	30	15	15	-12	83.0
H-07-18	42	45	3	100	20	15	30	15	15	-12	83.0
H-07-18	45	48	3	96	20	15	30	15	15	-12	83.0
H-07-18	48	51	3	96	20	10	30	15	15	-12	78.0
H-07-18	51	54	3	93	20	10	25	15	15	-12	73.0
H-07-18	54	57	3	95	20	10	25	15	15	-12	73.0
H-07-18	57	60	3	95	20	15	25	15	15	-12	78.0
H-07-18	60	63	3	87	17	10	20	10	15	-12	60.0
H-07-18	63	66	3	100	20	20	25	15	15	-12	83.0
H-07-18	66	69	3	95	20	10	25	15	15	-12	73.0
H-07-18	69	72	3	92	20	10	20	10	15	-12	63.0
H-07-25	16	19	3	45	8	8	10	10	12	-12	36.0
H-07-25	19	22	3	18	3	8	20	7	12	-12	38.0
H-07-25	22	25	3	14	3	8	20	7	12	-12	38.0
H-07-25	25	28	3	71	13	8	25	10	12	-12	56.0
H-07-25	28	31	3	91	20	10	25	10	12	-12	65.0
H-07-25	31	34	3	84	17	10	30	15	12	-12	72.0
H-07-25	34	37	3	94	20	10	25	15	12	-12	70.0
H-07-25	37	40	3	95	20	10	20	15	12	-12	65.0
H-07-25	40	43	3	98	20	20	25	15	12	-12	80.0
H-07-25	43	46	3	97	20	20	20	15	12	-12	75.0
H-07-25	46	49	3	55	13	8	20	7	12	-12	48.0
H-07-25	49	52	3	83	17	10	25	10	12	-12	62.0
H-07-25	52	55	3	97	20	15	30	15	12	-12	80.0
H-07-25	55	58	3	98	20	15	25	15	12	-12	75.0
H-07-25	58	61	3	88	17	10	25	15	12	-12	67.0
H-07-25	61	64	3	82	17	10	25	15	15	-12	70.0
H-07-25	64	67	3	78	17	10	25	15	15	-12	70.0
H-07-25	67	70	3	93	20	10	25	15	15	-12	73.0
H-07-25	70	73	3	98	20	10	30	15	15	-12	78.0
H-07-25	73	76	3	97	20	15	30	15	15	-12	83.0
H-07-25	76	79	3	95	20	10	30	15	15	-12	78.0
H-08-101	10	13	3	56	13	8	20	7	12	-12	48.0
H-08-101	13	16	3	67	13	10	20	7	12	-12	50.0
H-08-101	16	19	3	90	17	10	25	10	12	-12	62.0
H-08-101	19	22	3	91	20	10	25	15	12	-12	70.0
H-08-101	22	25	3	98	20	15	30	15	12	-12	80.0
H-08-101	25	28	3	97	20	15	30	15	12	-12	80.0
H-08-101	28	31	3	92	20	10	25	10	12	-12	65.0
H-08-101	31	34	3	95	20	10	25	10	12	-12	65.0
H-08-101	34	37	3	96	20	15	25	10	12	-12	70.0
H-08-101	37	40	3	94	20	10	25	10	12	-12	65.0
H-08-101	40	43	3	97	20	20	30	15	12	-12	85.0
H-08-101	43	46	3	91	20	10	25	10	12	-12	65.0
H-08-101	46	49	3	96	20	10	30	15	12	-12	75.0
H-08-101	49	52	3	96	20	15	25	10	12	-12	70.0
H-08-101	52	55	3	97	20	15	30	15	12	-12	80.0
H-08-75	7	10	3	95	20	15	25	10	12	-12	70.0
H-08-75	10	13	3	92	20	10	25	10	12	-12	65.0
H-08-75	13	16	3	95	20	15	25	10	12	-12	70.0
H-08-75	16	19	3	95	20	10	25	10	12	-12	65.0
H-08-75	19	22	3	100	20	20	25	10	12	-12	75.0
H-08-75	22	25	3	93	20	10	25	10	12	-12	65.0
H-08-75	25	28	3	97	20	15	25	10	12	-12	70.0
H-08-75	28	31	3	95	20	10	25	10	12	-12	65.0
H-08-75	31	34	3	59	13	8	25	15	12	-12	61.0
H-08-75	34	37	3	96	20	10	25	15	12	-12	70.0
H-08-75	37	40	3	98	20	15	25	15	12	-12	75.0
H-08-75	40	43	3	96	20	10	25	15	12	-12	70.0
H-08-75	43	46	3	88	17	10	25	15	12	-12	67.0
H-08-75	46	49	3	98	20	15	25	15	12	-12	75.0
H-08-75	49	52	3	97	20	15	30	15	12	-12	80.0
H-08-75	52	55	3	95	20	15	30	15	12	-12	80.0
H-08-75	55	58	3	96	20	15	30	15	12	-12	80.0
H-08-75	58	61	3	98	20	15	30	15	12	-12	80.0
H-08-75	61	64	3	95	20	15	30	15	12	-12	80.0
H-08-75	64	67	3	100	20	20	30	15	12	-12	85.0

Average RMR = 71.1

Table 2: Q Index Analysis
Liberty Mines - Hart Mine Crown Pillar
03101042.00

Borehole ID	Depth (m)			RQD Value	Joint Number (Jn)	Joint Rougness (Jr)	Joint Alteration (Ja)	Joint Water Reduction (Jw)	Stress Reduction Factor (SRF)	Calculated Q
	From	To	Interval							
H-08-101	10	13	3	56	15	1.5	2	1	2.5	1.1
H-08-101	13	16	3	67	12	3	2	1	2.5	3.4
H-08-101	16	19	3	90	6	1.5	4	1	2.5	2.2
H-08-101	19	22	3	91	3	1.5	2	1	2.5	9.1
H-08-101	22	25	3	98	3	3	2	1	2.5	19.7
H-08-101	25	28	3	97	4	1.5	2	1	2.5	7.3
H-08-101	28	31	3	92	6	3	2	1	2.5	9.2
H-08-101	31	34	3	95	3	3	2	1	2.5	18.9
H-08-101	34	37	3	96	3	3	2	1	2.5	19.3
H-08-101	37	40	3	94	2	3	2	1	2.5	28.3
H-08-101	40	43	3	97	2	3	2	1	2.5	29.2
H-08-101	43	46	3	91	6	3	2	1	2.5	9.1
H-08-101	46	49	3	96	3	3	2	1	2.5	19.3
H-08-101	49	52	3	96	2	3	2	1	2.5	28.8
H-08-101	52	55	3	97	2	3	2	1	2.5	29.1
H-07-07	4.3	7	2.7	95	6	3	2	1	2.5	9.5
H-07-07	7	10	3	97	3	4	2	1	2.5	25.8
H-07-07	10	13	3	98	2	3	2	1	2.5	29.3
H-07-07	13	16	3	96	3	3	1	1	2.5	38.3
H-07-07	16	19	3	89	6	1.5	2	1	2.5	4.5
H-07-07	19	22	3	97	4	3	2	1	2.5	14.6
H-07-07	22	25	3	100	1	4	2	1	2.5	80.0
H-07-07	25	28	3	94	3	4	2	1	2.5	25.2
H-07-07	28	31	3	94	2	4	2	1	2.5	37.6
H-07-07	31	34	3	95	3	3	2	1	2.5	18.9
H-07-07	34	37	3	92	3	3	4	1	2.5	9.2
H-07-07	37	40	3	97	4	3	2	1	2.5	14.6
H-07-07	40	43	3	93	6	1.5	2	1	2.5	4.7
H-07-07	43	46	3	93	3	1.5	2	1	2.5	9.3
H-07-07	46	49	3	96	3	3	2	1	2.5	19.1
H-07-07	49	52	3	97	3	3	1	1	2.5	38.7
H-07-07	52	55	3	97	2	3	2	1	2.5	29.2
H-07-07	55	58	3	94	3	3	2	1	2.5	18.9
H-07-07	58	61	3	98	2	4	2	1	2.5	39.2
H-07-07	61	64	3	98	3	4	2	1	2.5	26.1
H-07-07	64	67	3	97	2	4	2	1	2.5	38.8
H-07-07	67	70	3	99	2	4	2	1	2.5	39.6
H-07-18	3	6	3	90	3	4	4	1	2.5	12.0
H-07-18	6	9	3	93	3	4	2	1	2.5	24.8
H-07-18	9	12	3	69	3	4	1	1	2.5	37.0
H-07-18	12	15	3	84	6	1.5	1	1	2.5	8.4
H-07-18	15	18	3	82	9	3	2	1	2.5	5.5
H-07-18	18	21	3	87	9	3	2	1	2.5	5.8
H-07-18	21	24	3	85	6	3	4	1	2.5	4.3
H-07-18	24	27	3	73	6	3	4	1	2.5	3.7
H-07-18	27	30	3	86	6	4	4	1	2.5	5.8
H-07-18	30	33	3	87	6	3	2	1	2.5	8.7
H-07-18	33	36	3	93	6	3	4	1	2.5	4.6
H-07-18	36	39	3	71	6	3	4	1	2.5	3.6
H-07-18	39	42	3	98	2	4	2	1	2.5	39.3
H-07-18	42	45	3	100	2	4	2	1	2.5	40.0
H-07-18	45	48	3	96	2	4	2	1	2.5	38.3
H-07-18	48	51	3	96	3	4	2	1	2.5	25.7
H-07-18	51	54	3	93	2	4	4	1	2.5	18.5
H-07-18	54	57	3	95	3	3	4	1	2.5	9.5
H-07-18	57	60	3	95	3	1	4	1	2.5	3.2
H-07-18	60	63	3	87	6	4	4	1	2.5	5.8
H-07-18	63	66	3	100	2	4	4	1	2.5	20.0
H-07-18	66	69	3	95	2	4	2	1	2.5	38.1
H-07-18	69	72	3	92	3	4	4	1	2.5	12.3
H-07-25	16	19	3	45	9	1.5	4	1	2.5	0.8
H-07-25	19	22	3	18	9	1.5	4	1	2.5	0.3
H-07-25	22	25	3	14	6	1.5	4	1	2.5	0.4
H-07-25	25	28	3	71	9	1.5	2	1	2.5	2.4
H-07-25	28	31	3	91	6	1.5	2	1	2.5	4.6
H-07-25	31	34	3	84	4	3	2	1	2.5	12.7
H-07-25	34	37	3	94	4	4	2	1	2.5	18.9
H-07-25	37	40	3	95	2	3	2	1	2.5	28.6
H-07-25	40	43	3	98	2	4	2	1	2.5	39.2
H-07-25	43	46	3	97	2	4	4	1	2.5	19.4
H-07-25	46	49	3	55	6	1	4	1	2.5	0.9
H-07-25	49	52	3	83	6	1.5	4	1	2.5	2.1
H-07-25	52	55	3	97	2	1.5	2	1	2.5	14.5
H-07-25	55	58	3	98	2	4	4	1	2.5	19.7
H-07-25	58	61	3	88	4	3	4	1	2.5	6.6
H-07-25	61	64	3	82	3	3	4	1	2.5	8.2
H-07-25	64	67	3	78	3	3	2	1	2.5	15.5
H-07-25	67	70	3	93	4	3	4	1	2.5	7.0
H-07-25	70	73	3	98	2	3	2	1	2.5	29.3
H-07-25	73	76	3	97	2	3	2	1	2.5	29.0
H-07-25	76	79	3	95	3	1.5	2	1	2.5	9.5
H-08-75	7	10	3	95	3	3	2	1	2.5	18.9
H-08-75	10	13	3	92	6	3	2	1	2.5	9.2
H-08-75	13	16	3	95	2	3	2	1	2.5	28.4
H-08-75	16	19	3	95	6	3	2	1	2.5	9.5
H-08-75	19	22	3	100	2	5	2	1	2.5	50.0
H-08-75	22	25	3	93	6	3	4	1	2.5	4.7
H-08-75	25	28	3	97	2	3	4	1	2.5	14.6
H-08-75	28	31	3	95	6	3	4	1	2.5	4.7
H-08-75	31	34	3	59	15	1.5	4	1	2.5	0.6
H-08-75	34	37	3	96	6	1.5	4	1	2.5	2.4
H-08-75	37	40	3	98	4	3	4	1	2.5	7.4
H-08-75	40	43	3	96	6	3	4	1	2.5	4.8
H-08-75	43	46	3	88	6	3	2	1	2.5	8.8
H-08-75	46	49	3	98	2	3	2	1	2.5	29.4
H-08-75	49	52	3	97	4	3	2	1	2.5	14.6
H-08-75	52	55	3	95	4	3	2	1	2.5	14.2
H-08-75	55	58	3	96	2	3	2	1	2.5	28.8
H-08-75	58	61	3	98	2	3	2	1	2.5	29.3
H-08-75	61	64	3	95	3	3	2	1	2.5	19.1
H-08-75	64	67	3	100	2	5	2	1	2.5	50.0

Average Q = **17.8**

Table 3: Stability Analysis
Liberty Mines - Hart MIne Crown Pillar
03101042.00

Ore Zone Span (m)	Ore Zone Length (m)	Crown Pillar Thickness (m)	Elevation (m)	Ore Dip (Degrees)	Span Ratio	Scaled Crown Span (Cs)	Q	Critical Span (Sc)	Factor of Safety (Cs/Sc)	Comments
3	220	20	2280	75	0.01	1.4	17.8	11.7	8.4	Stable
4	220	20	2280	75	0.02	1.9	17.8	11.7	6.3	
5	220	20	2280	75	0.02	2.3	17.8	11.7	5.1	
10	220	20	2280	75	0.05	4.6	17.8	11.7	2.6	
15	220	20	2280	75	0.07	6.8	17.8	11.7	1.7	FS<2
20	220	20	2280	75	0.09	8.9	17.8	11.7	1.3	
25	220	20	2280	75	0.11	11.1	17.8	11.7	1.1	
30	220	20	2280	75	0.14	13.1	17.8	11.7	0.9	FS<1
3	220	30	2270	75	0.01	1.1	17.8	11.7	10.3	Stable
4	220	30	2270	75	0.02	1.5	17.8	11.7	7.7	
5	220	30	2270	75	0.02	1.9	17.8	11.7	6.2	
10	220	30	2270	75	0.05	3.7	17.8	11.7	3.1	
15	220	30	2270	75	0.07	5.5	17.8	11.7	2.1	
20	220	30	2270	75	0.09	7.3	17.8	11.7	1.6	FS<2
25	220	30	2270	75	0.11	9.0	17.8	11.7	1.3	
30	220	30	2270	75	0.14	10.7	17.8	11.7	1.1	
3	220	40	2260	75	0.01	1.0	17.8	11.7	11.9	Stable
4	220	40	2260	75	0.02	1.3	17.8	11.7	8.9	
5	220	40	2260	75	0.02	1.6	17.8	11.7	7.2	
10	220	40	2260	75	0.05	3.2	17.8	11.7	3.6	
15	220	40	2260	75	0.07	4.8	17.8	11.7	2.4	
20	220	40	2260	75	0.09	6.3	17.8	11.7	1.9	FS<2
25	220	40	2260	75	0.11	7.8	17.8	11.7	1.5	
30	220	40	2260	75	0.14	9.3	17.8	11.7	1.3	

Figures

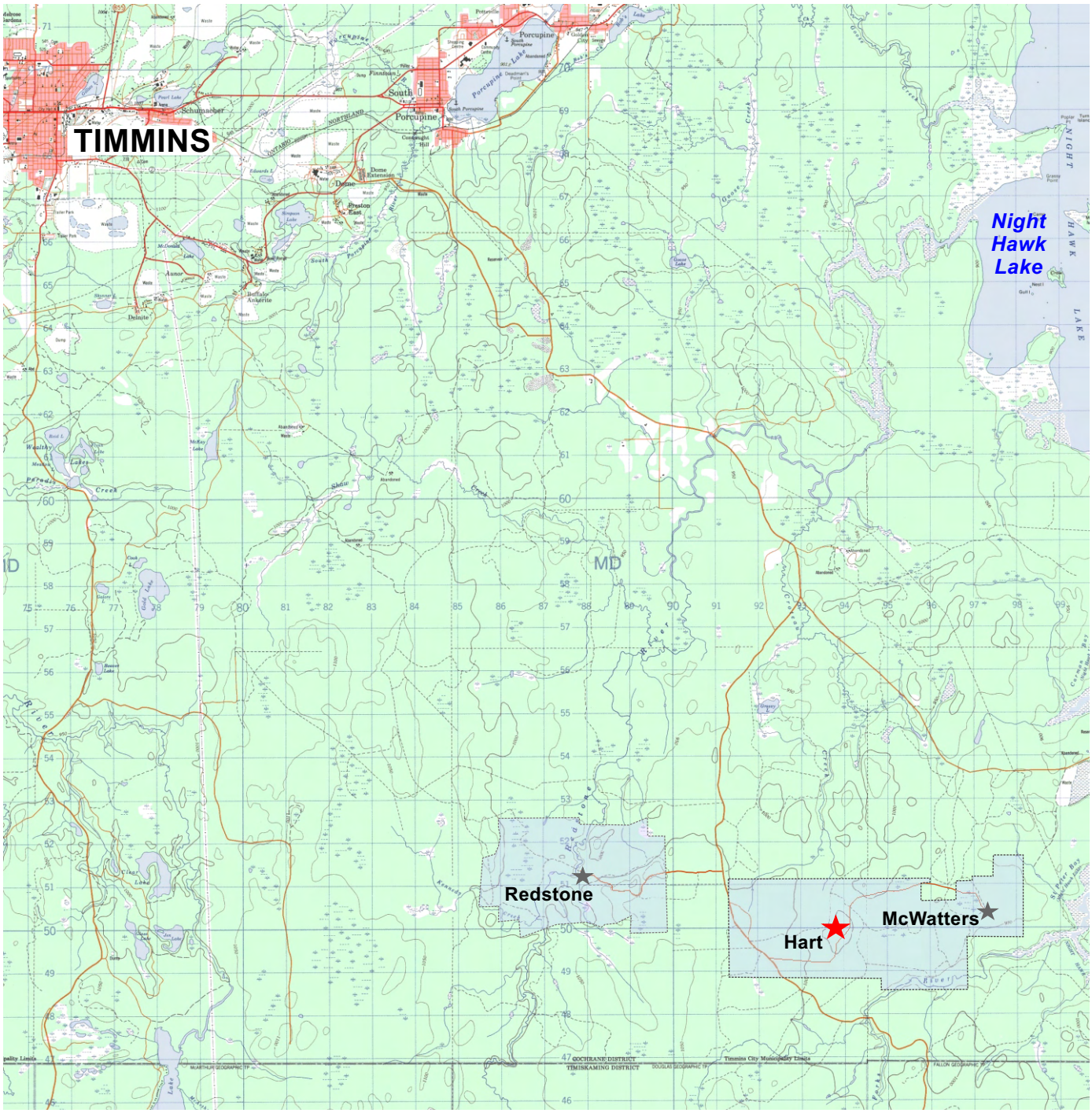
Figure 1 – Location Map

Figure 2 – Oblique Views of Ore-Body

Figure 3 – Plan of 40 m Mine Level

Figure 4 – Scaled Crown Span vs Q Index

Figure 5 – FS vs Ore Zone Span, 40 m Crown Pillar



LEGEND

★ APPROXIMATE LOCATION OF HART DEPOSIT

N
W E
S

0 1 2 km

MAP SOURCE:
NTS 1:50000 SHEET 42A/06, TIMMINS.

LOCATION MAP

HART DEPOSIT

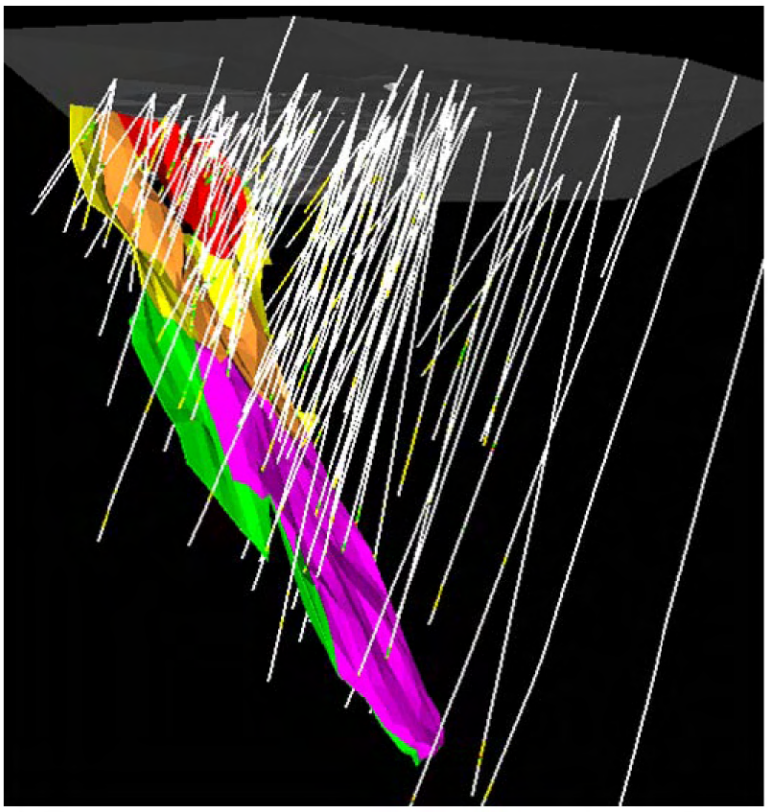
For Liberty Mines

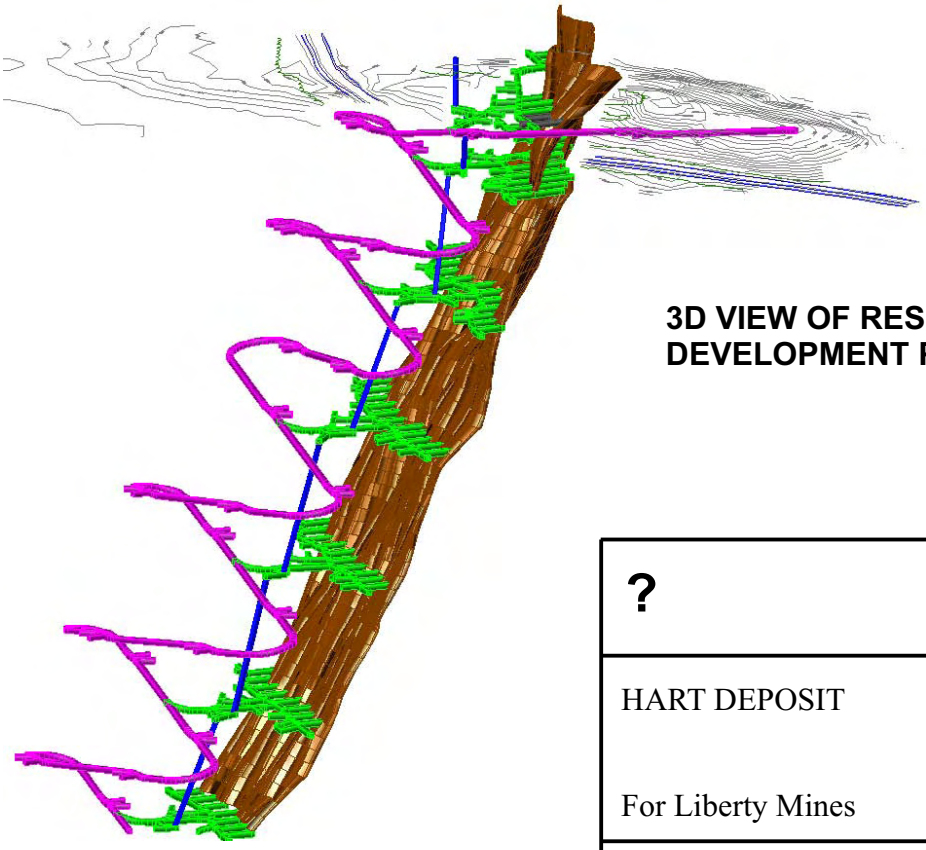
DATE: JUNE 2010	SCALE: AS SHOWN
PROJECT: 3-101042.00	REF. NO.: 3-10104200F1-LM

GENIVAR

FIGURE 1

OBLIQUE VIEW OF THE MODELLED MINERALIZATION SOLIDS AT HART IN RELATION TO INFORMING DRILLHOLE DATA (LOOKING NORTHEAST)





3D VIEW OF RESOURCE AND DEVELOPMENT PLAN

SOURCE:
PRELIMINARY ECONOMICAL ASSESSMENT FOR THE HART LAKE PROJECT, BY SRK CONSULTING, FEBRUARY 2010, FIGURES 25 AND 35.

?

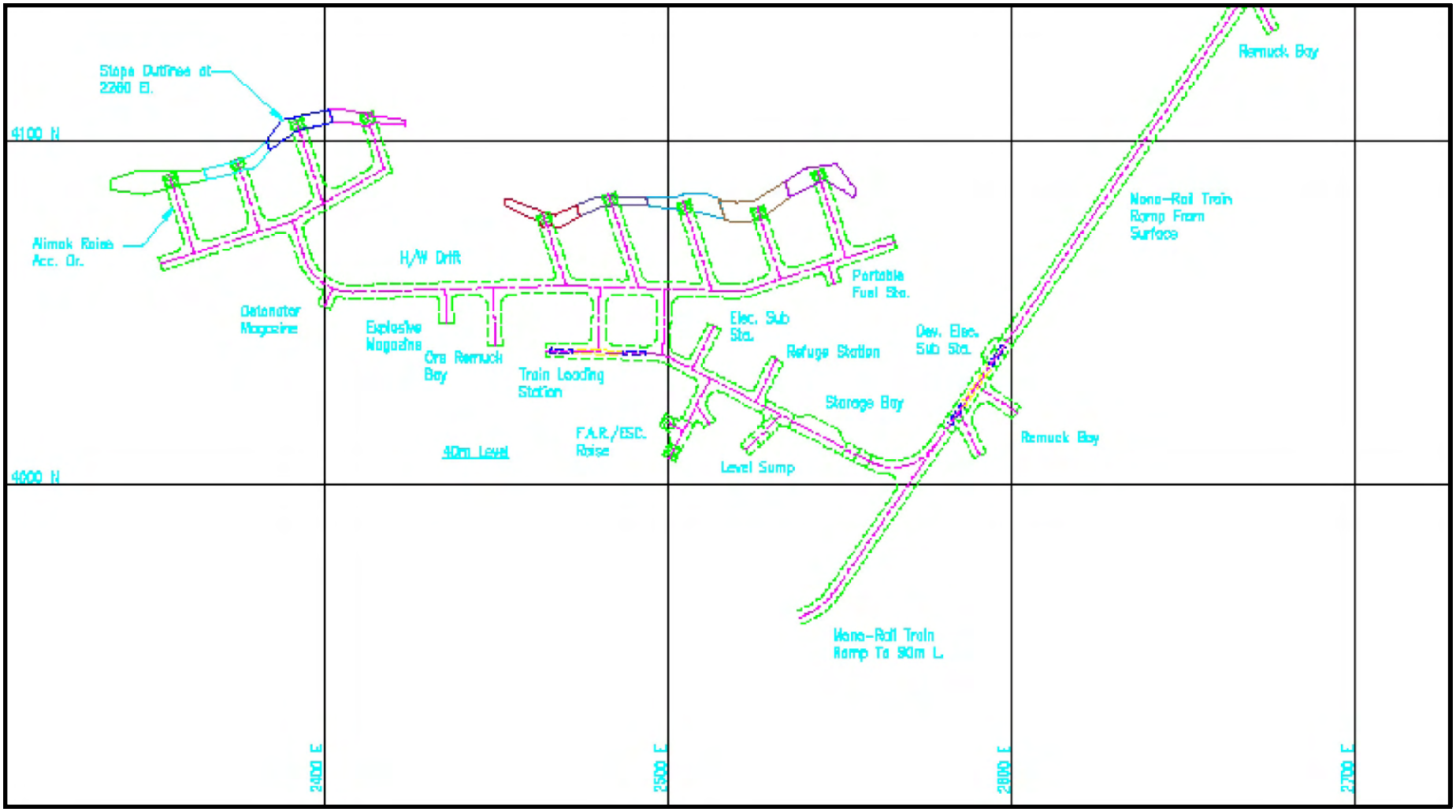
HART DEPOSIT

For Liberty Mines

DATE: JUNE 2010	SCALE: AS SHOWN
PROJECT: 3-101042.00	REF. NO.: 3-10104200F2-DT

GENIVAR

FIGURE 2



LEGEND

SOURCE:
PRELIMINARY ECONOMICAL ASSESSMENT FOR THE HART LAKE PROJECT, BY SRK CONSULTING, FEBRUARY 2010, FIGURE 38.

N
W E
S

SCALE: AS SHOWN
REF. NO.: 03-10104200F3-SP
DATE: JUNE 2010
PROJECT: 3-101024.00

GENIVAR

40 m LEVEL

HART DEPOSIT

For Liberty Mines

FIGURE

3

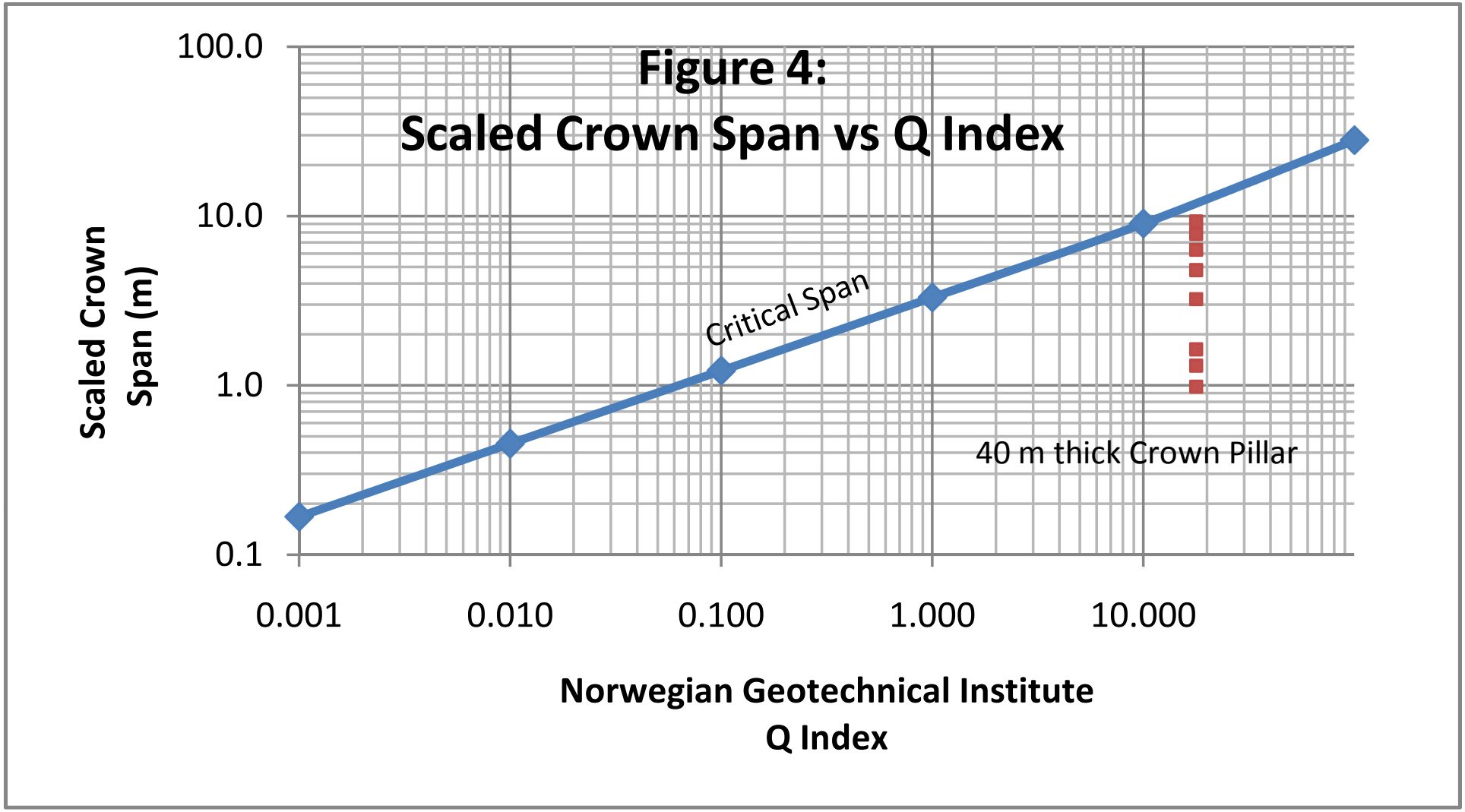


Figure 4:
Scaled Crown Span vs Q Index
100.0
10.0
1.0
0.1
Scaled Crown Span (m)
Critical Span
40 m thick Crown Pillar
0.001
0.010
0.100
1.000
10.000
Norwegian Geotechnical Institute Q Index

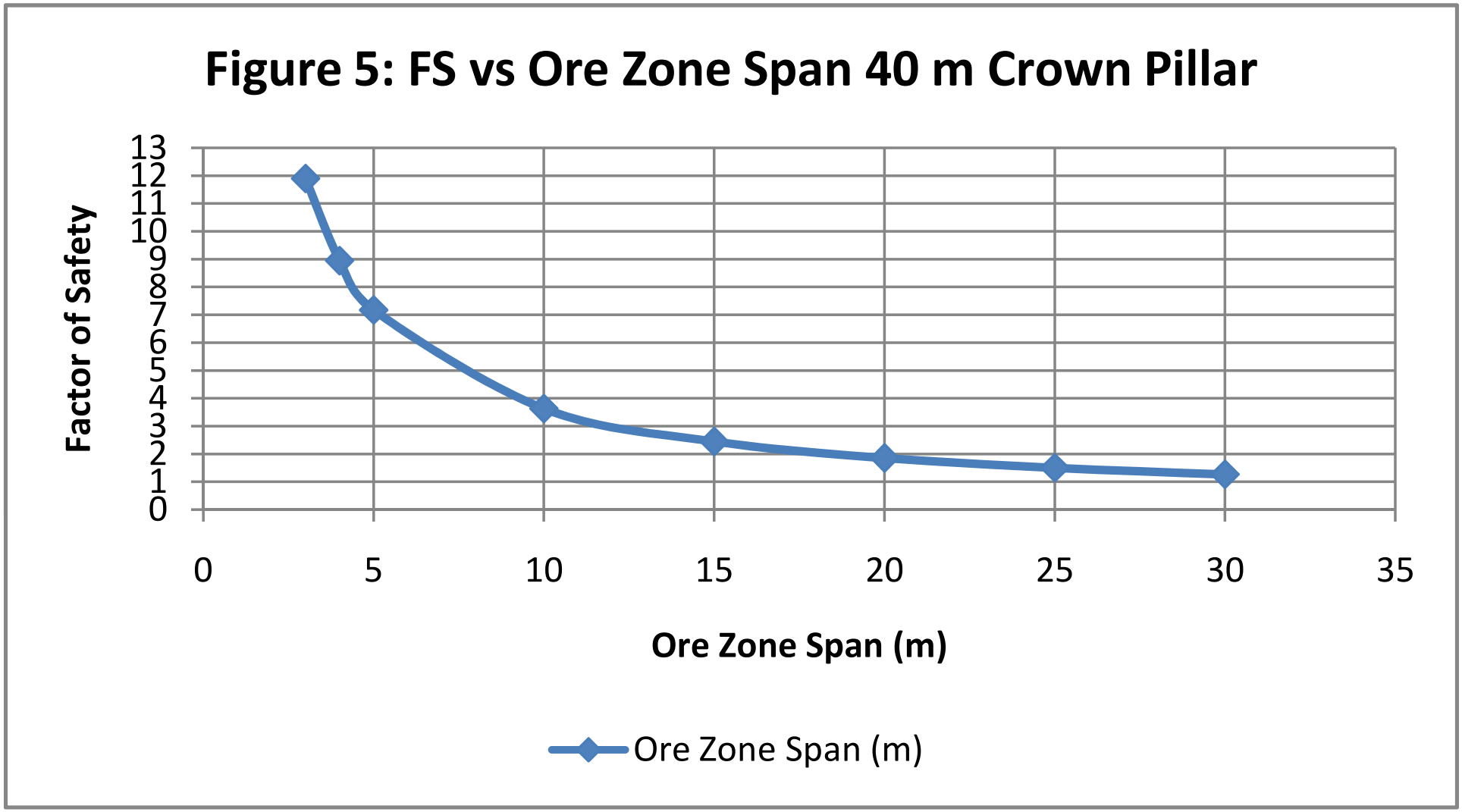


Figure 5: FS vs Ore Zone Span 40 m Crown Pillar
Factor of Safety
13
12
11
10
9
8
7
6
5
4
3
2
1
0
0
5
10
15
20
25
30
35
Ore Zone Span (m)
Ore Zone Span (m)

Appendix A

Rock Mass Rating Method

APPENDIX E

VENTILATION SYSTEM

Project No. 169511557 **14 August 2012**

PREPARED FOR:
Liberty Mines Inc.

Attention: Keyvan Salehi, P. Eng., MBA
VP Corporate Development

CONCERNING:
Hart Project
Ventilation System

~ Revision 1 ~

PREPARED BY:
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B VNETPC Schematic

1.0 EXECUTIVE SUMMARY

1.1 Introduction

The Hart Mine deposit is located in the Timmins area of Northern Ontario at an elevation of approximately 295 metres above sea level. The ore zone extends from surface to an elevation of approximately 580 metres below surface and will be accessed via a main 5.0 metre x 5.2 metre decline driven at -15% grade. The final depth is estimated to be at the 580 metre Level. The planned peak production rate is approximately 750 tonnes per day using a longhole longitudinal mining method. All waste and ore will be hauled to surface using 28 tonne trucks for development and 45 tonne haulage trucks during the production phase.

The overall final ventilation system design is a positive or “push” system based on delivering up to 157 m^3/s (333,000 cfm) through a dedicated 4.3 metre diameter intake raise which is outfitted with a man-way for egress. Return air is through the main decline which is connected at the entrance to the ore zone on each level. All primary fans are located on surface and are controlled by variable frequency drives to mesh the production rate with the air volume requirements thereby optimizing energy (power and propane) usage.

The region has a continental climate that is characterized by cold dry winters and relatively warm dry summers. Daily temperatures range from +24ºC in summer to -24ºC in the winter. Temperatures as low as -45ºC and as high as +38ºC have also been recorded which will necessitate the installation of a mine air heating system.

This report details the overall ventilation system circuit, main fans and heating system and initial main ramp development and stoping auxiliary ventilation system requirements.

The main fans operating duty points and yearly operating costs are listed in Table 1.1. To obtain actual operating performance data, Alphair ventilation fans were used in all cases.

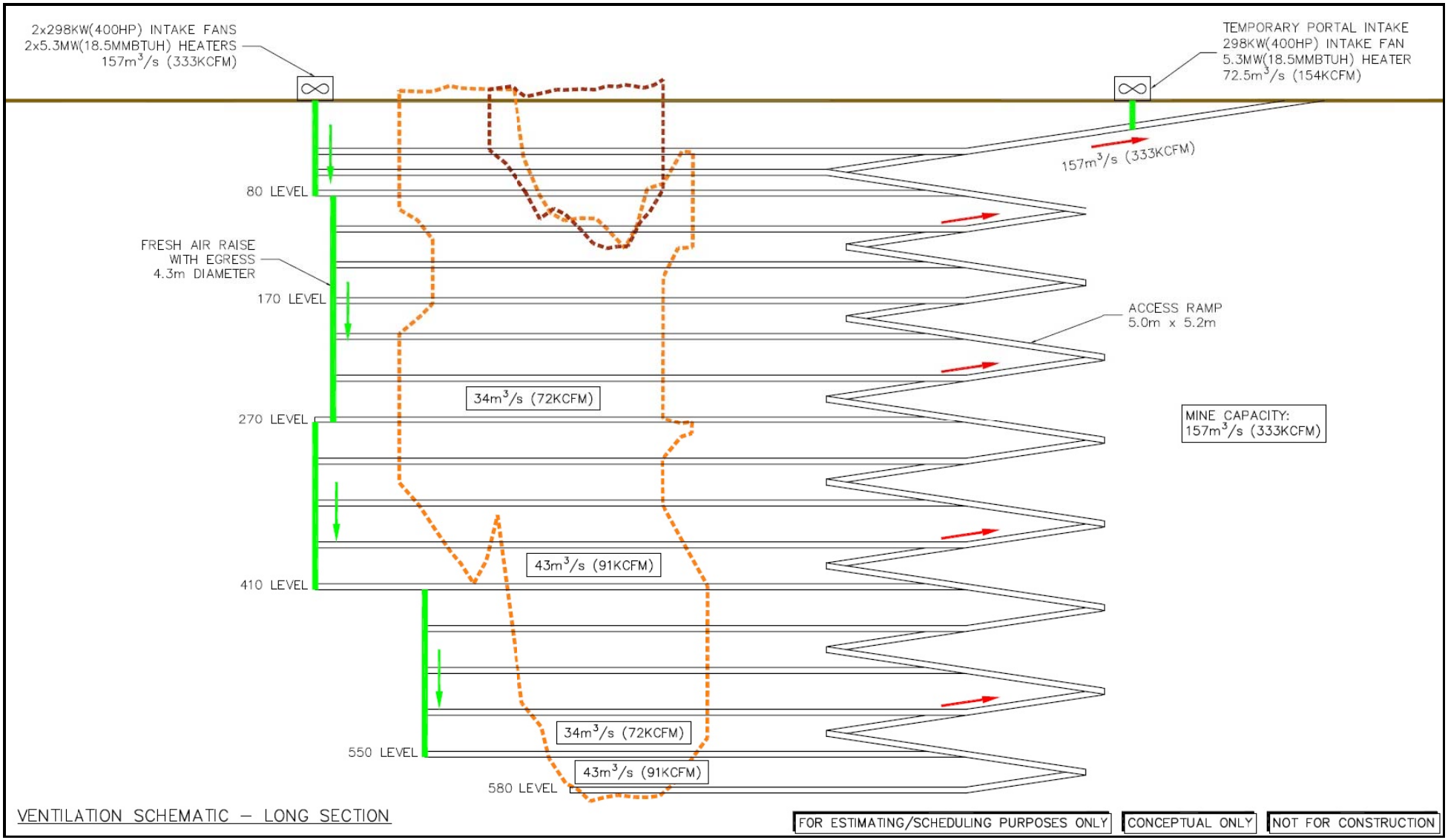
The main intake system is connected to direct fired propane mine air heating systems.

Table 1.1: Main Fan Duty Points

System	Number of Fans	Operating Duty Point	Connected Fan kW	Mine Air Heater
Main FAR Intake	2	Alphair 7650-AMF-5000, 1,180 rpm	2 x 298 kW (400 HP)	2 x 5.3 MW
Duty		157 m^3/s at 2370 Pascal SP		
Operating Cost per Year at $0.095 kWH		$663,000		

The overall sectional view of the ventilation system is illustrated in Figure 1.1.

Figure 1.1: Overall Sectional View of the Ventilation System



2.0 MINE AIR VOLUME ESTIMATE

The air volume requirements are outlined in the Ontario Occupational Health and Safety Act and Regulations for Mines and Mining Plants Section183.1 (3) which states that "*The flow of air must be at least 0.06 cubic meters per second for each kilowatt of power of the diesel-powered equipment operating in the workplace*". A percent utilization factor is also applied which used a conservative 70% for all ore/waste haulage equipment and 50% or 25% for all other pieces of equipment. The expected diesel equipment fleet at Hart Mine at full production for Year 2017 is listed in Table 2.1.

Table 2.1: Diesel Equipment Fleet and Air Volume Requirements (Year 2017)

VENTILATION REQUIREMENTS - Liberty Mines - Hart Mine

Equipment Type (Typical Model)	Max Fleet	Power		Expected Peak Utilization	100 cfm/HP 100% Util	m^3/Sec 100% Util	100 cfm/HP @ Equip Util	m^3/Sec @ Equip Util
		BHP	KW					
Haulage Truck 28 t	1	408	304	70.0%	40,767	19	**28,537**	**13**
Haulage Truck 45 t	2	520	388	70.0%	104,063	49	**72,844**	**34**
Ejector Box Truck	1	408	304	50.0%	40,767	19	**20,384**	**10**
LHD 6 m^3	2	353	263	70.0%	70,538	33	**49,376**	**23**
LHD 4.5 m^3	2	307	229	70.0%	61,419	29	**42,993**	**20**
Jumbo	2	154	115	25.0%	30,844	15	**7,711**	**4**
Scissor Lift Truck	4	173	129	25.0%	69,197	33	**17,299**	**8**
Utility Pick Up	6	172	128	50.0%	102,990	49	**51,495**	**24**
Forklift	1	154	115	50.0%	15,422	7	**7,711**	**4**
LHD 1.9 m^3	1	117	87	50.0%	11,667	6	**5,833**	**3**
Grader	1	154	115	25.0%	15,422	7	**3,855**	**2**
Explosive Truck	1	173	129	25.0%	17,299	8	**4,325**	**2**
Fuel / Lube Truck	1	173	129	25.0%	17,299	8	**4,325**	**2**
	25			CFM	**597,693**	**282**	**316,689**	**149**
Subtotal							**316,689**	**149**
Contingency on Volume for Leakage				5%			**15,834**	**7**
Underground Airflow Requirement ACFM for 750 TPD					0.075		**332,523**	**157**

The overall air volume requirement for the typical highest production Year 2017 and onward is estimated at 149 m³/s (317,000 cfm). A design value of 157 m³/s (333,000 cfm) is used which provides for potential leakages in the main system.

3.0 VENTILATION DESIGN PARAMETERS

The following primary ventilation design parameters are used in the design of the ventilation system and are provided in Table 3.1.

Table 3.1: Ventilation Parameters and Design Values

Parameters	Value	Unit
Average ore production rate	750	tpd
Ventilation system	Push	
Ventilation capacity (maximum)	157 (333,000)	m^3/s (cfm)
Intake air velocity (Intake airway c/w Man-way)	11 (2,200)	m/s (fpm)
Main decline: 5.0 m x 5.2 m	< 6 (<1200)	m/s (fpm)
Bare boreholes (K-value)	30	$lb \cdot min^2/ft^4$
Haulage ramp resistance (K-value; blast tunnel – dykes)	70	$lb \cdot min^2/ft^4$
Raisebore intake raise with hooped ladder (4.3m diameter)	120	$lb \cdot min^2/ft^4$
Silica, crystalline (TWA)	0.025	mg/m^3
DPM - TC	0.4	mg/m^3
CO (TWA)	25	ppm
CO_2 (TWA)	5000	ppm
NO (TWA)	25	ppm
NO_2 (TWA)	0.2	ppm
SO_2 (TWA)	2	ppm
Heat stress limit (wet bulb globe temperature - moderate, acclimatized, 75% work; 25% rest)	28.5	°C
Noise continuous (8 hours)	85	dBA
Noise intermittent (15 minutes)	100	dBA

The design values are based on the “Threshold Limit Values for Chemical Substances and Physical Agents” as published by the ACGIH and referenced in Section 283 of the OHSA and Regulations for Mines and Mining Plants.

4.0 MINE VENTILATION SYSTEM

The mine ventilation system design is a positive or “push” system based on delivering up to 157 m^3/s (333,000 cfm) through a dedicated 4.3 metre diameter intake raise which is outfitted with a man-way for egress. Return air is through the main decline which is connected at the entrance to the ore zone on each level. The main ventilation systems consist of the following installations;

- Main fresh air raise supply fans and propane direct fired heaters connected to a 4.3 metre diameter raise which is outfitted with a man-way.

Installation of variable frequency drives for all primary fans will allow flexibility in the air volume capacity to meet the production requirements.

4.1 Intake System Configuration

Figure 4.1 illustrates a typical parallel fan installation consisting of an inlet hood with safety screen, rectangular inlet silencer, mine air direct fire propane heater, fan and evase, outlet damper transition and 90 degree elbow to fit the raise diameter. The elbow comes with an air-lock door system to allow access to the egress system.

This intake system is also used as the primary egress route from underground and is equipped with a man-way. The air velocity in the 4.3 metre raise during the full production period can be expected to reach 11 m/s (2,160 fpm) which makes travel through the system at full air volume nearly impossible. This system must be reduced to a maximum air volume of about 50% of full speed to allow usage during an emergency or for the monthly man-way inspection requirements.

The type of man-way installed in the raise will dramatically impact the raise resistance and therefore the surface main fans operating duty point pressure which impacts the electrical energy consumption. Figure 4.2 illustrates a typical man-way installation in a 4 metre diameter raise.

The intake system will be constructed as a modular system in order to utilize one fan and heater setup on the temporary portal fresh air raise until the main intake system can be established. Once the main intake system is available, the fan and heater installed on the portal raise can be relocated over to main intake raise and installed in parallel with a second fan and heater.

Figure 4.1: Intake System

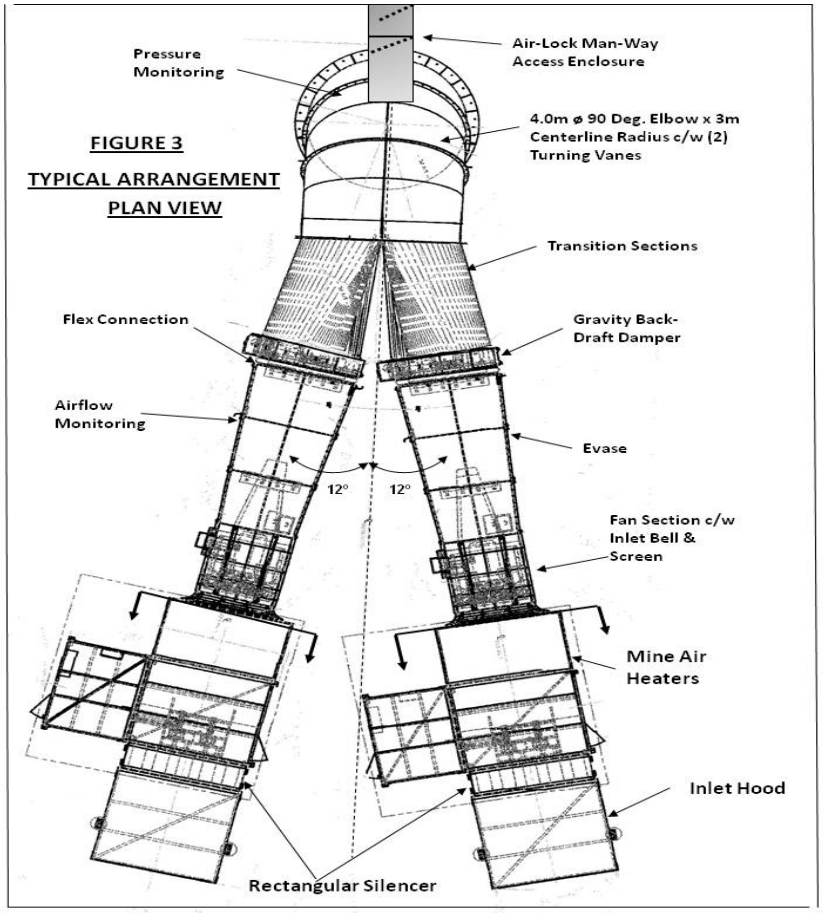
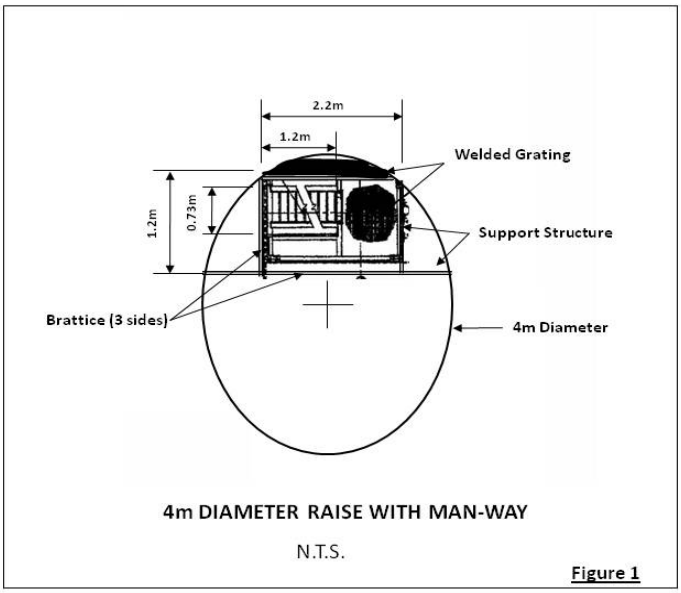


Figure 4.2: Typical Manway Installation in a 4 metre Diameter Raise



The arrangement in Figure 4.1 illustrates an Alphair 7650-AMF-5000 full blade, 400 HP vane axial fan installation complete with one 10.6 MW (37 MMBTUH) direct propane fired mine air heater. The intake fans operating duty point is listed in Table 4.1, which indicates the maximum setting during the final system operating point.

Table 4.1: Intake Raise Fan Duty Points

System	Number of Fans	Operating Duty Point	Connected Fan kW	Mine Air Heater
Main FAR Intake	2	Alphair 7650-AMF-5000, 1180 rpm	2 x 298 kW (400 HP)	2 x 5.3 MW
Duty		157 m^3/s at 2370 Pascal SP		

The installation consists of the following components:

- Inlet hood with safety screen.
- Rectangular inlet silencer to reduce the noise level to 85 dBA at 3 metres from inlet.
- Two 5.3 MW (18.5 MMBTUH) direct fired mine air heaters come with control room, and transition section comes with access doors.
- Vane axial mine fans, 400 HP comes with inlet bell with screen (comes with access hatch) and outlet evase.
- Flex connection.
- Gravity operated back-draft dampers.
- Transition section from fan outlet to 4.3 metre elbow.
- 90 degrees x 4.3 metre elbow comes with two turning vanes and air-lock door system.
- Air volume and pressure monitoring devices.

4.1.1 Intake Raise Mine Air Heating

The intake raise mine air heating system is required to heat the mine air during the winter months. The heating system capacity is designed for a 55°C (100°F) temperature rise to allow for heating of the mine air at extreme low temperatures (-45°C has been recorded in the Timmins area).

The direct propane fired system which includes two 5.3 MW (18.5 MMBTUH) heater with a temperature rise of 55°C, common control room, comes with valve trains, electrics, and two x 400 HP variable frequency drives for the main fans. A complete tank farm is also included (one 30,000 gallon tank, vaporizers, pump, cement slab and piers, piping and fencing).

4.1.2 Ventilation System Cost Estimate

Estimated capital and installation costs were obtained from a similar installation quote from a fan and heater manufacturer and local contractor in the Sudbury area.

Table 4.2: Estimated Capital and Installation Costs

Temporary Portal Intake	
Fan, damper, silencer, 90 degree elbow, and controls	$395,500
Mine air heater, control, 400hp VFD drive and electrics	$423,159
Propane tank farm and installation (Temporary)	$225,000
Engineering	$50,000
Fan and heater installation	$50,000
Subtotal	**$1,143,659**
Main Intake	
Fan, damper, silencer, 90 degree elbow, and controls	$395,500
Mine air heater, control, 400hp VFD drive and electrics	$423,159
Propane tank and installation	$225,000
Engineering	$50,000
Fan and Heater Installation	$50,000
Move1st fan from Portal FA raise to Main Intake raise and install	$100,000
Subtotal	**$1,243,659**
TOTAL	**$2,387,318**

4.2 Mine Air Heating Propane Consumption

The mine air heaters are designed for a maximum temperature rise of 55°C but will modulate to provide an output temperature in the intake raise collar of +2°C. The estimated yearly propane consumption for the intake raise heater (157 m³/s) based on Timmins' daily average temperature readings recorded at the airport for the years 1971 to 2000 are indicated in Table 4.3 and Table 4.4.

Table 4.3: Monthly Propane Consumption

Propane Consumption [35.6 degree F (+ 2 C)]

Basic Calculation is as Follows

Volume of Propane = [(Airflow in Acfm) * (Temp setpoint-Temp outside) * (1.08 Btu/(Acfm*F*hr)) * 24 hr/day * (Days in Month)] / [(21897 Btu / l of Propane)]

Area	Temperature setpoint (F)	Airflow (Acfm)	Propane Consumption October (Litre)	Propane Consumption November (Litre)	Propane Consumption December (Litre)	Propane Consumption January (Litre)	Propane Consumption February (Litre)	Propane Consumption March (Litre)	Propane Consumption April (Litre)	**Total Winter Consumption (Litre)**
	35.6	333000		127,714	334,328	428,907	337,450	213,354	17,029	**1,458,781**

Table 4.4: Monthly Propane Cost Estimates

Propane Monthly Costs [35.6 degree F (+ 2 C)]

Basic Calculation is as Follows

Cost of Propane = [(Airflow in Acfm) * (Temp setpoint-Temp outside) * (1.08 Btu/(Acfm*F*hr)) * 24 hr/day * (Days in Month) * ($0.53/ l of Propane)] / [(21897 Btu / l of Propane)]

Area	Temperature setpoint (F)	Airflow (Acfm)	Propane Cost October	Propane Cost November	Propane Cost December	Propane Cost January	Propane Cost February	Propane Cost March	Propane Cost April	Total Winter cost
Hart Mine	35.6	333000		$ 67,689	$ 67,689	$ 67,689	$ 67,689	$ 67,689	$ 67,689	**$ 406,132**

5.0 EXCAVATION AND INSTALLATION REQUIREMENTS

The excavation requirements for the intake and exhaust raise systems are listed in Table 5.1. The installation requirements are listed in Table 5.2.

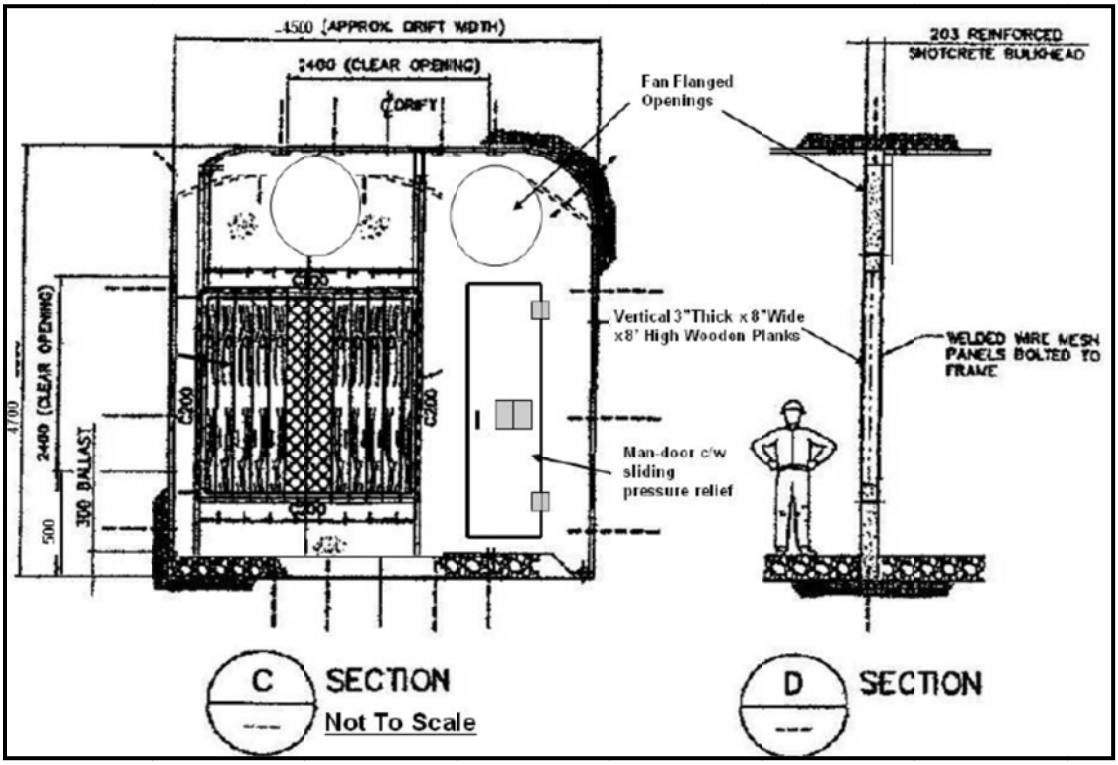
Table 5.1: Excavation Requirements

Location	Raise Dimension
Fresh Air Raise Intake System	
Surface to 580 Level	4.3 m diameter raisebore raise and secured (screen, bolted) c/w manway • 80 Level to Surface • 170 Level to 80 Level • 270 Level to 170 Level • 340 Level to 270 Level • 410 Level to 340 Level • 480 Level to 410 Level • 580 Level to 480 Level
Main Decline	5.0 m x 5.2 m

Table 5.2: Installation Requirements

Location	Installation
Fresh Air Raise Intake System	
Levels: 45, 60, 80, 110, 140, 170, 200, 235, 270, 305, 340, 375, 410, 445, 480, 515, 550, and 580	Ventilation wall c/w man door access and 2 fan diameter openings (refer to Figure 5.1)

Figure 5.1: Typical Vent, Regulator Type – Intake Raise



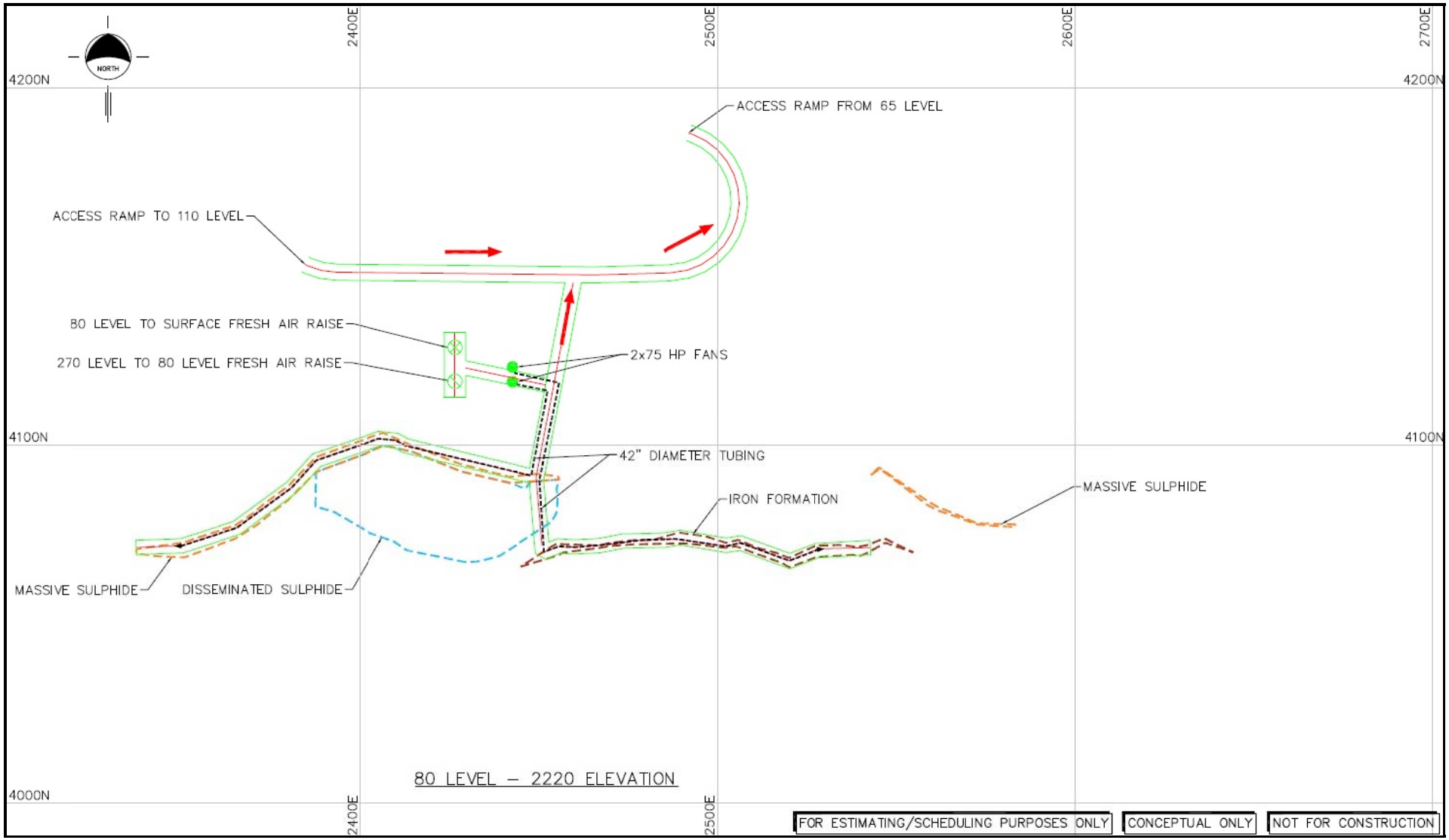
6.0 TYPICAL LEVEL LAYOUT

The ventilation circuit on most operating levels will consist of two auxiliary fans located in the egress fresh air raise vent wall with 1,067 mm (42 inch) diameter tubing installed to ventilate each of the east and west stoping areas. The system is designed to handle the 263 kW, 6 m3 LHD which requires 15.8 m3/s (33,500 cfm). In some instances, the auxiliary fans may also be located in the main decline at the level access. All truck loading is done in the main decline at the level access. A typical auxiliary ventilation fan and tubing as listed in Table 6.1. A typical level ventilation circuit is illustrated in Figure 6.1.

Table 6.1: Level Auxiliary Fans Installations

Stoping Ventilation System			
Description	**Air Volume (includes leakage)**	**Diesel Equipment**	**Distance**
Alphair 4200VAX2700, 1750 rpm, 18.8 m^3/s at 1.8 kPa TO at STP, 75 HP	18.8 m^3/s (40,000 cfm)	263 kW LHD	150 metres

Figure 6.1: Typical Level Ventilation System



7.0 MAIN DECLINE DEVELOPMENT

The 5.0 metre wide x 5.2 metre high main decline is to be driven at approximately -15% decline from the portal to eventually the 580 Level. The diesel equipment utilized for this development are:

- 4.5 m^3 LHD: 229 kW (307 HP) requiring 13.74 m^3/s (29,200 cfm)
- 28 T Haulage Truck: 304 KW (407 HP) requiring 18.24 m^3/s (38,650 cfm)
- 2 Boom Jumbo: 115 kW (154 HP) requiring 6.9 m^3/s (14,620 cfm)

With operations in a single face heading, the maximum air volume required is for the simultaneous operation of the LHD and haulage truck. To allow for leakage of approximately 25%, the total design air volume at the fans location should be 40.0 m^3/s (85,000 CFM). The first fresh air connection from the main ramp is the 80 Level which is approximately 550 metres from the portal. An additional 100 metres of duct allowance should be allowed to account for the extra time required to raisebore the egress fresh air raise to surface. The egress raise system is divided into a series of raises in order to minimize the auxiliary ventilation system required to drive the ramp. The longest section is between 480 Level to 580 Level which is 600 metres in length. The auxiliary ventilation system should be designed for a total length of 800 metres which includes equivalent duct lengths for going around corners in the ramp. The auxiliary ventilation system options (fans and tubing diameter) are presented in Table 7.1.

Table 7.1: Ramp Auxiliary Vent System Comparison

Option	Tubing Pressure Loss - 800 m (includes a 20% installation loss factor)	Fan Type	Total Number of Fans	Connected Fan HP	Remarks
Twin 1.067 m Diameter ducts (42” diameter)	(0.9”/100’ x 2,360’) = 21.25” WG	Alphair 4200VAX2700 42.5 Kcfm at 8” WG TP c/w 100 HP motor	6	600	3 fans connected in series per vent line
Twin 1.22 m diameter ducts (48” diameter)	(0.45”/100’) = 10.62” WG	Alphair 4200VAX2700 42.5 Kcfm at 7” WG TP c/w 100 HP motor	4	400 HP	2 fans connected in series per vent line
Single 1.37 metre diameter duct (54” diameter)	(1.02”/100’ x 2,360’) = 27.2” WG	Alphair 5400VAX31500 85 Kcfm at 12.5” WG TP c/w 250 HP motor	4	1,000 HP	2 fans connected in series per vent line (does not meet design requirements)

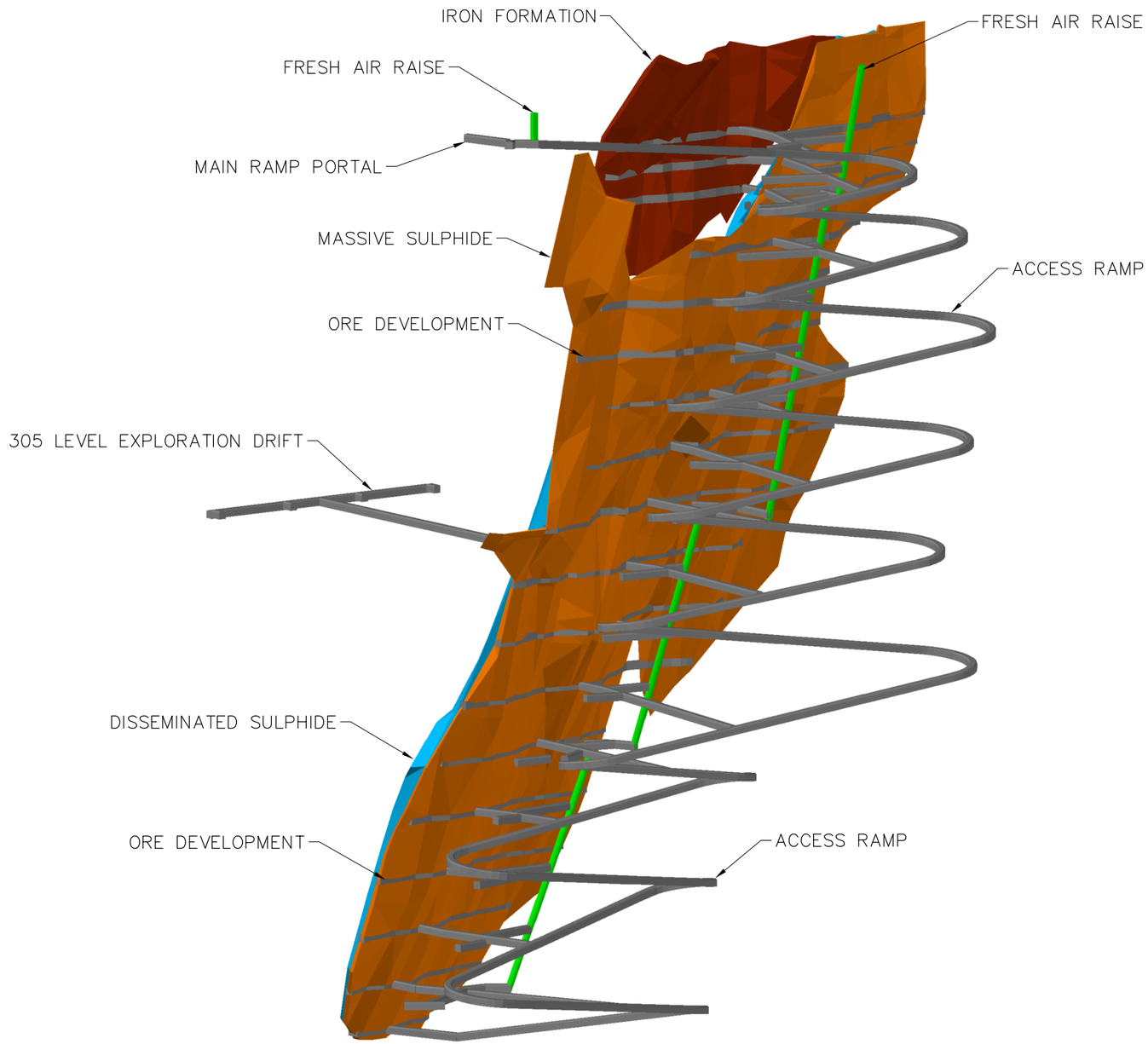
The most practical auxiliary tubing installation consists of two x 1.22 metre (48 inch) diameter ventilation lines connected to two x 100 HP fans in series per line. It will be necessary to increase the ramp height to 5.2 metres to accommodate the twin ducts. The installation should consist of twin 100 HP fans, inlet silencer and inlet bell with screen. For the initial drive from the portal, two individual 5 MMBTUH or a single 10 MMBTUH mine air heater is required for heating the development air. Subsequent ramp drives will use the main intake system.

APPENDIX F

BACKFILL PLANT

APPENDIX G

UNDERGROUND LEVEL PLANS AND SCHEMATICS



Drawing Number	Drawing Description
11557_510U005	Overall Schematic – Isometric View
11557_510U010	Overall Schematic – Long Section
11557_510U020	Mineable Tonnes Schematic – Long Section
11557_510U030	Ventilation Schematic – Long Section
11557_510U040	Dewatering Schematic – Long Section
11557_510U050	Development Schedule – Long Section
11557_520U010	45 Level – 2255 Elevation – Level Plan
11557_520U020	65 Level – 2237.5 Elevation – Level Plan
11557_520U030	80 Level – 2220 Elevation – Level Plan
11557_520U040	110 Level – 2190 Elevation – Level Plan
11557_520U050	140 Level – 2160 Elevation – Level Plan
11557_520U060	170 Level – 2130 Elevation – Level Plan
11557_520U070	200 Level – 2100 Elevation – Level Plan
11557_520U080	235 Level – 2065 Elevation – Level Plan
11557_520U090	270 Level – 2030 Elevation – Level Plan
11557_520U100	305 Level – 1995 Elevation – Level Plan
11557_520U110	305 Level Exploration Drift – 1995 Elevation – Level Plan
11557_520U120	340 Level – 1960 Elevation – Level Plan
11557_520U130	375 Level – 1925 Elevation – Level Plan
11557_520U140	410 Level – 1890 Elevation – Level Plan
11557_520U150	445 Level – 1855 Elevation – Level Plan
11557_520U160	480 Level – 1820 Elevation – Level Plan
11557_520U170	515 Level – 1785 Elevation – Level Plan
11557_520U180	550 Level – 1750 Elevation – Level Plan
11557_520U190	580 Level – 1720 Elevation – Level Plan
11557_500U010	Surface Infrastructure – Plan View
11557_500U100	5.0m x 5.2m Drift – Cross Section

OVERALL SCHEMATIC – ISOMETRIC VIEW

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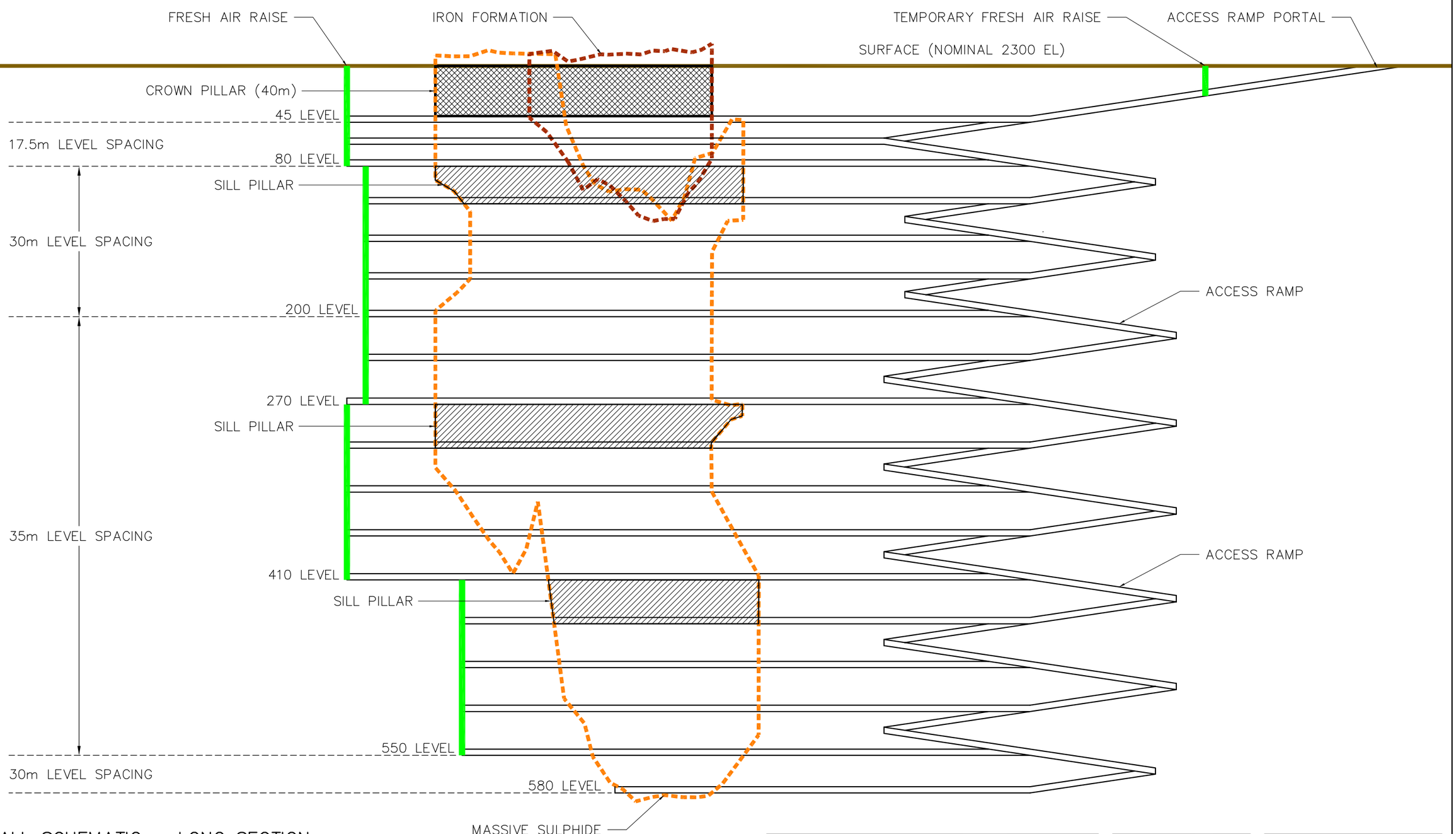
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
OVERALL SCHEMATIC
ISOMETRIC VIEW

SCALE: NTS | PROJ. NO. 169511557 | DWG. NO. 510U005 | REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U005.dwg



OVERALL SCHEMATIC – LONG SECTION

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DSGN / CHECK	DSGN ENG. / PR.MGR
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PROJ. NO. 169511557
DWG. NO. 510U010

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DATE: 2011.08.29

Stantec

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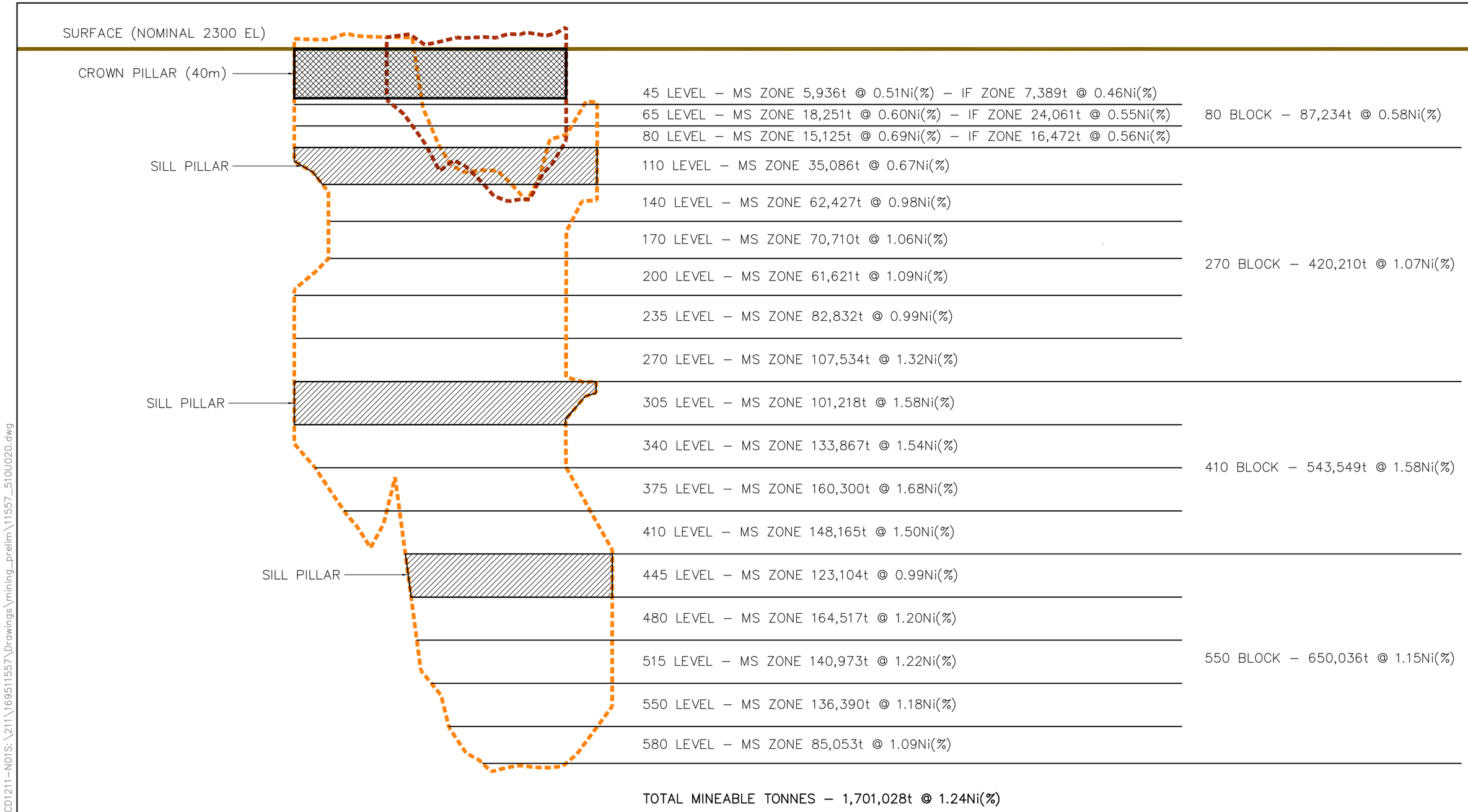
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
OVERALL SCHEMATIC
LONG SECTION

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	510U010	A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U010.dwg



MINEABLE TONNES SCHEMATIC – LONG SECTION

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REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	DWG CHECK	DSGN ENG PRJMGR
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DATE: 2011.08.29

Stantec

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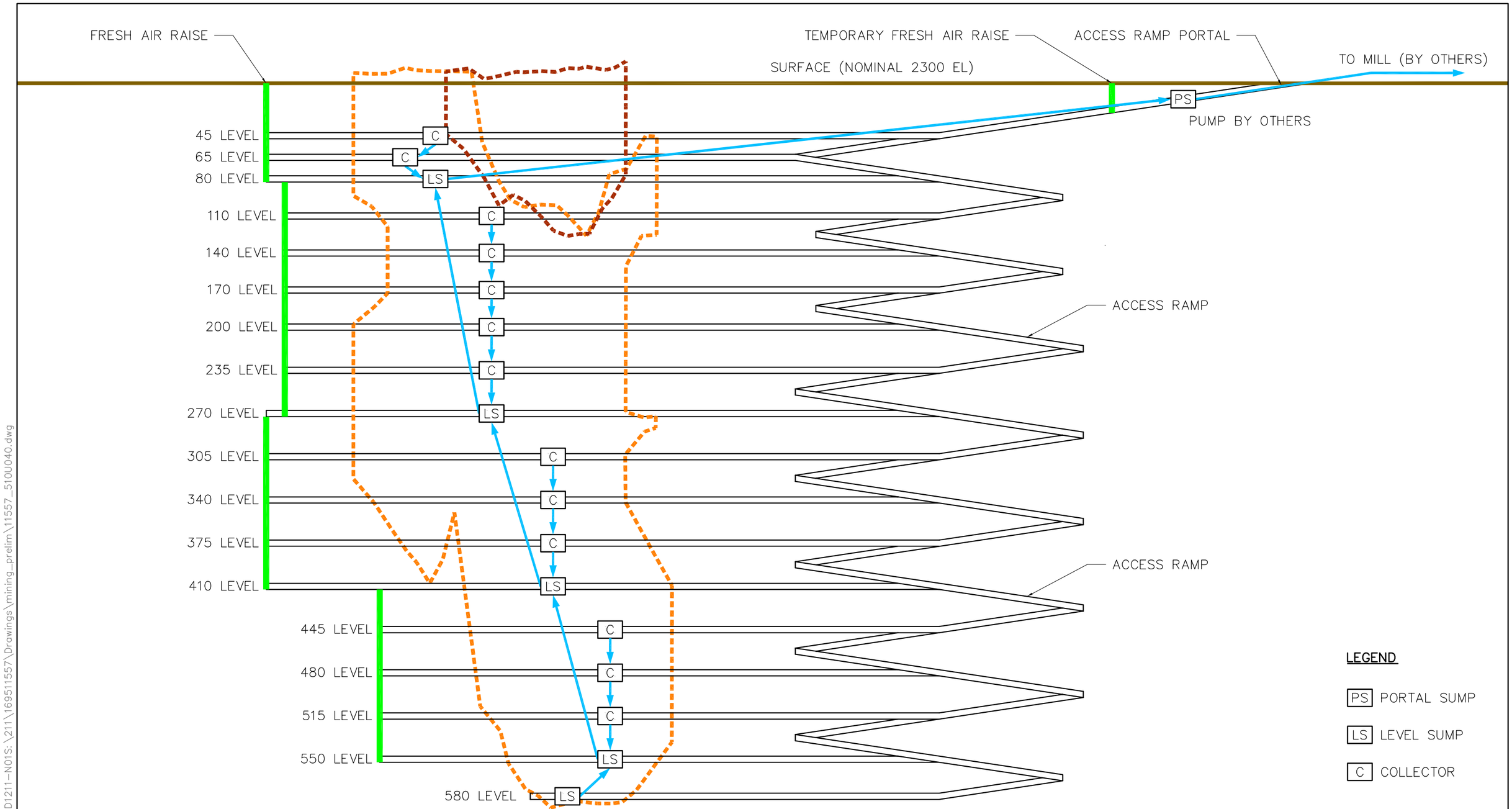
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
MINEABLE TONNES SCHEMATIC
LONG SECTION

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	510U020	A

PROJ. NO. 169511557
DWG. NO. 510U020
REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U020.dwg



DEWATERING SCHEMATIC – LONG SECTION

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REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DSGN / CHECK	DSGN ENG / PR.MGR
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DWG. NO. 510U040
REV. NO. A

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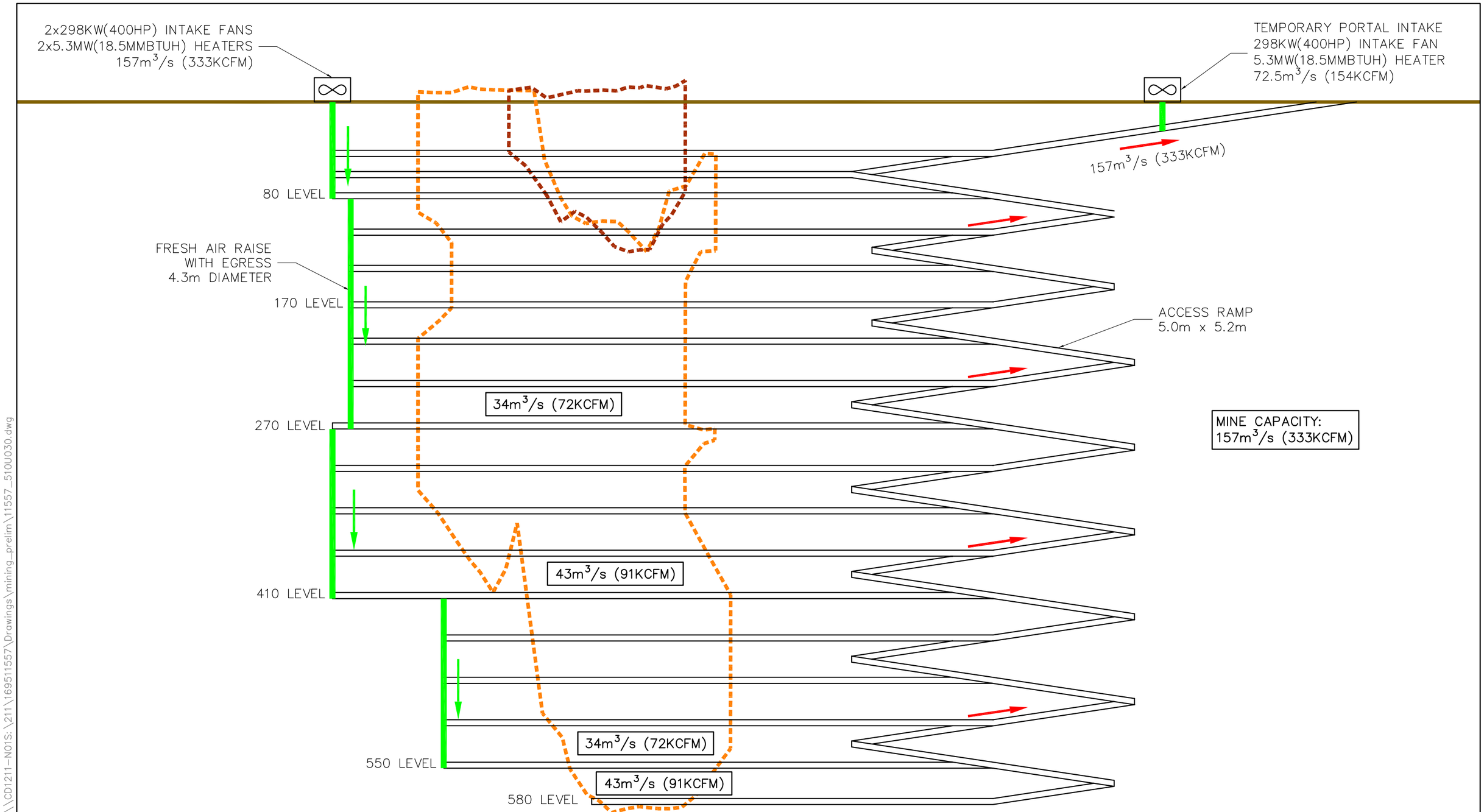
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
DEWATERING SCHEMATIC
LONG SECTION

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	510U040	A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U040.dwg



VENTILATION SCHEMATIC – LONG SECTION

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REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHIEF DSGN. / CHECK	DSGN ENG. / PR.MGR
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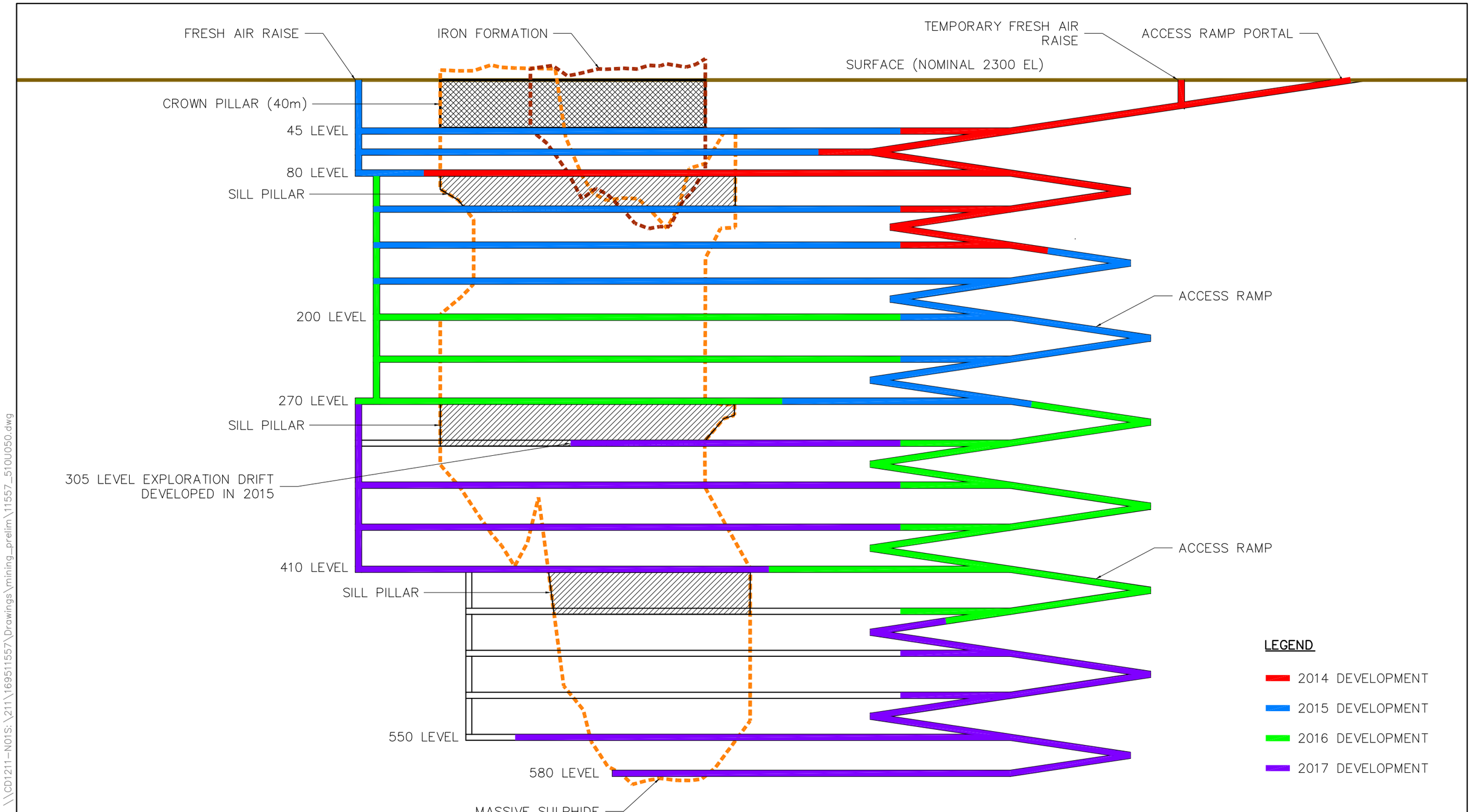
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
VENTILATION SCHEMATIC
LONG SECTION

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	510U030	A

Aug 14, 2012 – 11:05am \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U030.dwg



DEVELOPMENT SCHEDULE – LONG SECTION

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHKD	DSGN ENG. / PR.MGR
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PROJ. NO. 169511557
DWG. NO. 510U050

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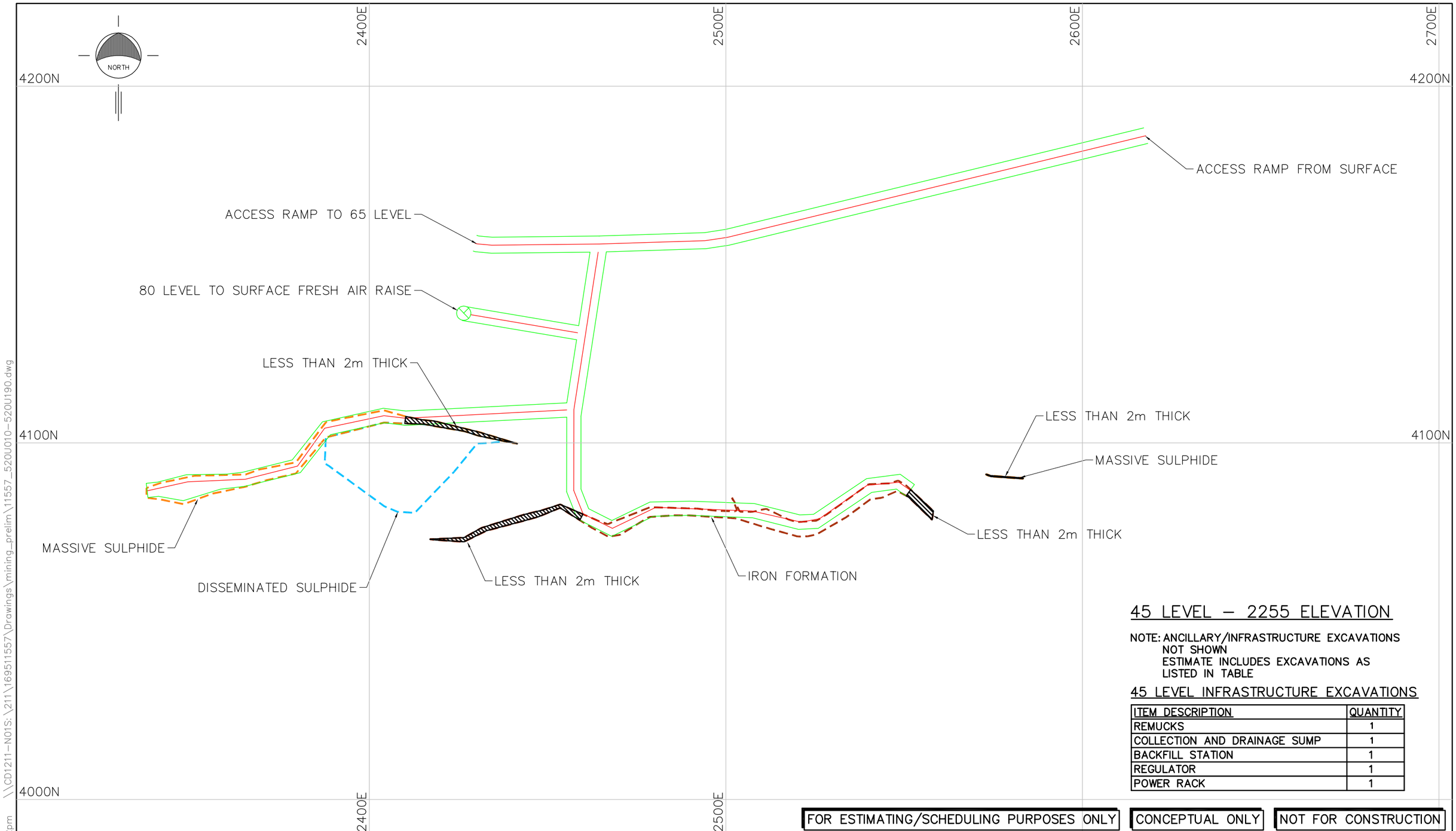
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
DEVELOPMENT SCHEDULE
LONG SECTION

SCALE: NTS | PROJ. NO. 169511557 | DWG. NO. 510U050 | REV. NO. A

Aug 16, 2012 – 12:39pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U050.dwg



45 LEVEL – 2255 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

45 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHKD	ENGR
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DWG. NO. 520U010

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DATE: 2011.08.25

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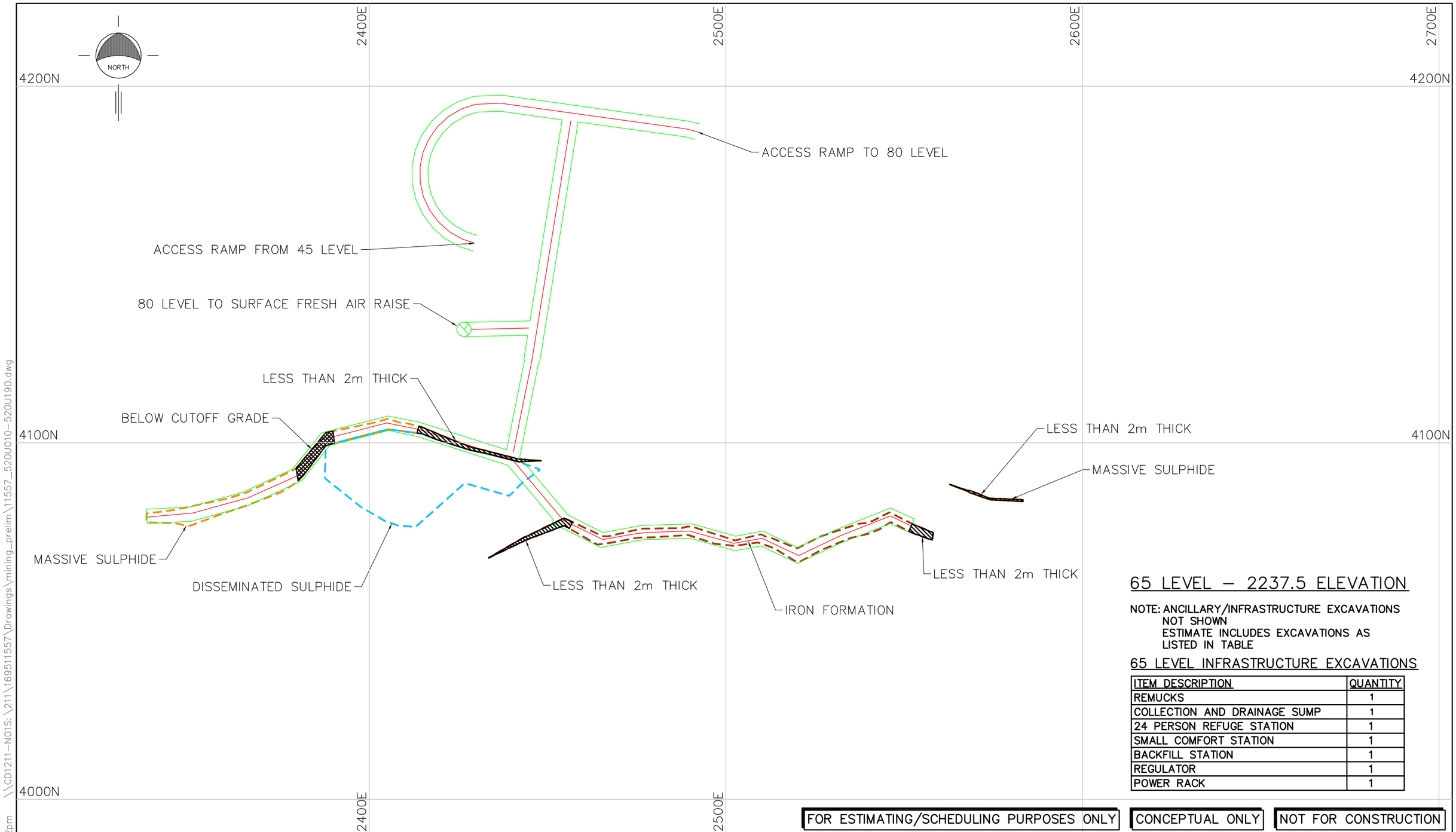
CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
45 LEVEL – 2255 ELEVATION
LEVEL PLAN

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
1:1000	169511557	520U010	A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_520U010-520U190.dwg



65 LEVEL – 2237.5 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

65 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
24 PERSON REFUGE STATION	1
SMALL COMFORT STATION	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DSGN CHECK	DSGN ENG PRJMGR
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DATE: 2011.08.25

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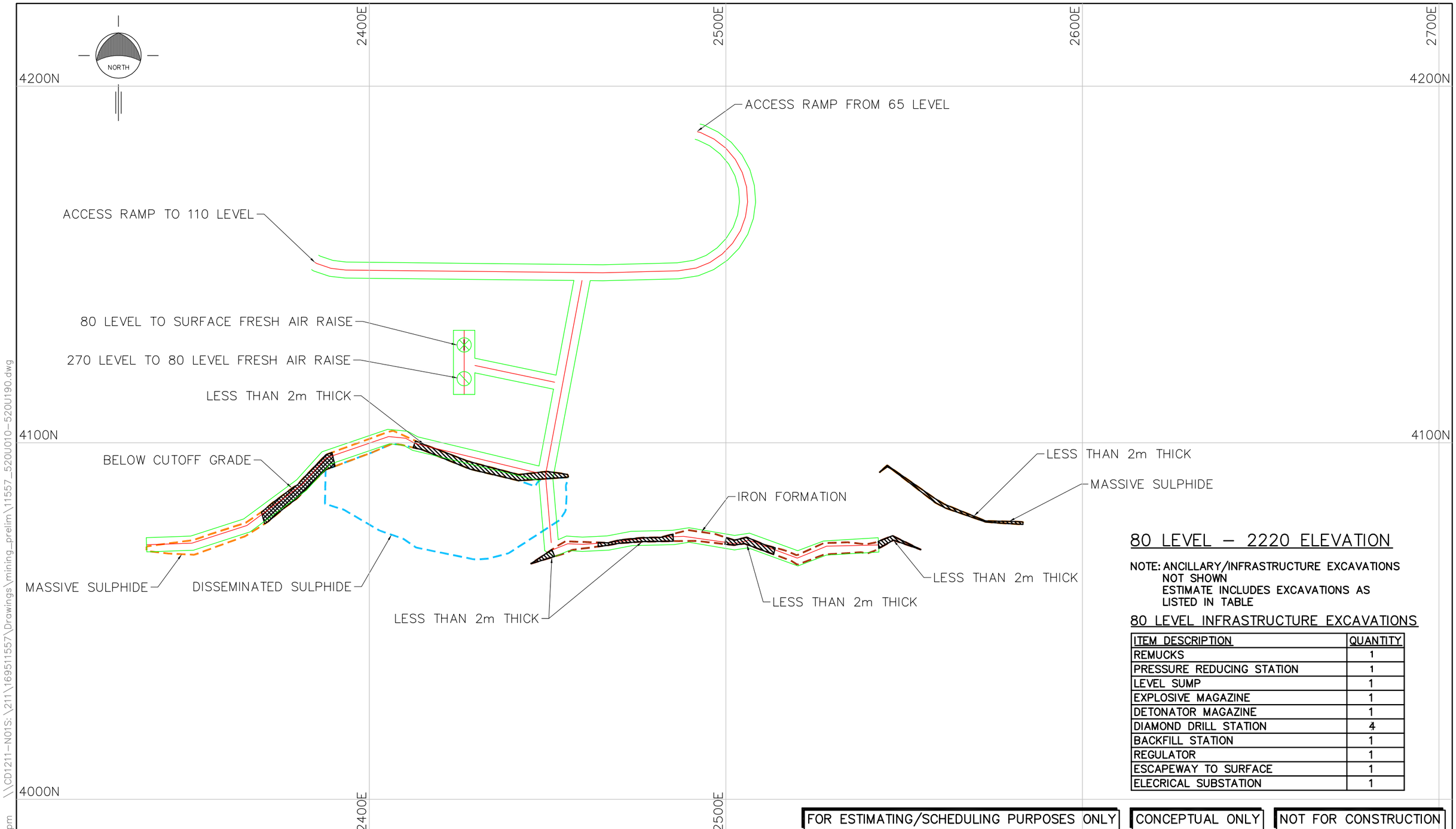
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
65 LEVEL – 2237.5 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U020 | REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_520U010-520U190.dwg



80 LEVEL – 2220 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

80 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
PRESSURE REDUCING STATION	1
LEVEL SUMP	1
EXPLOSIVE MAGAZINE	1
DETONATOR MAGAZINE	1
DIAMOND DRILL STATION	4
BACKFILL STATION	1
REGULATOR	1
ESCAPEWAY TO SURFACE	1
ELECRICAL SUBSTATION	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHKD	DSGN ENG. / PR.MGR
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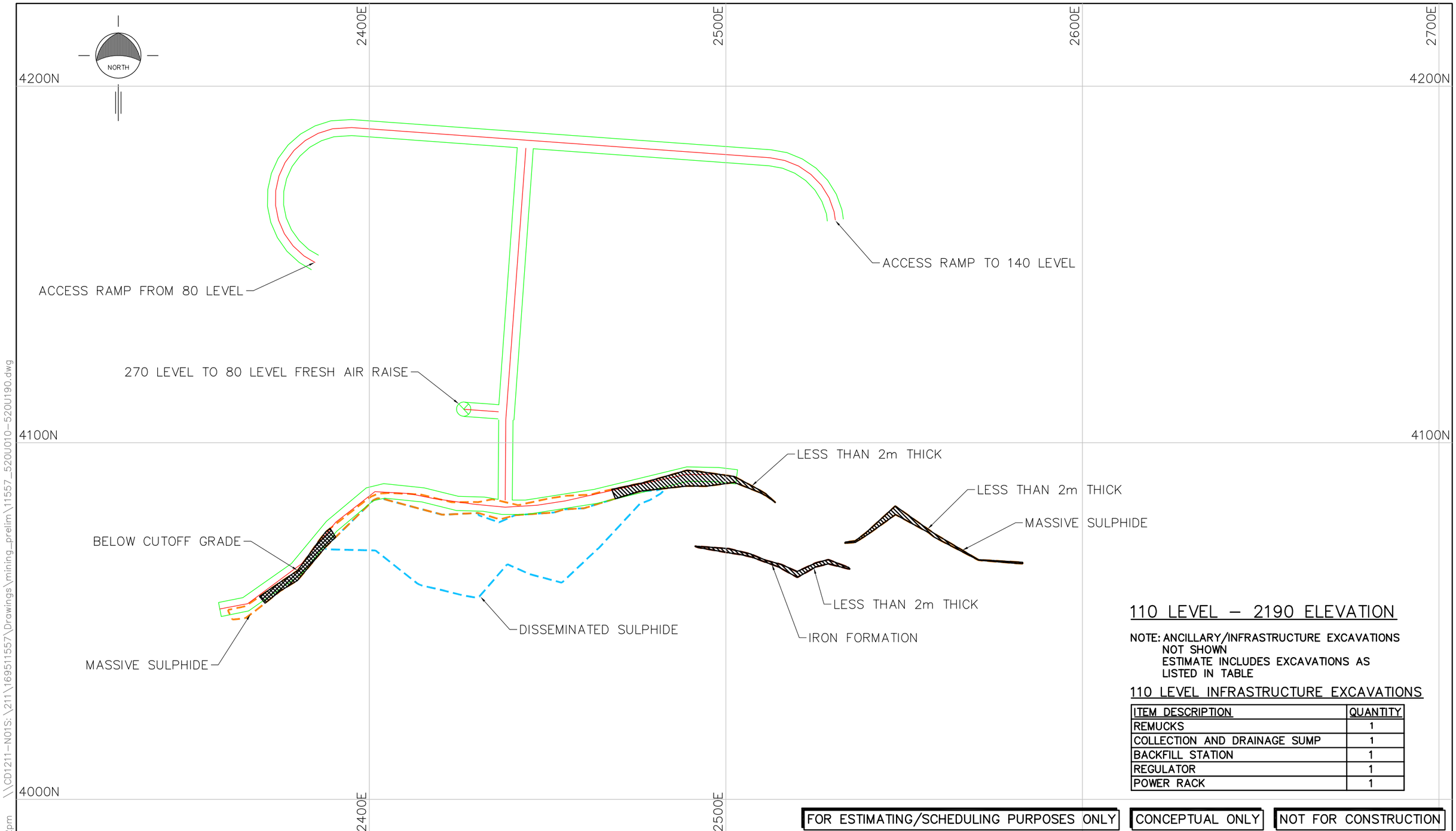
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
80 LEVEL – 2220 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U030 | REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_520U010-520U190.dwg



110 LEVEL – 2190 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

110 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DRGS CHECK	DSGN ENG. PR.MGR
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DATE: 2011.08.25

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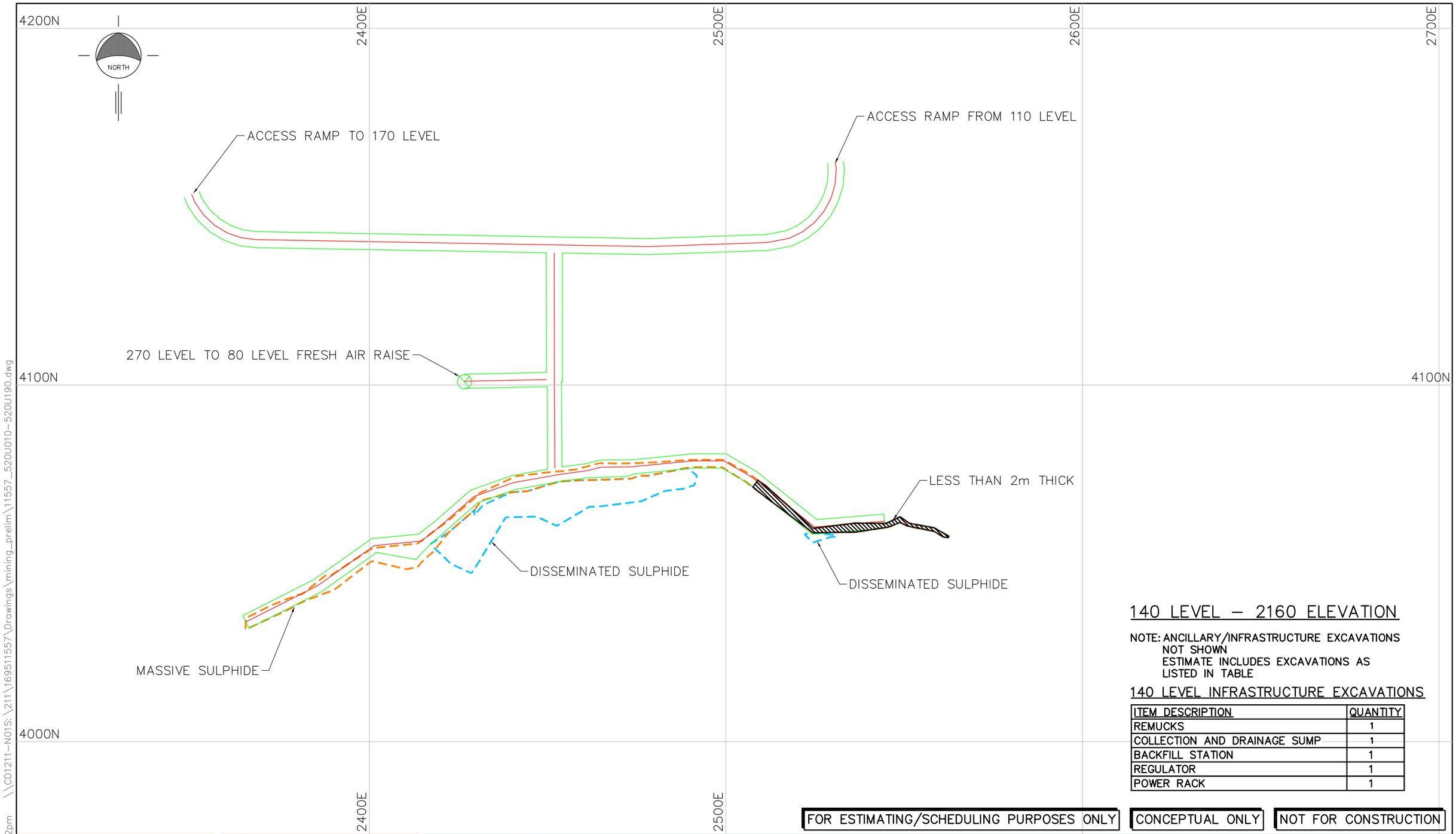
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
110 LEVEL – 2190 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U040 | REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_520U010-520U190.dwg



140 LEVEL – 2160 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

140 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DSGN CHECK	DSGN ENG PRJMGR
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DATE: 2011.08.25

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
140 LEVEL – 2160 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U050 | REV. NO. A

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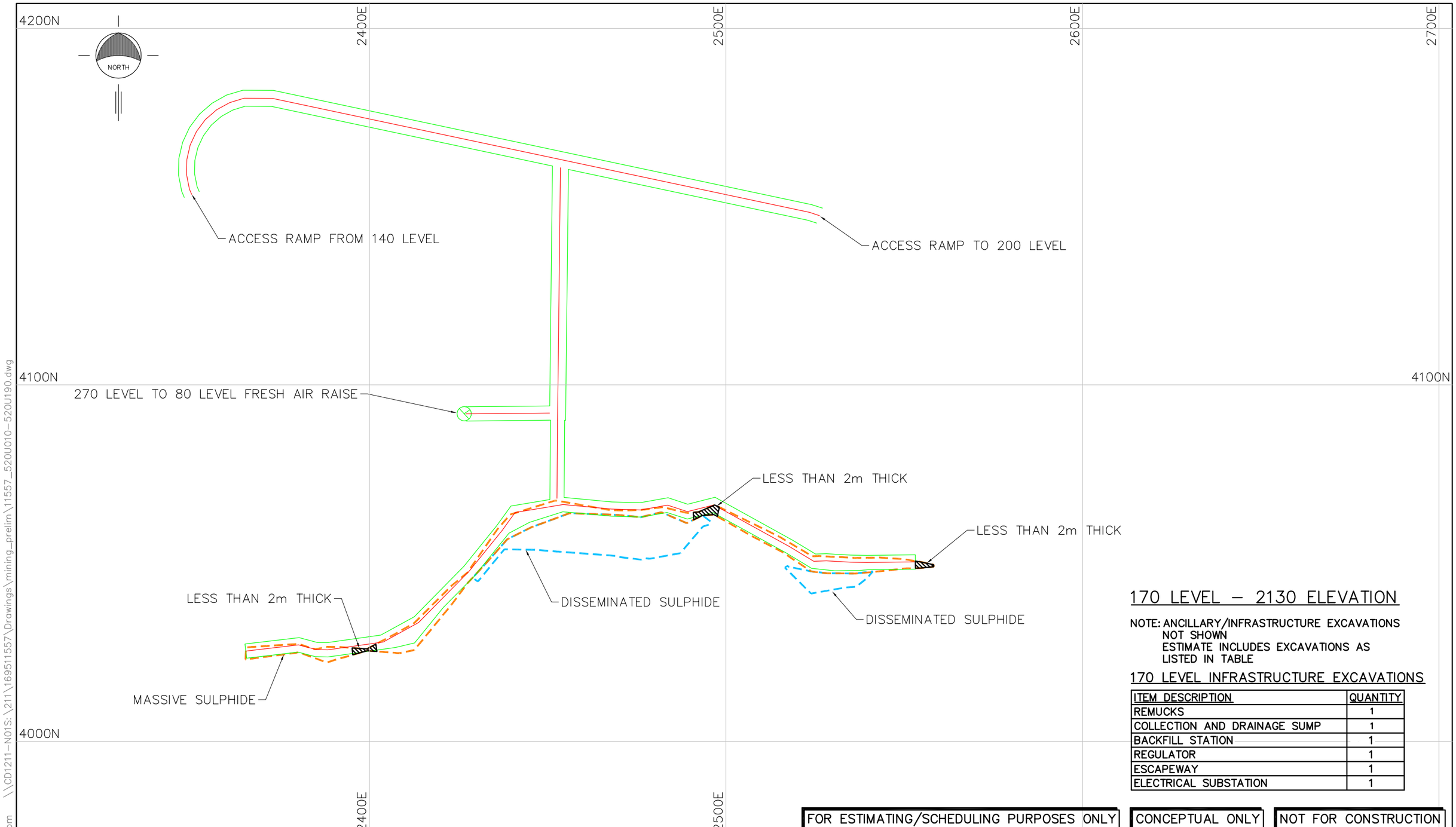

170 LEVEL – 2130 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

170 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
ESCAPEWAY	1
ELECTRICAL SUBSTATION	1

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHEF DSGN	CHECK	DSGN ENG.	PRJMGR
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DATE: 2011.08.25

Stantec

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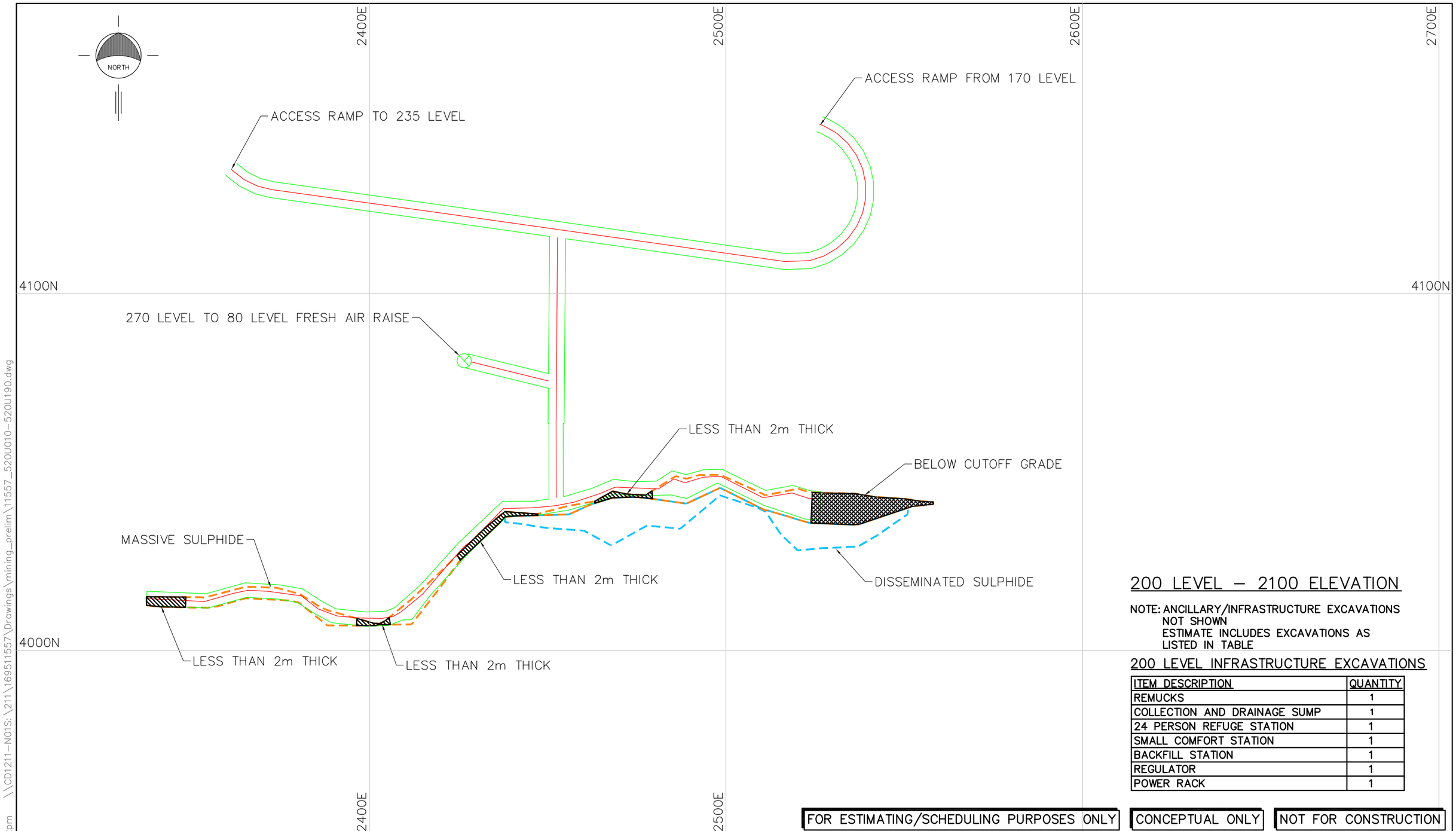
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
170 LEVEL – 2130 ELEVATION
LEVEL PLAN

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
1:1000	169511557	520U060	A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_520U010-520U190.dwg



200 LEVEL – 2100 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

200 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
24 PERSON REFUGE STATION	1
SMALL COMFORT STATION	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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ORIGINAL DRAWN BY: LWG
DATE: 2011.08.25

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
200 LEVEL – 2100 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U070 | REV. NO. A

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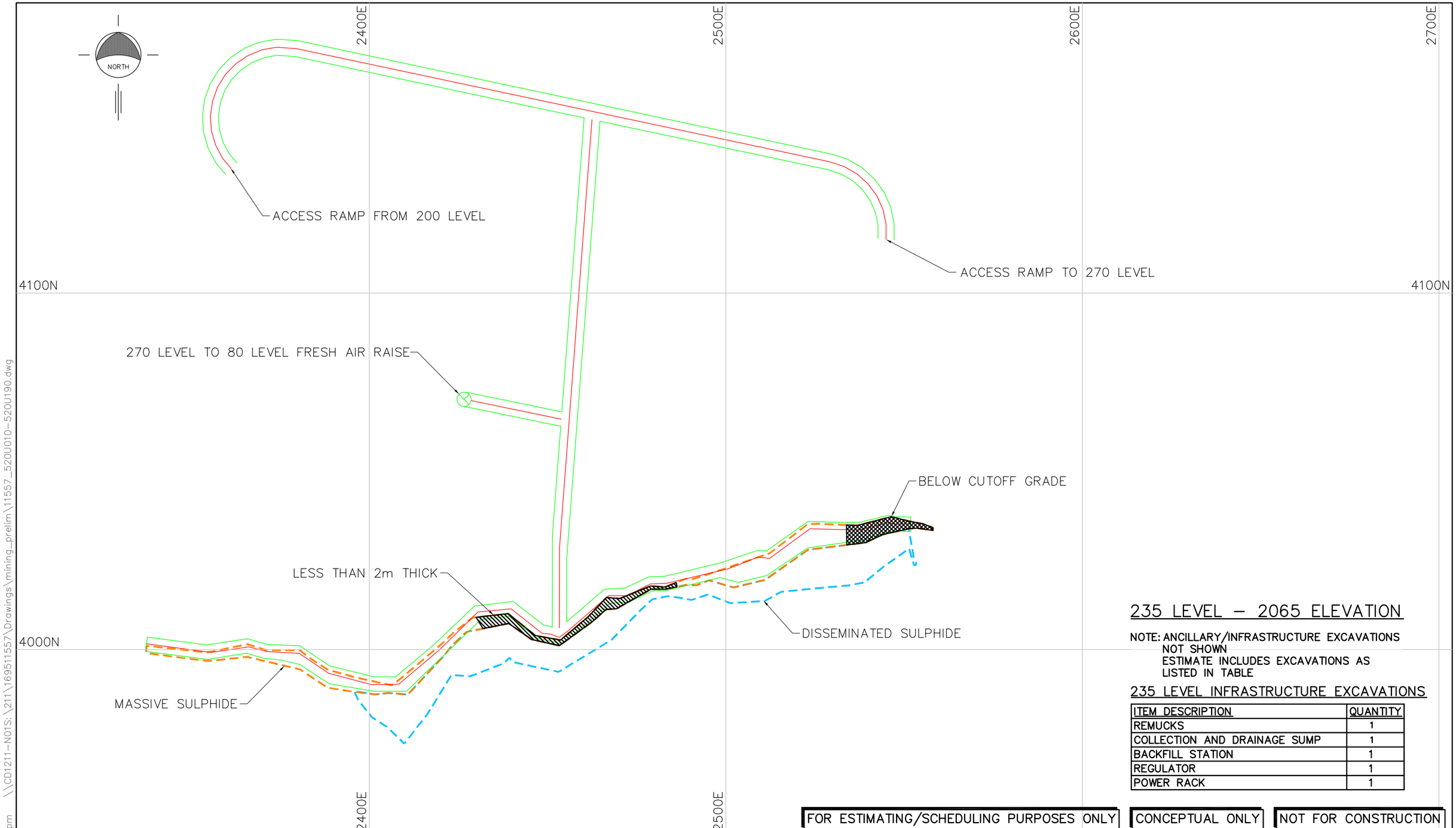

235 LEVEL – 2065 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

235 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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DATE: 2011.08.25

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
235 LEVEL – 2065 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U080 | REV. NO. A

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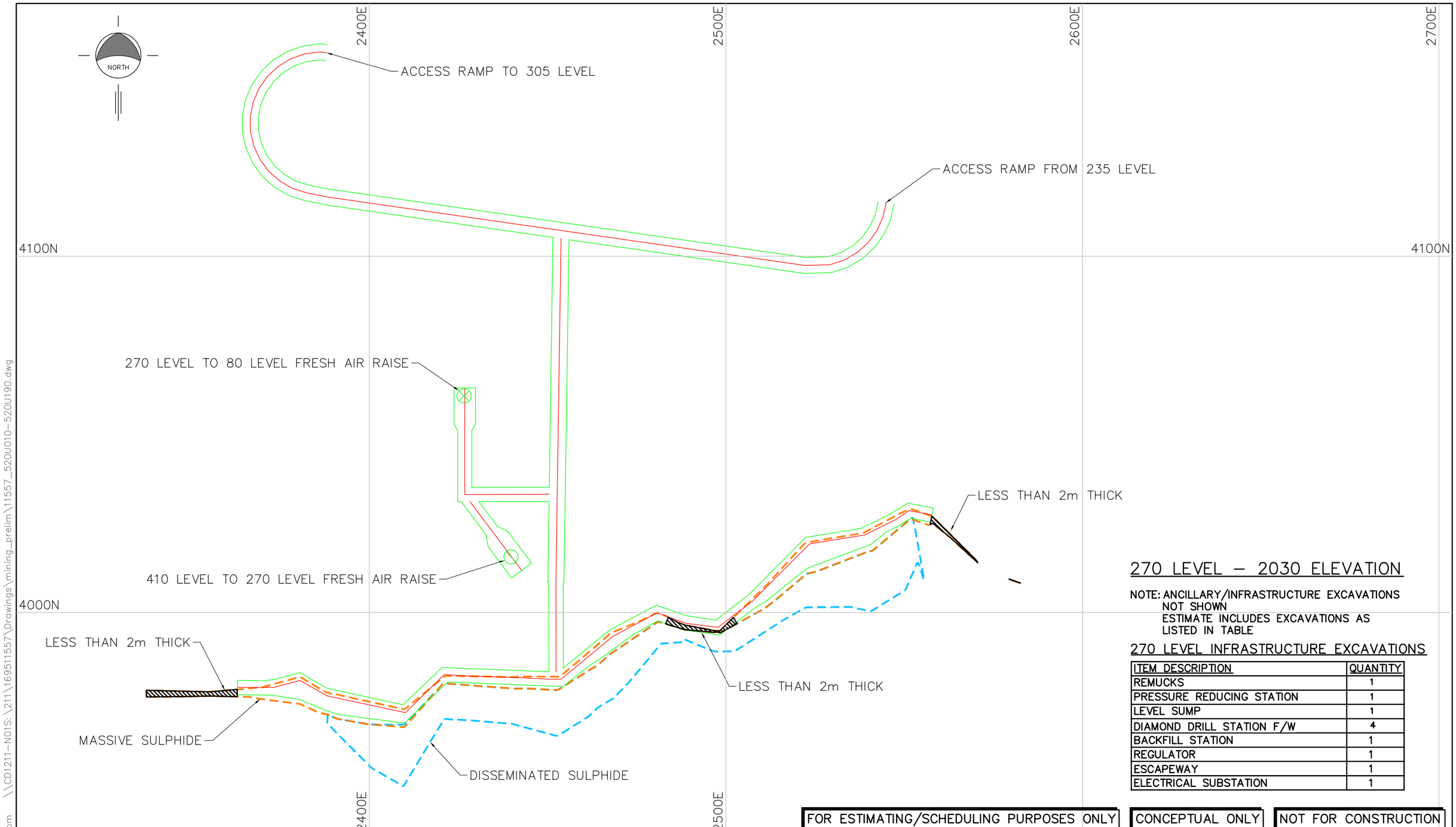

270 LEVEL – 2030 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

270 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
PRESSURE REDUCING STATION	1
LEVEL SUMP	1
DIAMOND DRILL STATION F/W	4
BACKFILL STATION	1
REGULATOR	1
ESCAPEWAY	1
ELECTRICAL SUBSTATION	1

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PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
270 LEVEL – 2030 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U090 | REV. NO. A

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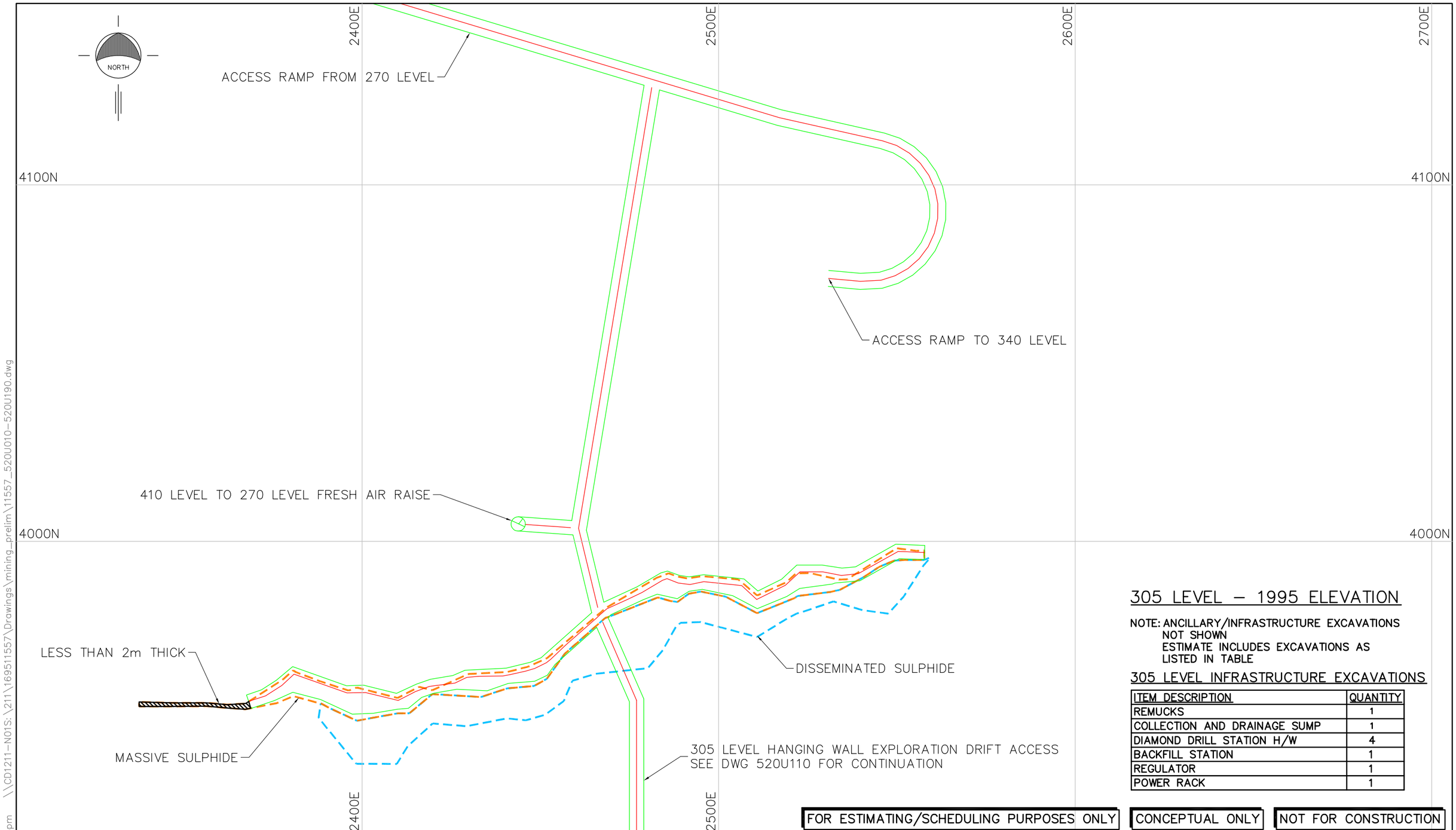

305 LEVEL – 1995 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

305 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
DIAMOND DRILL STATION H/W	4
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
305 LEVEL – 1995 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U100 | REV. NO. A

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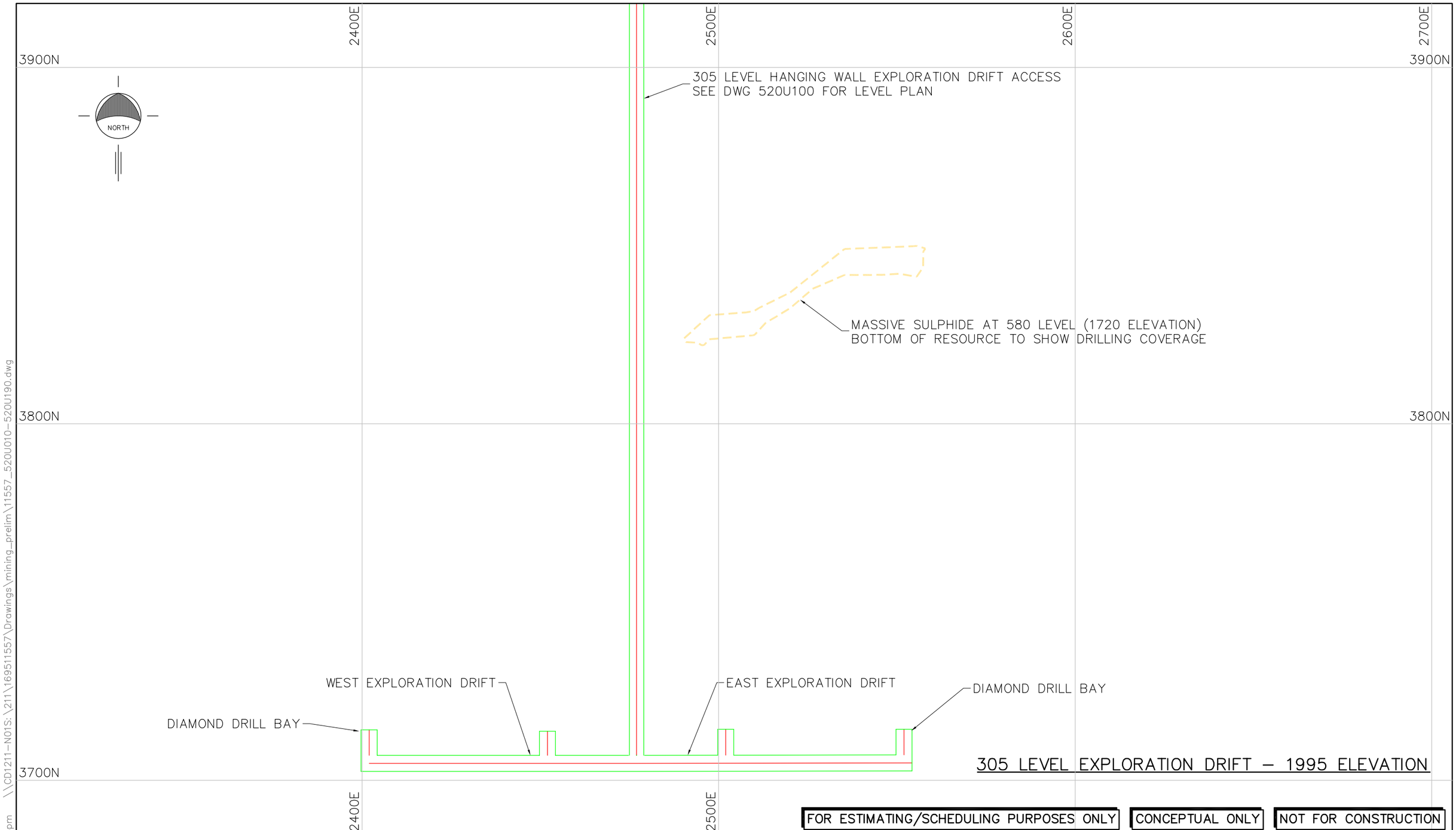

305 LEVEL EXPLORATION DRIFT – 1995 ELEVATION

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
305 LEVEL EXPLORATION DRIFT – 1995 ELEV.
LEVEL PLAN

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
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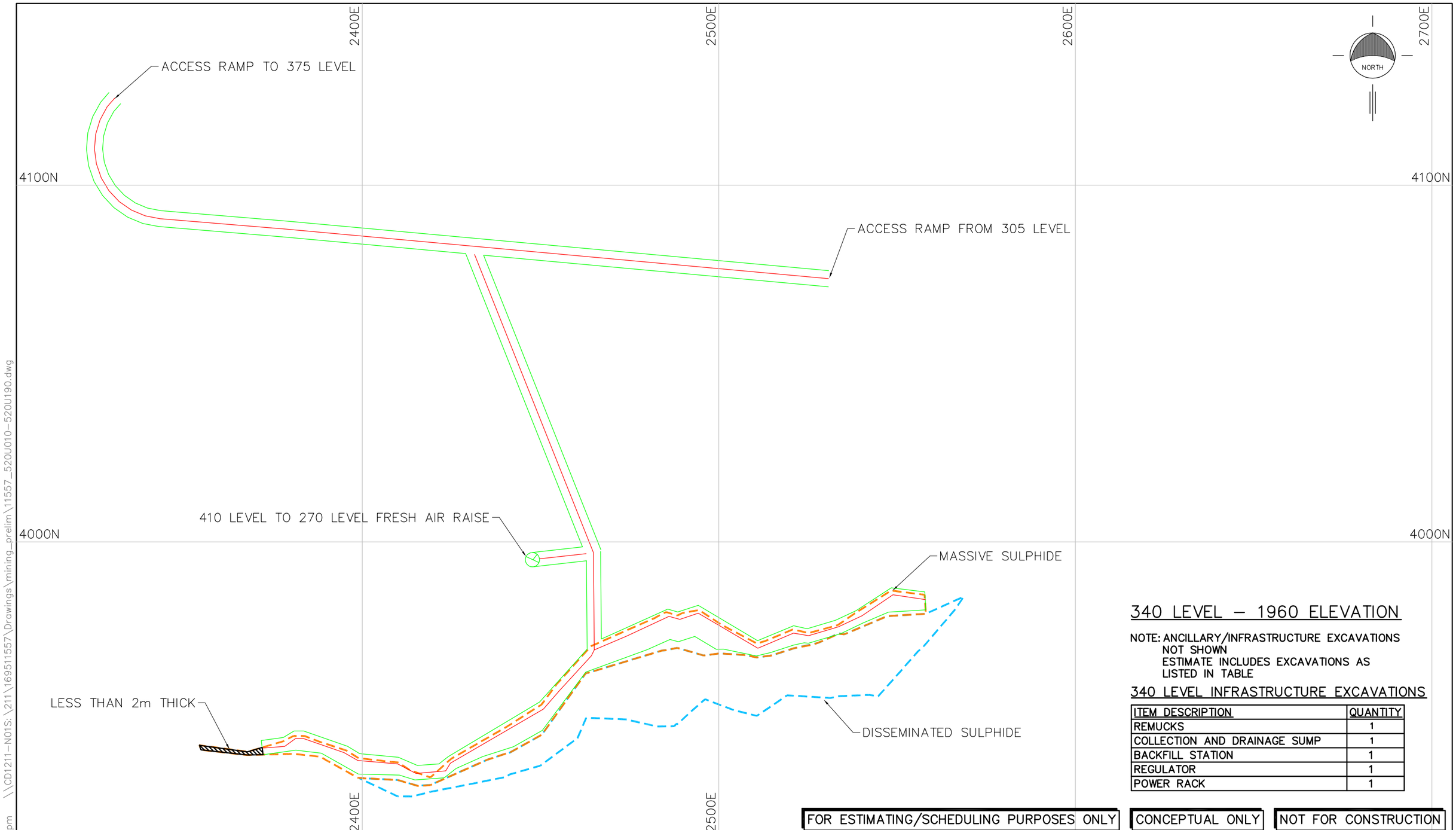

340 LEVEL – 1960 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

340 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
340 LEVEL – 1960 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U120 | REV. NO. A

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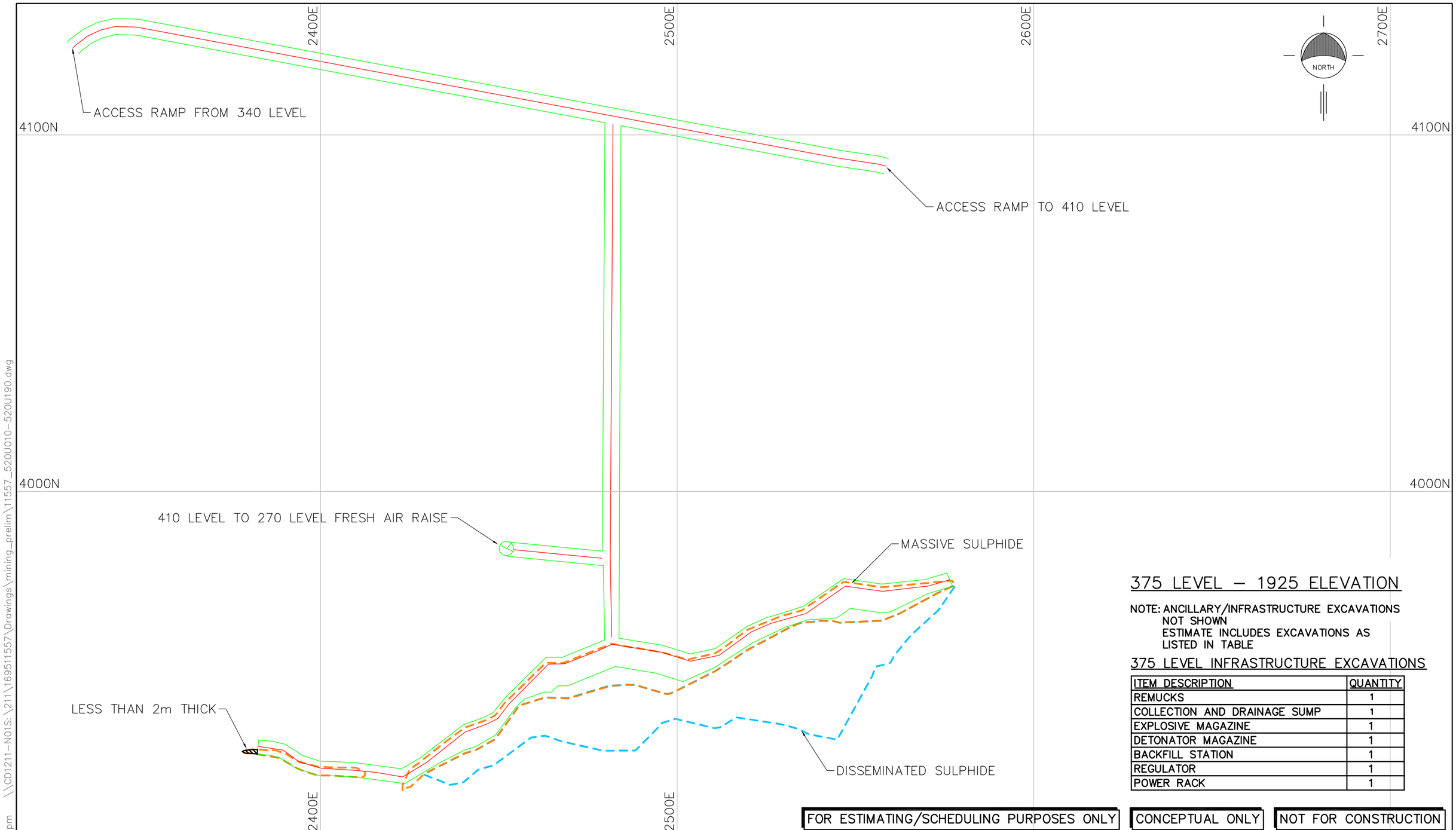

375 LEVEL – 1925 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

375 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
EXPLOSIVE MAGAZINE	1
DETONATOR MAGAZINE	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
375 LEVEL – 1925 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U130 | REV. NO. A

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410 LEVEL – 1890 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

410 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
LEVEL SUMP	1
SERVICE BAY	1
FUEL BAY	1
WASH BAY	1
24 PERSON REFUGE STATION	1
SMALL COMFORT STATION	1
DIAMOND DRILL STATION (FW)	4
BACKFILL STATION	1
REGULATOR	1
ESCAPEWAY	1
ELECTRICAL SUBSTATION	1

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PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
410 LEVEL – 1890 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U140 | REV. NO. A

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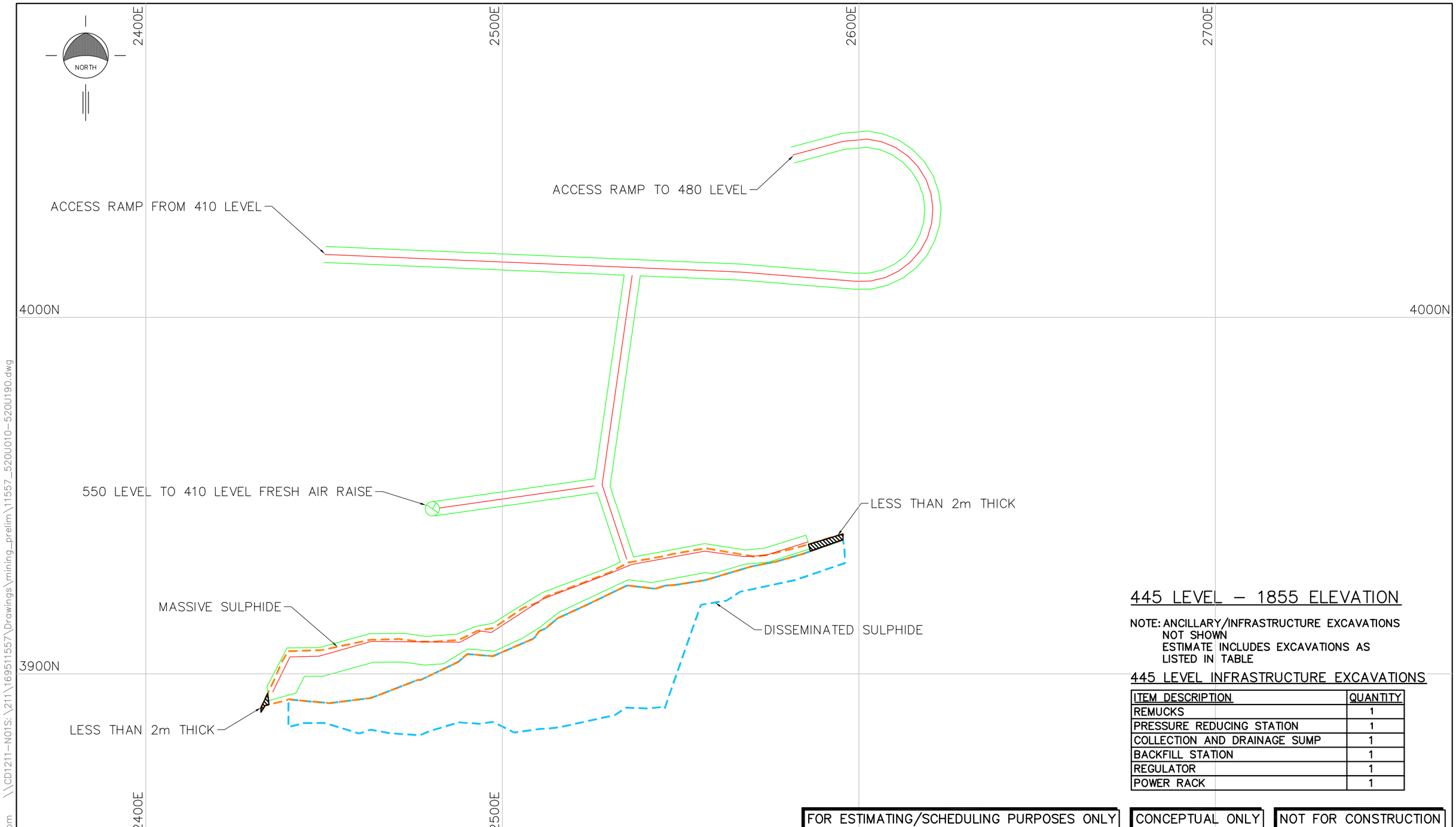

445 LEVEL – 1855 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

445 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
PRESSURE REDUCING STATION	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
445 LEVEL – 1855 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U150 | REV. NO. A

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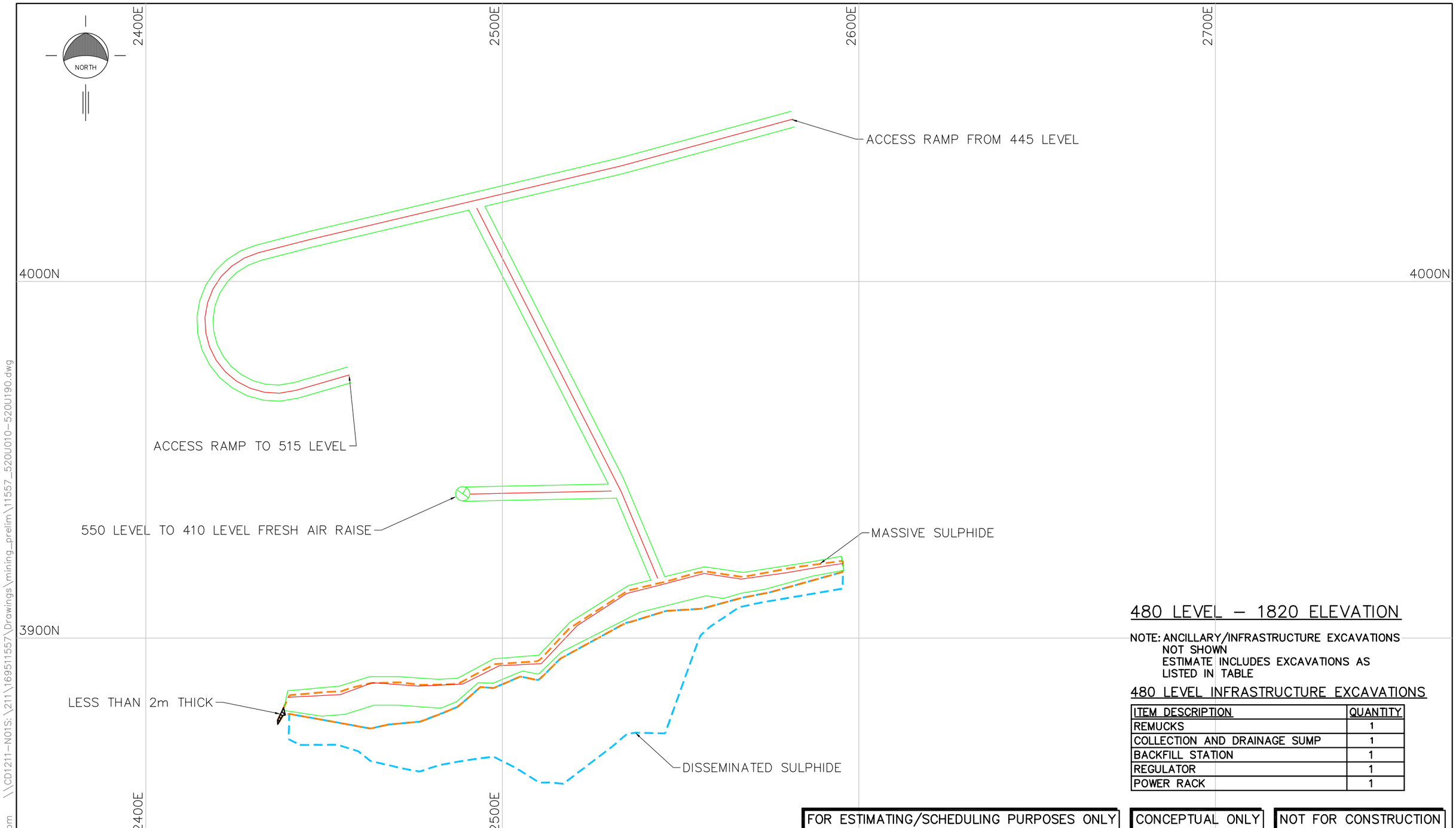

480 LEVEL – 1820 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

480 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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DATE: 2011.08.25

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
480 LEVEL – 1820 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U160 | REV. NO. A

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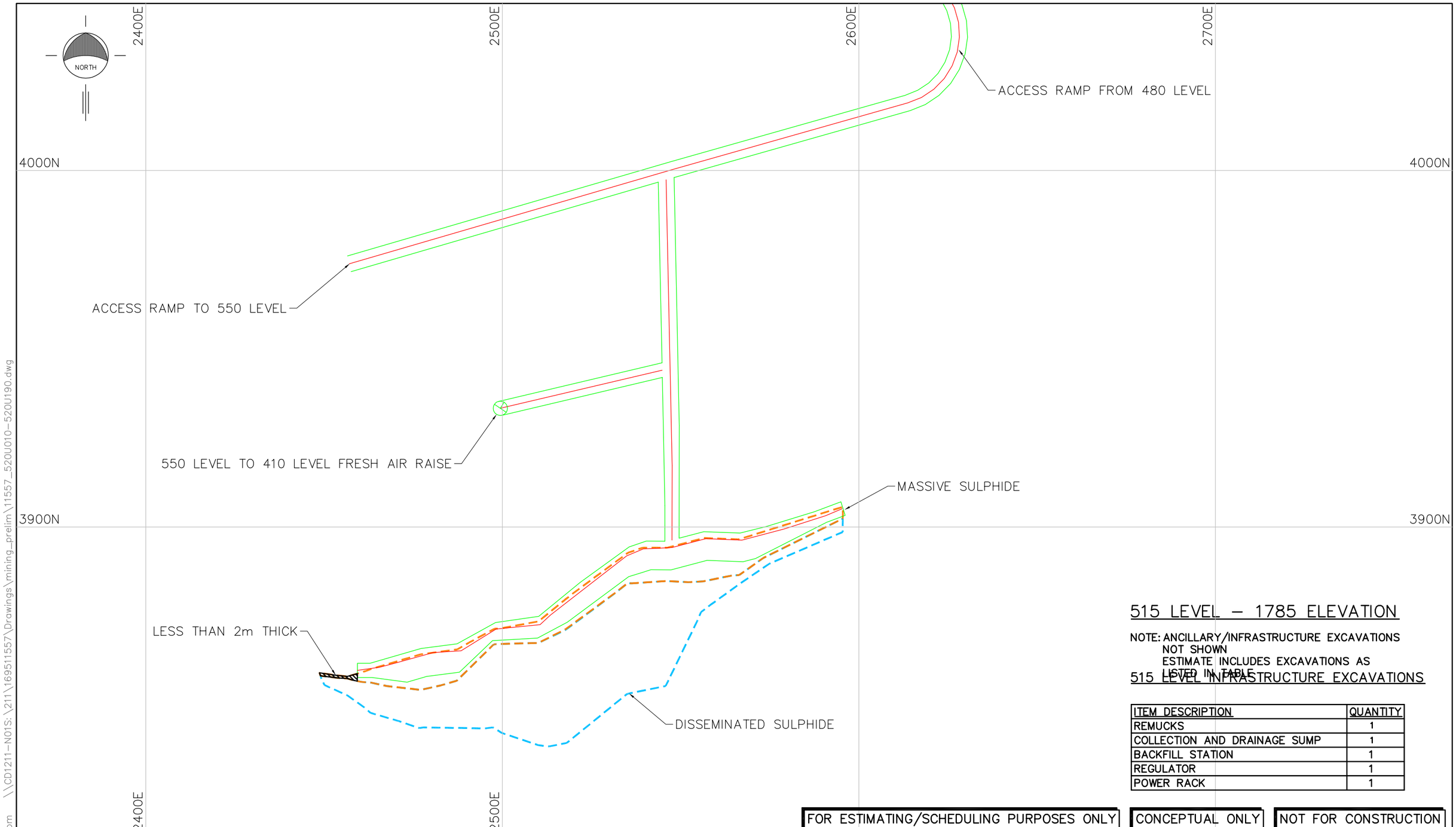

515 LEVEL – 1785 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

515 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
COLLECTION AND DRAINAGE SUMP	1
BACKFILL STATION	1
REGULATOR	1
POWER RACK	1

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DATE: 2011.08.25

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
515 LEVEL – 1785 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U170 | REV. NO. A

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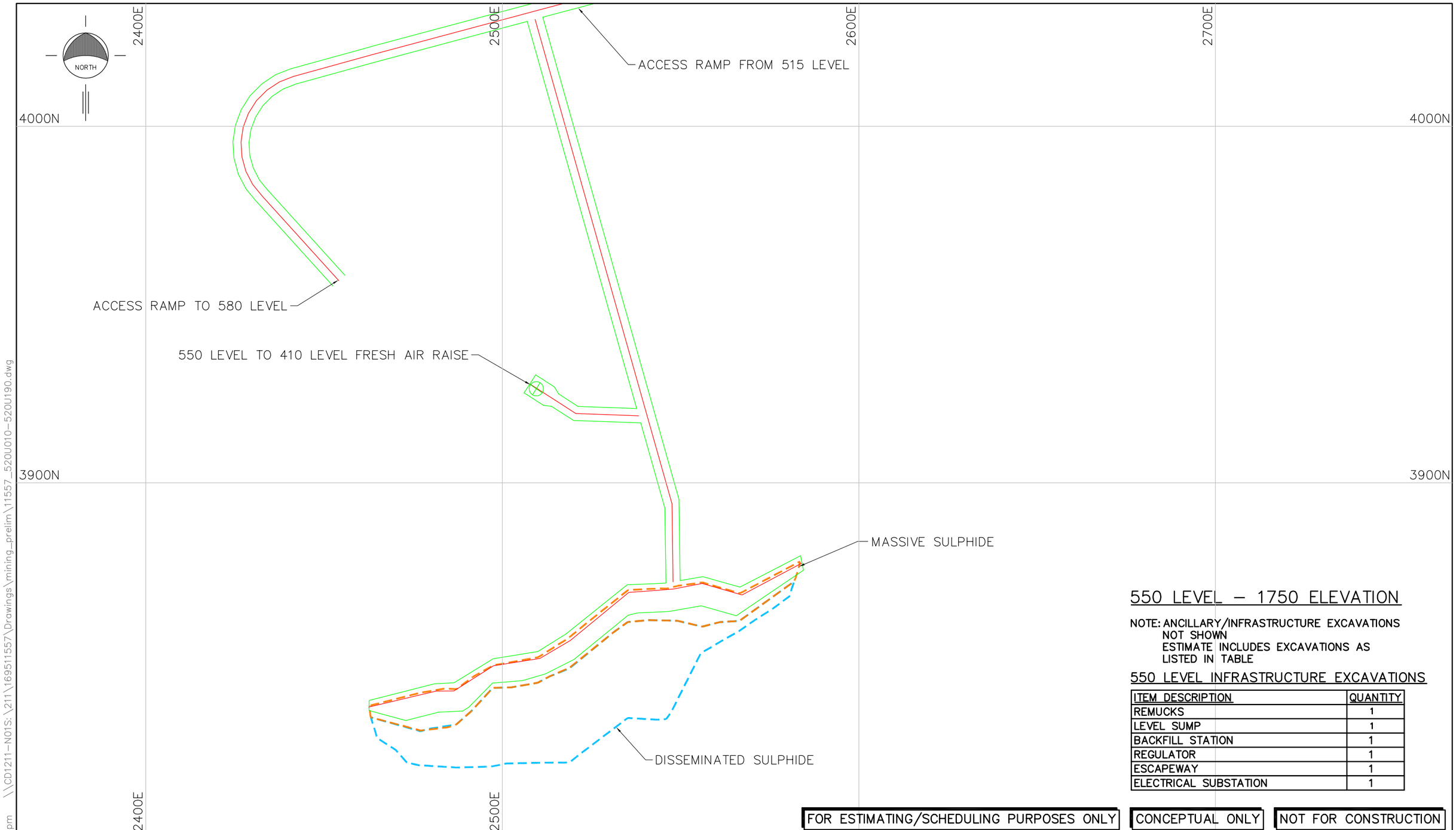

550 LEVEL – 1750 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

550 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
LEVEL SUMP	1
BACKFILL STATION	1
REGULATOR	1
ESCAPEWAY	1
ELECTRICAL SUBSTATION	1

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DATE: 2011.08.25

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
550 LEVEL – 1750 ELEVATION
LEVEL PLAN

SCALE: 1:1000 | PROJ. NO. 169511557 | DWG. NO. 520U180 | REV. NO. A

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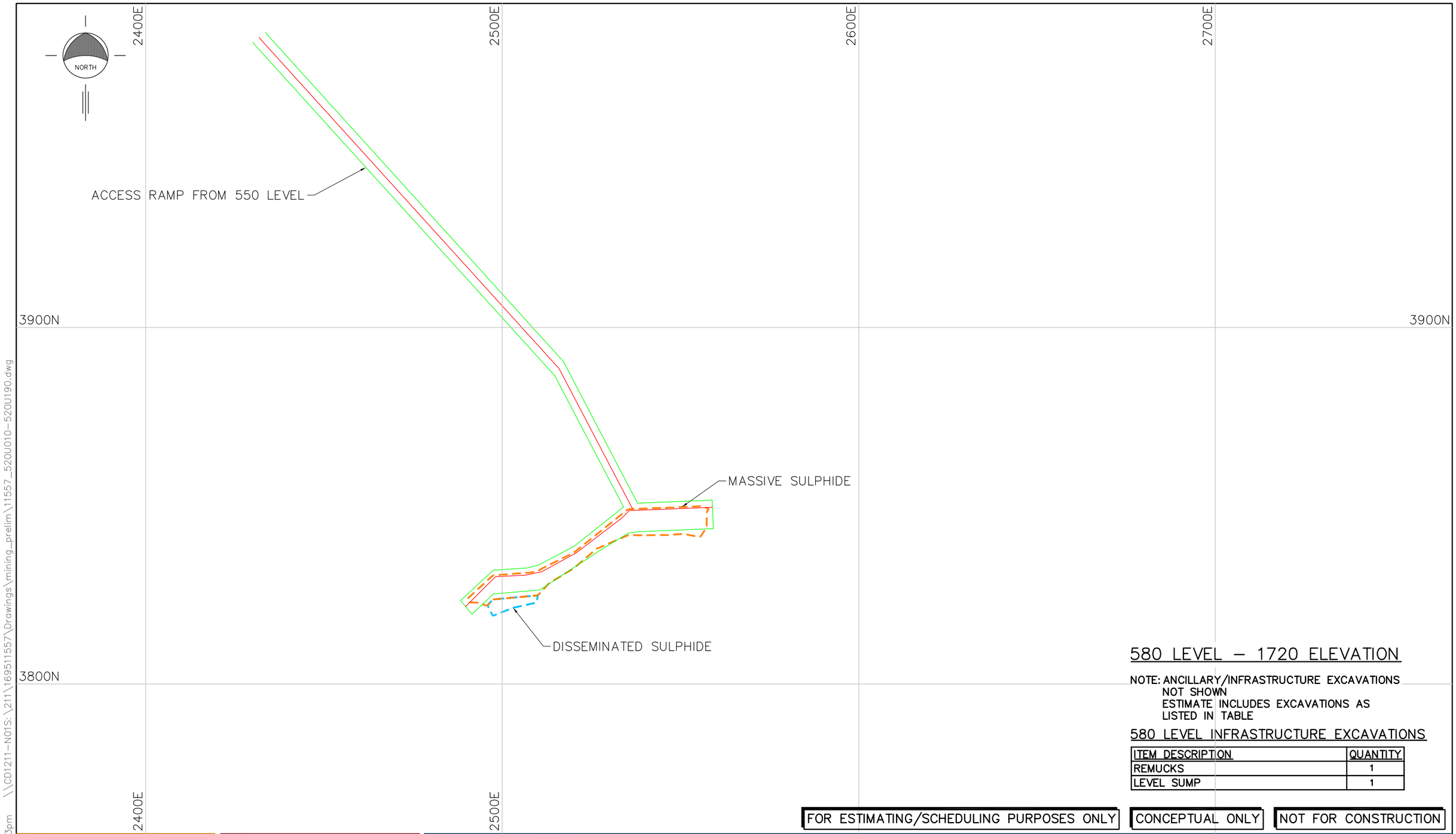

580 LEVEL – 1720 ELEVATION

NOTE: ANCILLARY/INFRASTRUCTURE EXCAVATIONS NOT SHOWN
ESTIMATE INCLUDES EXCAVATIONS AS LISTED IN TABLE

580 LEVEL INFRASTRUCTURE EXCAVATIONS

ITEM DESCRIPTION	QUANTITY
REMUCKS	1
LEVEL SUMP	1

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DATE: 2011.08.25

Stantec

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PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
580 LEVEL – 1720 ELEVATION
LEVEL PLAN

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
1:1000	169511557	520U190	A

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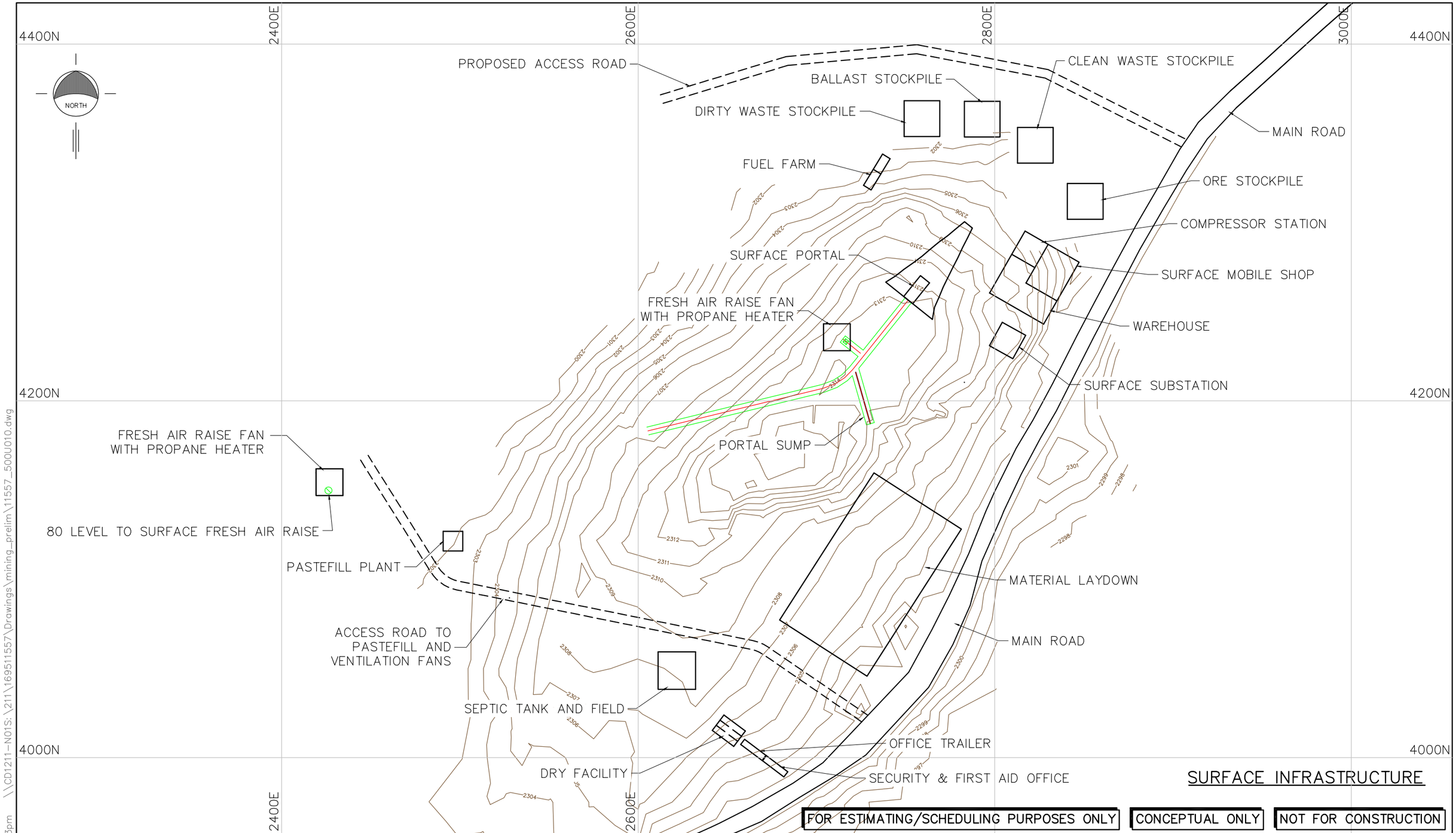

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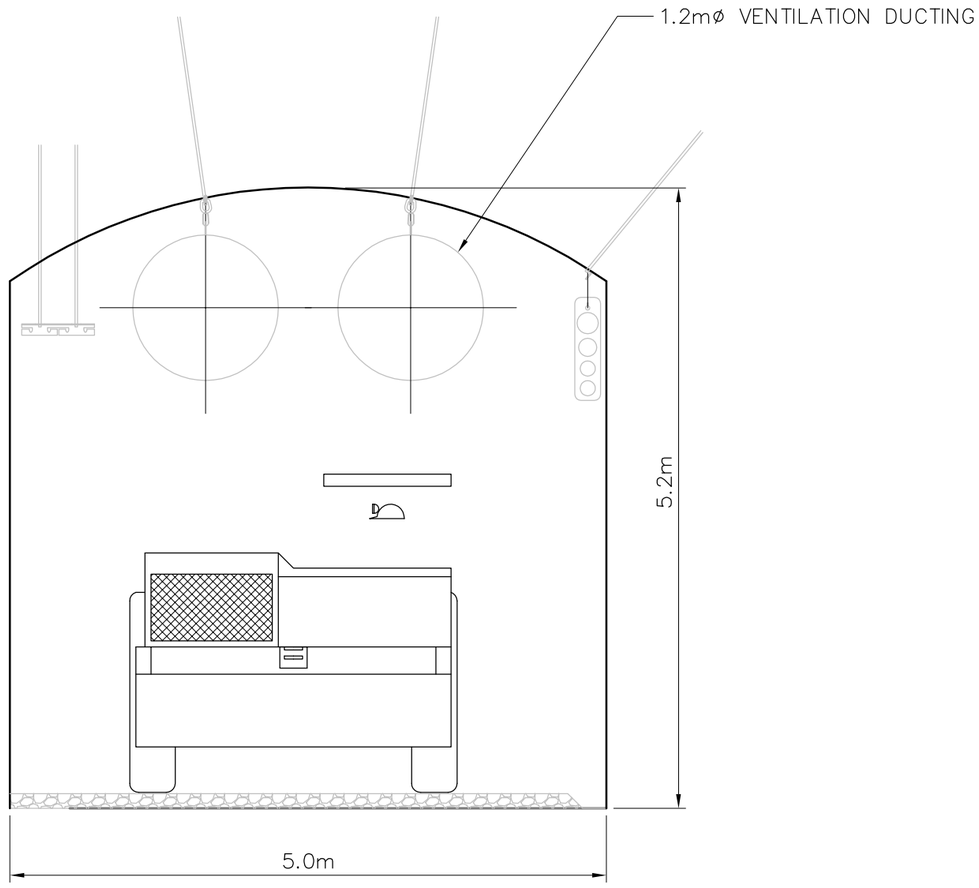
CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
SURFACE INFRASTRUCTURE
PLAN VIEW

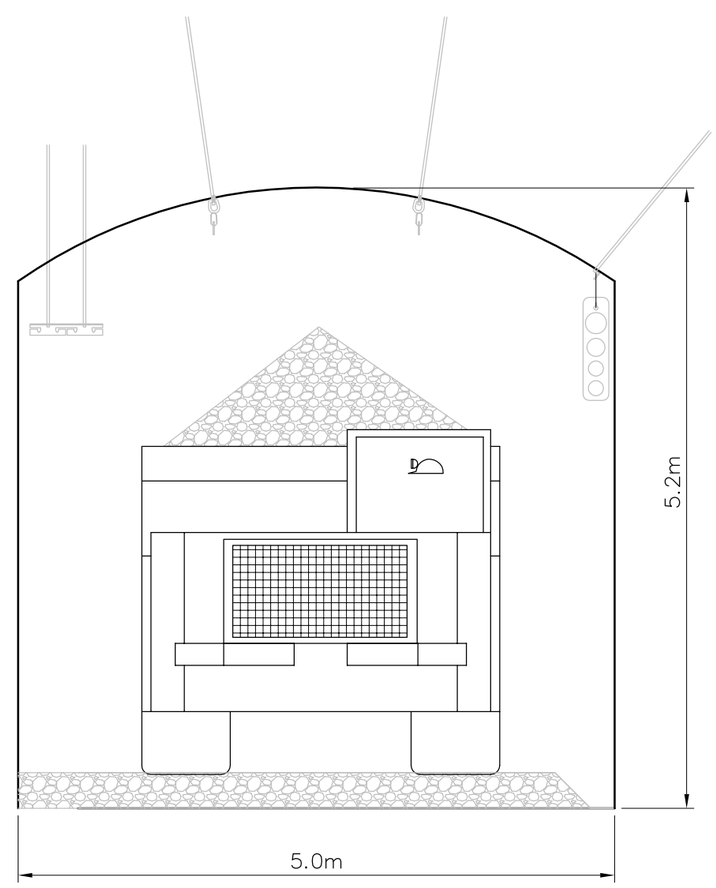
SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
1:2000	169511557	500U010	A

DEVELOPMENT DRIFT PROFILE
(30 TONNE TRUCK)



NOTE: GROUND SUPPORT NOT SHOWN

HAULAGE DRIFT PROFILE
(40 TONNE TRUCK)



NOTE: GROUND SUPPORT NOT SHOWN

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION (THIS DRAWING IS NOT VALID UNLESS THE LAST REVISION IS HAND SIGNED)	YY.MM.DD	BY	CHEF DSGN / CHECK	DSGN ENG / PR.MGR
	---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	12.08.14	BWS		

PROJ. NO. 169511557
DWG. NO. 500U100
REV. NO. A

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ORIGINAL DRAWN BY: LWG
DATE: 2011.09.14

Stantec

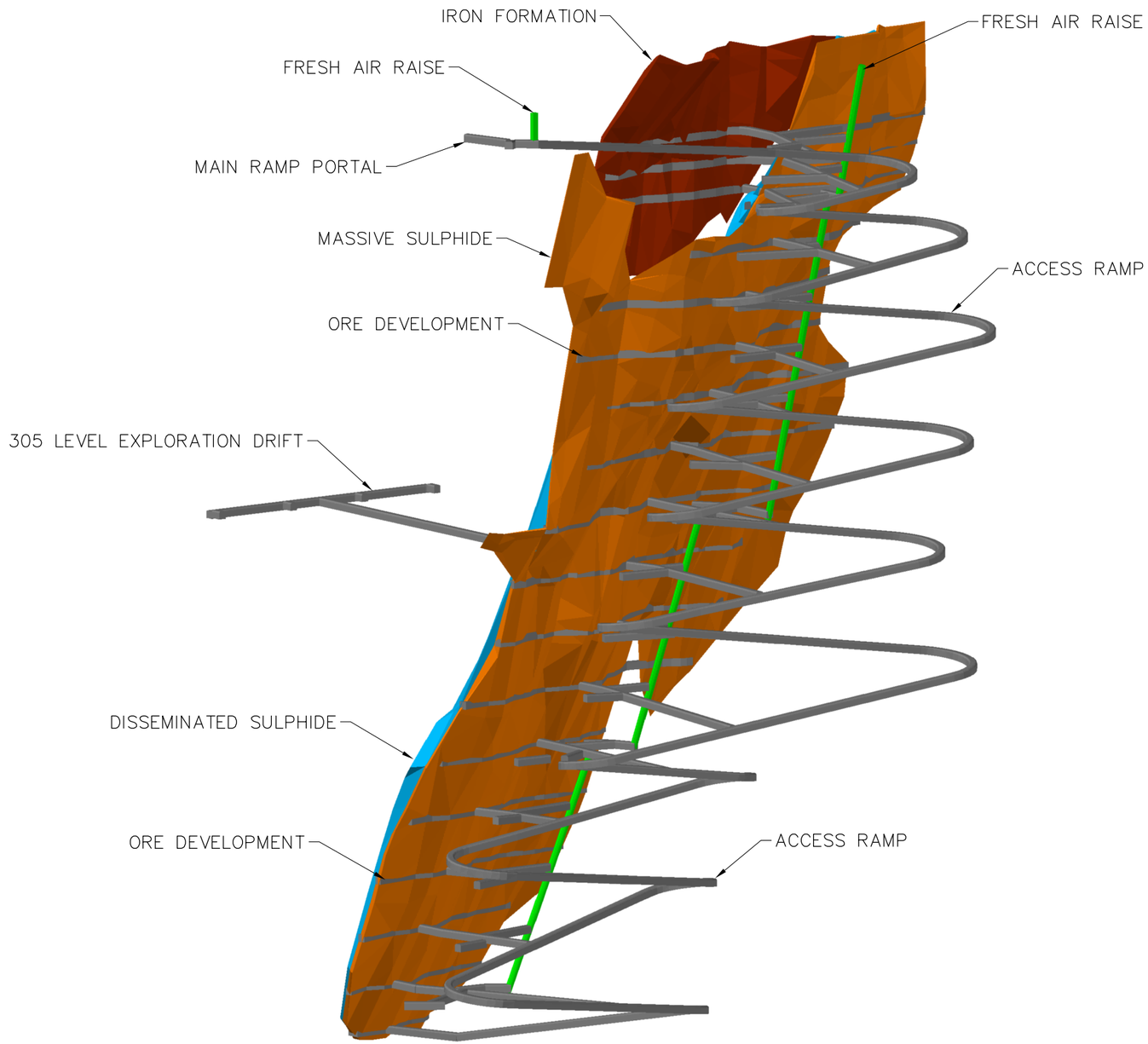
CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
5.0m x 5.2m DRIFT
CROSS SECTION

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
1:50	169511557	500U100	A

Aug 14, 2012 – 2:11pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_500U100.dwg

APPENDIX H

INFRASTRUCTURE DRAWINGS / ELECTRICAL SIGNLE LINE DRAWINGS



Drawing Number	Drawing Description
11557_400E010	Electrical - Surface & Main Sump – Single Line
11557_400E020	Electrical – Upper Levels – Single Line
11557_400E030	Electrical – Middle Levels – Single Line
11557_400E040	Electrical – Lower Levels – Single Line

OVERALL SCHEMATIC – ISOMETRIC VIEW

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REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHKD DSGN CHECK	DSGN ENG PR.MGR
A	---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	12.08.08	BWS		

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PROJ. NO. 169511557
DWG. NO. 510U005

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ORIGINAL DRAWN BY: BWS
DATE: 2011.08.29

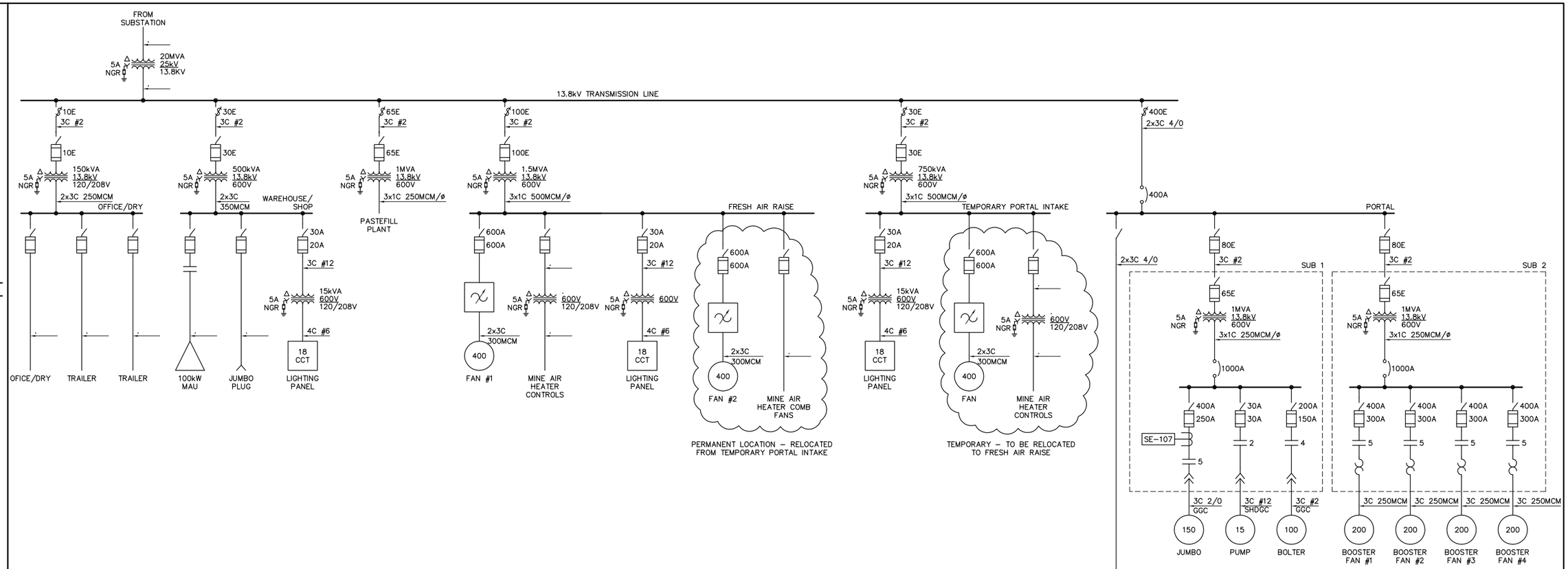
Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
OVERALL SCHEMATIC
ISOMETRIC VIEW

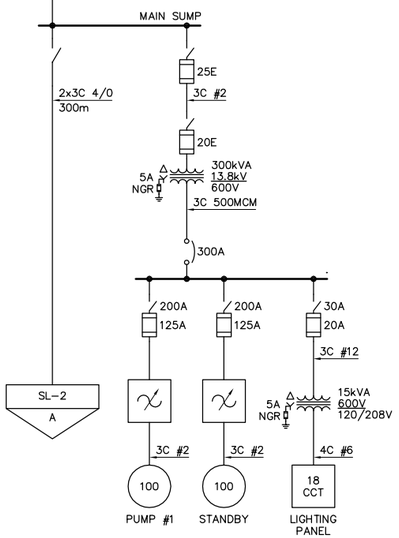
SCALE: NTS | PROJ. NO. 169511557 | DWG. NO. 510U005 | REV. NO. A

Aug 10, 2012 – 2:42pm \\CD1211-N01S:\211\169511557\Drawings\mining_prelim\11557_510U005.dwg

SURFACE



MAIN SUMP



PRELIMINARY

REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHIEF DSGN CHECK	DSGN ENG. PR.MGR
A	---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	12.08.13	BWS		

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ORIGINAL DRAWN BY: RRC

DATE: 2011.09.29

Stantec

CLIENT: LIBERTY MINES INC.

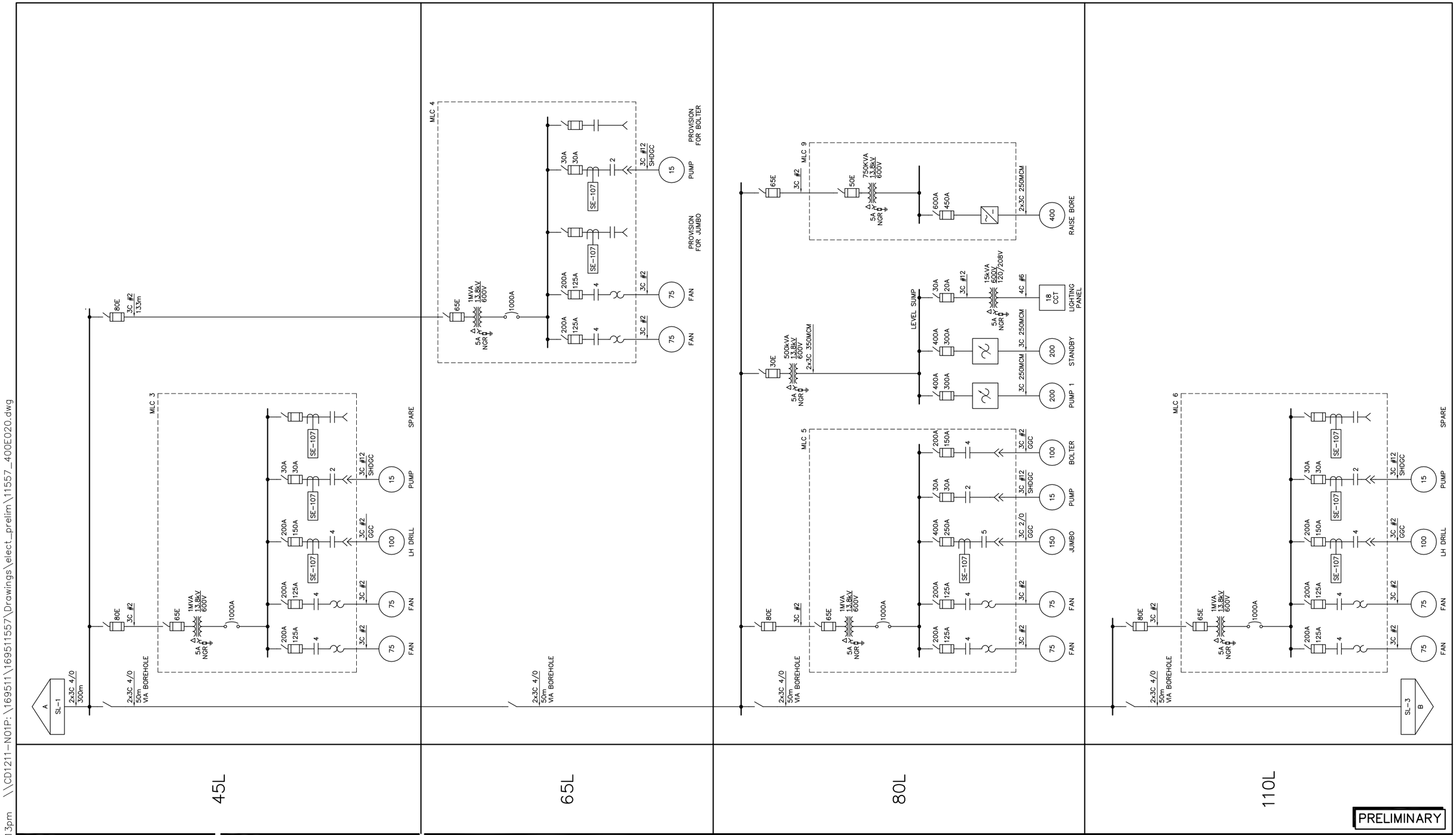
PROPERTY: HART MINE

PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
ELECTRICAL – SURFACE & MAIN SUMP
SINGLE LINE

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	400E010	A

PROJ. NO. 169511557
DWG. NO. 400E010

Aug 13, 2012 – 1:36pm \\CD1211-N01S:\211\169511557\Drawings\elect_prelim\11557_400E010.dwg



REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHIEF DSGN. CHECK	DSGN ENG. PR.MGR
---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	11.12.07	BWS		

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PROJ. NO. 169511557
DWG. NO. 400E020
REV. NO. A

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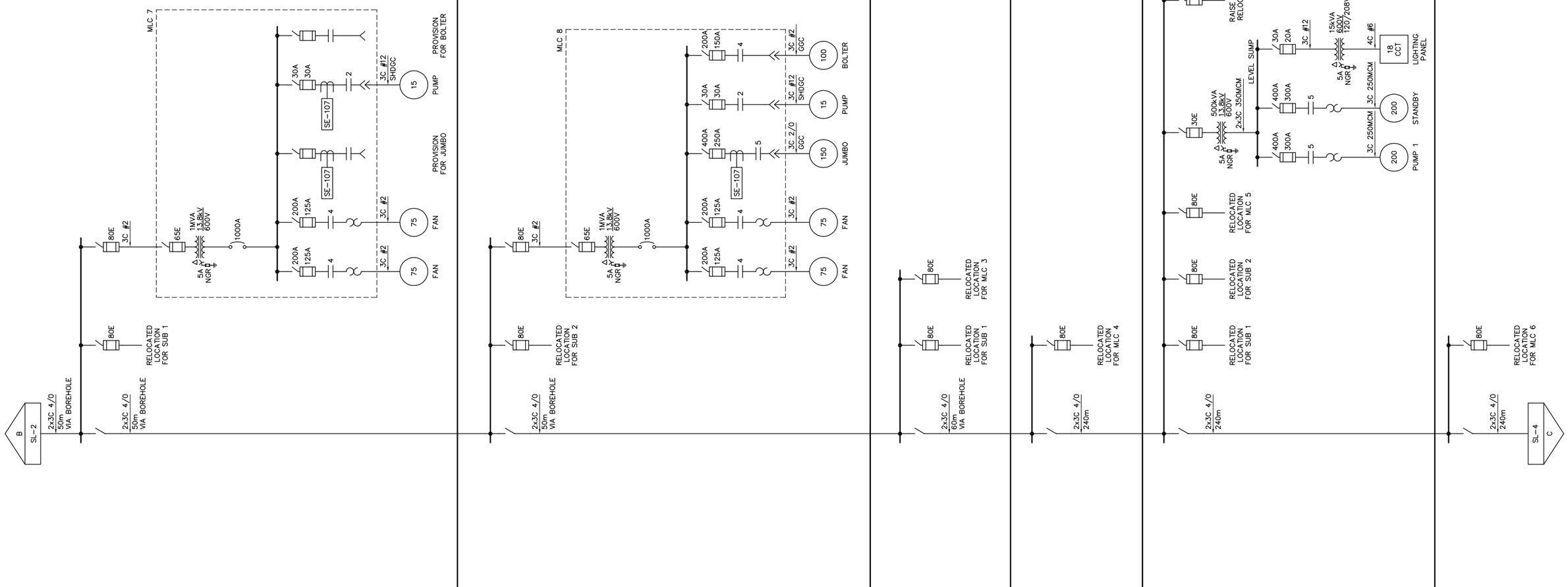
DATE: 2011.09.29

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
ELECTRICAL – UPPER LEVELS
SINGLE LINE

SCALE: NTS | PROJ. NO. 169511557 | DWG. NO. 400E020 | REV. NO. A

Dec 07, 2011 – 12:13pm \\CD1211-N01P:\169511\169511557\Drawings\elect_prelim\11557_400E020.dwg



REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHIEF DSGN CHECK	DSGN ENG. PR.MGR
A	---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	11.12.07	BWS		

PROJ. NO. 169511557
DWG. NO. 400E030

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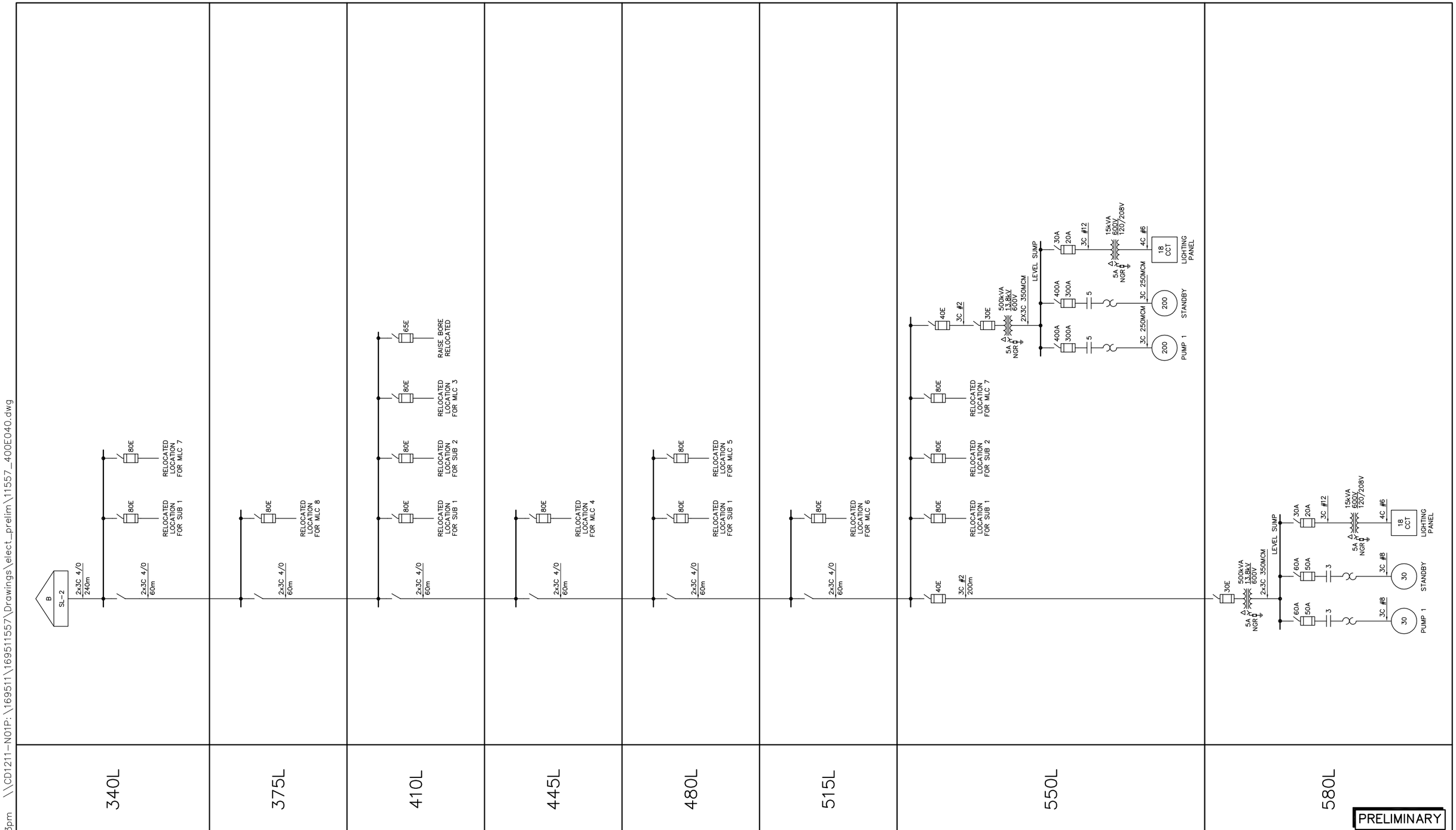
DATE: 2011.09.29

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
ELECTRICAL – MIDDLE LEVELS
SINGLE LINE

SCALE:	PROJ. NO.	DWG. NO.	REV. NO.
NTS	169511557	400E030	A



PRELIMINARY

REV. NO.	REF. DWG. NO.	REFERENCE DRAWING TITLE	REV.	DESCRIPTION	YY.MM.DD	BY	CHIEF DRAF. CHECK	DSGN ENG. PR.MGR
A	---	---	A	PRELIMINARY – ISSUED FOR STUDY ONLY	11.12.07	BWS		

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PROJ. NO. 169511557
DWG. NO. 400E040

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ORIGINAL DRAWN BY: TTA
DATE: 2011.09.29

Stantec

CLIENT: LIBERTY MINES INC.
PROPERTY: HART MINE
PROJECT: PREFEASIBILITY STUDY
UNDERGROUND MINE DESIGN
ELECTRICAL – LOWER LEVELS
SINGLE LINE

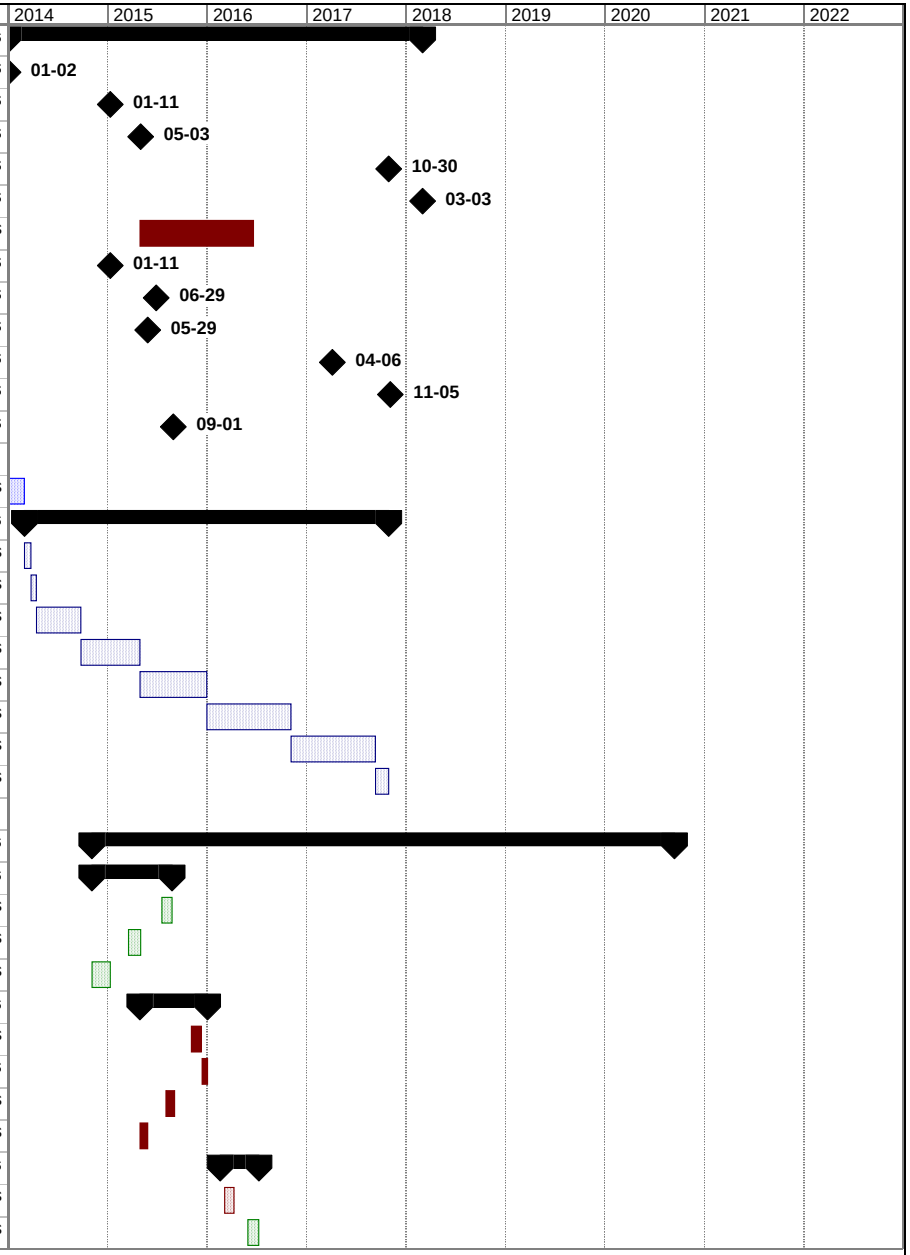
SCALE: NTS | PROJ. NO. 169511557 | DWG. NO. 400E040 | REV. NO. A

Dec 07, 2011 – 12:13pm \\CD1211-N01P:\169511\169511557\Drawings\elect_prelim\11557_400E040.dwg

APPENDIX I

DEVELOPMENT AND PRODUCTION SCHEDULE

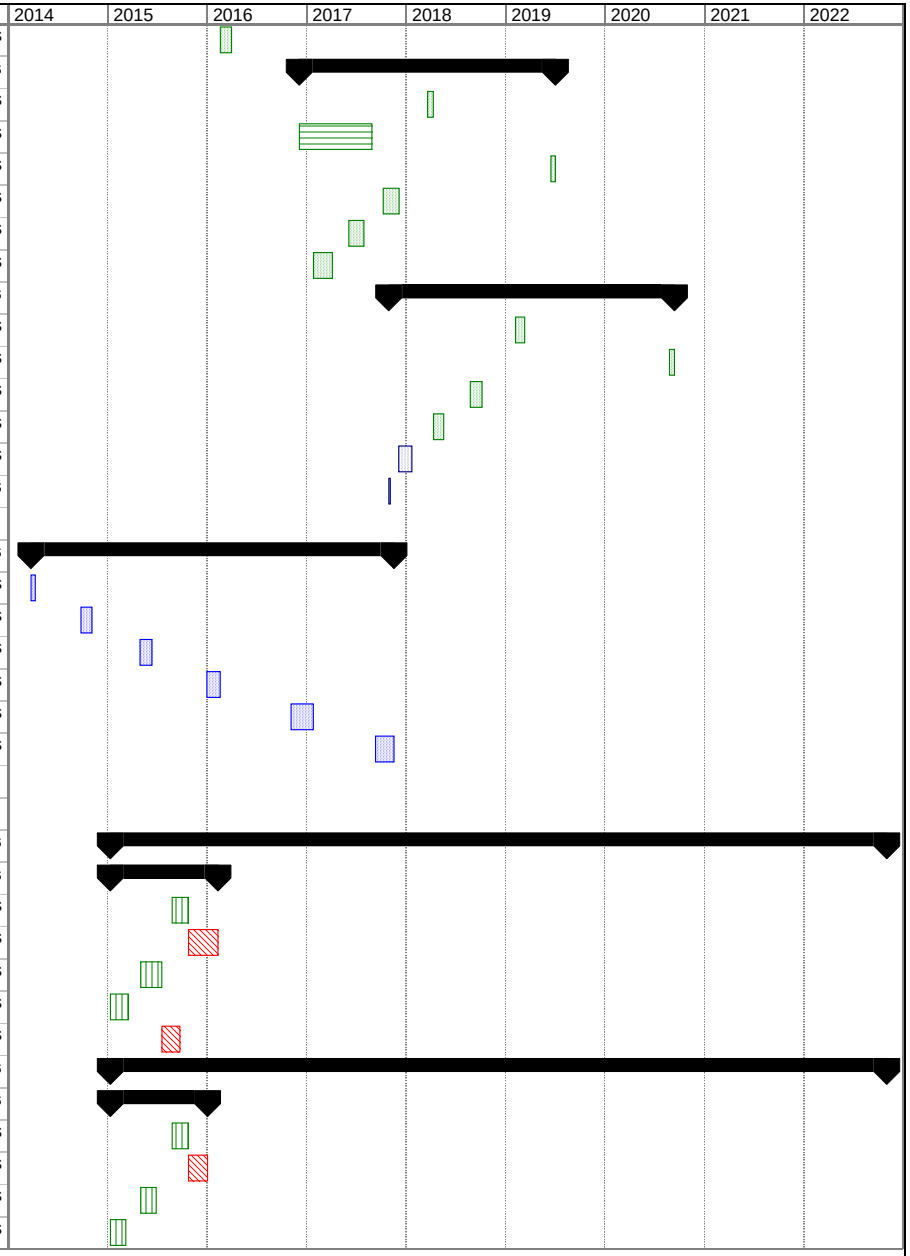
ID		Task Name	Quantity	Rate	Duration
1		**Milestones**			**1462 days**
2		Portal Start			0 days
3		1st Level Complete			0 days
4		2nd Level Complete			0 days
5		Ramp to 580 Level Complete (lowest level)			0 days
6		Contractor Crew Complete			0 days
7		Additional Development Crew			402 days
8		1st Ore			0 days
9		1st Stope			0 days
10		270 Block Ore			0 days
11		410 Block Ore			0 days
12		550 Block Ore			0 days
13		Steady State Production (~750 Tonnes per day)			0 days
14					
15		Portal			60 days
16		**RAMP**			**1293 days**
17		Portal to Ramp Raise	48	2	24 days
18		Ramp Raise to Sump	60	3	20 days
19		Sump TO 80 Level	811	5	163 days
20		80 Level TO 170 Level	1010	5	202 days
21		170 Level TO 270 Level	1152	5	231 days
22		270 Level TO 410 Level	1543	5	309 days
23		410 Level TO 550 Level	1475	5	295 days
24		550 Level TO 580 Level	245	5	49 days
25					
26		**Lateral Waste Development**			**2049 days**
27		**80 Block**			**279 days**
28		45 Sub Level Lateral Development	185	5	37 days
29		65 Sub Level Lateral Development	224	5	45 days
30		80 Level Lateral Development	206	4	52 days
31		**170 Block**			**234 days**
32		110 Sub Level Lateral Development	181	5	37 days
33		110 Sub Level Sill Pillar Access	30	5	6 days
34		140 Sub Level Lateral Development	131	4	33 days
35		170 Level Lateral Development	116	4	29 days
36		**270 Block**			**142 days**
37		200 Sub Level Lateral Development	172	5	35 days
38		235 Sub Level Lateral Development	205	5	41 days



Project: Very Preliminary dev and prod
Date: 08-16-12

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

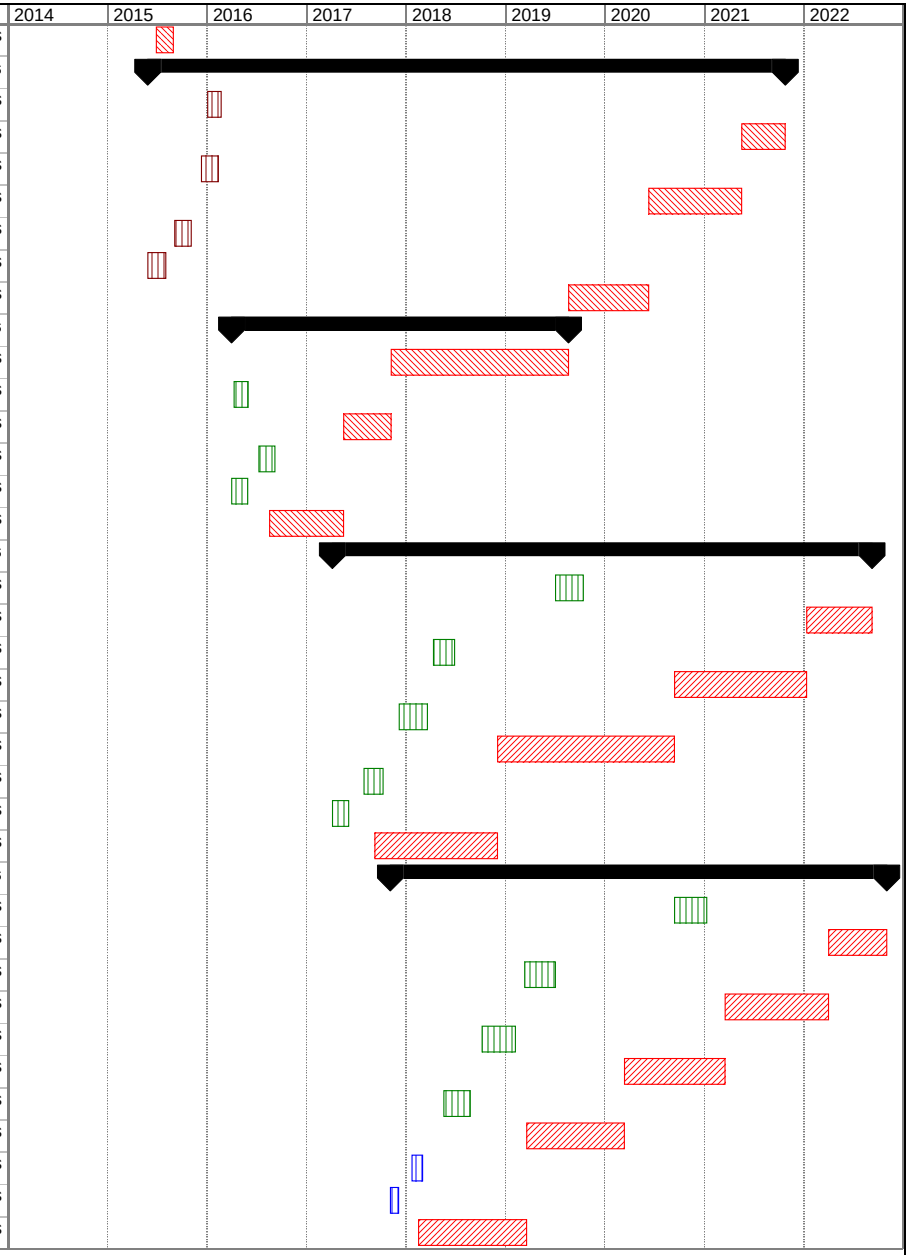
ID		Task Name	Quantity	Rate	Duration
39		270 Level Lateral Development	206	5	42 days
40		**410 Block**			**896 days**
41		305 Sub Level Lateral Development	106	5	22 days
42		305 Sub Level - HW Exploration Drift	630	2.5	252 days
43		305 Sub Level Sill Pillar Access	82	5	17 days
44		340 Sub Level Lateral Development	294	5	59 days
45		375 Sub Level Lateral Development	277	5	56 days
46		410 Level Lateral Development	278	4	70 days
47		**550 Block**			**1004 days**
48		445 Sub Level Lateral Development	170	5	34 days
49		445 Sub Level Sill Pillar Access	93	5	19 days
50		480 Sub Level Lateral Development	213	5	43 days
51		515 Sub Level Lateral Development	187	5	38 days
52		550 Level Lateral Development	166	5	34 days
53		580 Level Lateral Development	27	5	6 days
54					
55		**Raises**			**1288 days**
56		FA near Portal	25	2.4	16 days
57		FA 80 L to Surface	83	2.4	41 days
58		FA 170 L TO 80 L	91	2.4	44 days
59		FA 270 L TO 170 L	104	2.4	49 days
60		FA 410 L TO 270 L	147	2.4	67 days
61		FA 550 L TO 410 L	148	2.4	68 days
62					
63					
64		**Production**			**2747 days**
65		**Iron Formation**			**381 days**
66		45 Sub Level - UC IF	7389	125	60 days
67		Stoping 65 L Block - IF	16343	175	94 days
68		65 Sub Level - UC IF	7718	100	78 days
69		80 Level - UC IF	6609	100	67 days
70		Stoping 80 L Block - IF	9863	150	66 days
71		**Massive**			**2747 days**
72		**80 Block**			**343 days**
73		45 Sub Level - UC	5936	100	60 days
74		Stoping 65 L Block - MS	12556	225	56 days
75		65 Sub Level - UC	5695	100	57 days
76		80 Level - UC	5697	100	57 days



Project: Very Preliminary dev and prod
Date: 08-16-12

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

ID		Task Name	Quantity	Rate	Duration
77		Stoping 80 L Block - MS	9429	150	63 days
78		**170 Block**			**2251 days**
79		110 Sub Level - OC	8619	175	50 days
80		Stoping 110 L Block	15929	100	160 days
81		110 Sub Level - UC	10538	225	47 days
82		Stoping 140 L Block	48802	150	326 days
83		140 Sub Level - UC	13626	225	61 days
84		170 Level - UC	14729	225	66 days
85		Stoping 170 L Block	55981	200	280 days
86		**270 Block**			**1192 days**
87		Stoping 200 L Block	46507	75	621 days
88		200 Sub Level - UC	15114	300	51 days
89		Stoping 235 L Block	65140	325	175 days
90		235 Sub Level - UC	17692	300	59 days
91		270 Level - UC	17597	300	59 days
92		Stoping 270 L Block	89937	350	257 days
93		**410 Block**			**1907 days**
94		305 Sub Level - OC	17816	175	102 days
95		Stoping 305 L Block	65955	275	240 days
96		305 Sub Level - UC	17446	225	78 days
97		Stoping 340 L Block	113860	250	456 days
98		340 Sub Level - UC	20007	225	89 days
99		Stoping 375 L Block	139381	225	620 days
100		375 Sub Level - UC	20919	300	70 days
101		410 Level - UC	17849	300	60 days
102		Stoping 410 L Block	130316	300	435 days
103		**550 Block**			**1748 days**
104		445 Sub Level - OC	18052	175	104 days
105		Stoping 445 L Block	85423	400	214 days
106		445 Sub Level - UC	19628	175	113 days
107		Stoping 480 L Block	145672	400	365 days
108		480 Sub Level - UC	18844	175	108 days
109		Stoping 515 L Block	124088	350	355 days
110		515 Sub Level - UC	16885	175	97 days
111		Stoping 550 L Block	120123	350	344 days
112		550 Level - UC	16267	420	39 days
113		580 Level - UC	8787	300	30 days
114		Stoping 580 L Block	76266	200	382 days



Project: Very Preliminary dev and prod
Date: 08-16-12

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

APPENDIX J

CAPITAL AND OEPRATING COST ESTIMATES DETAILS

Cost Breakdown Structure Details
STANTEC CONSULTING LTD.
Job Code: 169511557 - Vent Rev
Description: Hart Project - Liberty Mines

From Cost Item: 1 **To Cost Item: 1.9.9**

		Cost Item					Total Costs by Category								
CBS Position Code	CI Description	Cost Source	Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1	Hart Mine	Detail	1.00	LS	210,353,624.83	210,353,624.83	87,141,476.50	26,523,855.11	1,272,800.00	39,336,408.30	30,197,640.64	2,822,440.00	200,005.78	21,717,057.00	1,141,941.50
1.1	Surface Construction	Detail	1.00	LS	8,625,419.78	8,625,419.78	753,582.17	97,497.95	24,000.00	3,222,475.44	307,198.94	306,400.00	200,005.78	2,572,318.00	1,141,941.50
1.1.1	Site Clearing	Plug	50,600.00	Cubic Meter	13.08	661,853.78	0.00	0.00	0.00	0.00	0.00	0.00	5.78	0.00	661,848.00
1.1.2	Surface Leveling	Plug	1.00	LS	250,000.00	250,000.00	0.00	0.00	0.00	0.00	0.00	250,000.00	0.00	0.00	0.00
1.1.3	Office Complex	Detail	1.00	LS	244,093.50	244,093.50	0.00	0.00	0.00	0.00	0.00	38,000.00	0.00	0.00	206,093.50
1.1.3.1	Materials	Detail	1.00	LS	244,093.50	244,093.50	0.00	0.00	0.00	0.00	0.00	38,000.00	0.00	0.00	206,093.50
1.1.3.1.1	Delivery	Plug	1.00	LS	2,100.00	2,100.00	0.00	0.00	0.00	0.00	0.00	2,100.00	0.00	0.00	0.00
1.1.3.1.2	Return	Plug	1.00	LS	2,100.00	2,100.00	0.00	0.00	0.00	0.00	0.00	2,100.00	0.00	0.00	0.00
1.1.3.1.3	Installation	Plug	1.00	LS	25,000.00	25,000.00	0.00	0.00	0.00	0.00	0.00	25,000.00	0.00	0.00	0.00
1.1.3.1.4	Demobilization	Plug	1.00	LS	8,800.00	8,800.00	0.00	0.00	0.00	0.00	0.00	8,800.00	0.00	0.00	0.00
1.1.3.1.5	Office Supplies and Furniture	Detail	1.00	LS	206,093.50	206,093.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	206,093.50
1.1.3.1.5.1	Software Licences	Plug	1.00	LS	5,000.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,000.00
1.1.3.1.5.2	Misc. Specialty Software Allowance	Plug	1.00	LS	10,460.00	10,460.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,460.00
1.1.3.1.5.3	IP Phones Telephones Cellphone etc 50 units	Plug	1.00	Each	1,987.40	1,987.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,987.40
1.1.3.1.5.4	Computer and Accessories	Plug	1.00	Each	28,503.50	28,503.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28,503.50
1.1.3.1.5.5	Printer Plotter and Scanners	Plug	1.00	Each	78,450.00	78,450.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78,450.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.1.3.1.5.6	Owner's Team - IT support & maintenance charges	Plug	1.00	LS	26,150.00	26,150.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26,150.00
1.1.3.1.5.7	Office Furniture	Plug	1.00	Each	42,467.60	42,467.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42,467.60
1.1.3.1.5.8	Signage	Plug	1.00	LS	7,845.00	7,845.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,845.00
1.1.3.1.5.9	Miscellaneous Equipment & Supplies (Salt & Sand boxes Boot Washers etc)	Plug	1.00	LS	5,230.00	5,230.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,230.00
1.1.4	Office Trailer	Detail	1.00	LS	1,600.00	1,600.00	0.00	0.00	0.00	0.00	0.00	1,600.00	0.00	0.00	0.00
1.1.4.1	Materials	Detail	1.00	LS	1,600.00	1,600.00	0.00	0.00	0.00	0.00	0.00	1,600.00	0.00	0.00	0.00
1.1.4.1.1	Delivery	Plug	1.00	LS	900.00	900.00	0.00	0.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00
1.1.4.1.2	Return	Plug	1.00	LS	400.00	400.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
1.1.4.1.3	Block and Level	Plug	1.00	LS	300.00	300.00	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
1.1.5	Dry Complex	Detail	1.00	LS	328,954.00	328,954.00	0.00	0.00	0.00	37,050.00	176,104.00	15,800.00	0.00	0.00	100,000.00
1.1.5.1	Materials	Detail	1.00	LS	328,954.00	328,954.00	0.00	0.00	0.00	37,050.00	176,104.00	15,800.00	0.00	0.00	100,000.00
1.1.5.1.1	Delivery	Plug	1.00	LS	1,200.00	1,200.00	0.00	0.00	0.00	0.00	0.00	1,200.00	0.00	0.00	0.00
1.1.5.1.2	Return	Plug	1.00	LS	1,200.00	1,200.00	0.00	0.00	0.00	0.00	0.00	1,200.00	0.00	0.00	0.00
1.1.5.1.3	Block and Level	Plug	1.00	LS	900.00	900.00	0.00	0.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00
1.1.5.1.4	Supply and Install Insulated Skirting	Plug	1.00	LS	12,500.00	12,500.00	0.00	0.00	0.00	0.00	0.00	12,500.00	0.00	0.00	0.00
1.1.5.1.5	10,000 Liters Tank(Procurement, Design and Installation)	Plug	1.00	LS	100,000.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00
1.1.5.1.6	Piping Supplies	Detail	1.00	LS	45,154.00	45,154.00	0.00	0.00	0.00	37,050.00	8,104.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
IMEL1000	Heattrace	200.00		Meter	185.25	37,050.00	0.00	0.00	0.00	37,050.00	0.00	0.00	0.00	0.00	0.00
SUPI1056	DN200 HDPE	200.00		Meter	40.52	8,104.00	0.00	0.00	0.00	0.00	8,104.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.1.5.1.7	Caps, Lamps, Supplies	Plug	1.00	LS	168,000.00	168,000.00	0.00	0.00	0.00	0.00	168,000.00	0.00	0.00	0.00	0.00
1.1.6	Security Building	Detail	1.00	LS	1,000.00	1,000.00	0.00	0.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00
1.1.6.1	Materials	Detail	1.00	LS	1,000.00	1,000.00	0.00	0.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00
1.1.6.1.1	Delivery	Plug	1.00	LS	400.00	400.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
1.1.6.1.2	Return	Plug	1.00	LS	400.00	400.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
1.1.6.1.3	Block and Level	Plug	1.00	LS	200.00	200.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00
1.1.7	Surface Shop	Detail	1.00	LS	1,071,322.56	1,071,322.56	215,913.70	33,880.80	0.00	493,307.92	8,220.14	0.00	200,000.00	120,000.00	0.00
1.1.7.1	Civil Labour	Detail	15.00	Day	4,543.28	68,149.20	65,461.20	0.00	0.00	2,688.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner	1.00	210.00	Each	63.82	13,402.20	12,612.60	0.00	0.00	789.60	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner	2.00	420.00	Each	60.09	25,237.80	23,658.60	0.00	0.00	1,579.20	0.00	0.00	0.00	0.00	0.00
LASC2002	Cement Finisher	2.00	420.00	Each	70.26	29,509.20	29,190.00	0.00	0.00	319.20	0.00	0.00	0.00	0.00	0.00
1.1.7.2	Steel Labour	Detail	25.00	Day	6,068.26	151,706.50	150,452.50	0.00	0.00	1,254.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAST1000	Ironworker Structural Lead	1.00	275.00	Each	93.61	25,742.75	25,533.75	0.00	0.00	209.00	0.00	0.00	0.00	0.00	0.00
LAST1002	Ironworker Structural	5.00	1,375.00	Each	91.61	125,963.75	124,918.75	0.00	0.00	1,045.00	0.00	0.00	0.00	0.00	0.00

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1.1.7.3	Materials	Detail	1.00	LS	497,586.06	497,586.06	0.00	0.00	0.00	489,365.92	8,220.14	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1005	Building Steel		20,000.00	Kilogram	4.00	80,000.00	0.00	0.00	0.00	80,000.00	0.00	0.00	0.00	0.00	0.00
IMST1006	Building Cladding		1,400.00	Square Meter	175.00	245,000.00	0.00	0.00	0.00	245,000.00	0.00	0.00	0.00	0.00	0.00
AIMCO1001	Rebar, Form, and Pour Foundations		38.00	Cubic Meter	386.58	14,690.22	0.00	0.00	0.00	14,690.22	0.00	0.00	0.00	0.00	0.00
IMFU1000	Lube Cube		5.00	Each	2,400.00	12,000.00	0.00	0.00	0.00	12,000.00	0.00	0.00	0.00	0.00	0.00
IMOP1001	Rollup Door		3.00	Each	18,000.00	54,000.00	0.00	0.00	0.00	54,000.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		10,000.00	Kilogram	4.50	45,000.00	0.00	0.00	0.00	45,000.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		17.00	Square Meter	40.00	680.00	0.00	0.00	0.00	680.00	0.00	0.00	0.00	0.00	0.00
IMOP2000	Steel Door - Insulated		2.00	Each	1,200.00	2,400.00	0.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00
AIMCO1002	Mesh and Pour Floors		72.00	Cubic Meter	279.05	20,091.61	0.00	0.00	0.00	20,091.61	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		100.00	Meter	14.09	1,409.31	0.00	0.00	0.00	320.21	1,089.10	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		100.00	Meter	71.31	7,131.04	0.00	0.00	0.00	0.00	7,131.04	0.00	0.00	0.00	0.00
AIMCO1000	Rebar, Form, and Pour Walls		34.00	Cubic Meter	446.58	15,183.88	0.00	0.00	0.00	15,183.88	0.00	0.00	0.00	0.00	0.00
1.1.7.4	Misc. Tool Allowance	Plug	1.00	LS	200,000.00	200,000.00	0.00	0.00	0.00	0.00	0.00	0.00	200,000.00	0.00	0.00
1.1.7.5	Equipment Operating	Detail	480.00	Hour	70.59	33,880.80	0.00	33,880.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	480.00 Each	61.10	29,328.00	0.00	29,328.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.10	48.00 Each	83.20	3,993.60	0.00	3,993.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CESM1000	Pickup Truck		0.10	48.00 Each	11.65	559.20	0.00	559.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.7.6	20T O/H Crane	Plug	1.00	LS	120,000.00	120,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120,000.00	0.00
1.1.8	Compressor Building	Detail	1.00	LS	622,486.92	622,486.92	78,162.71	16,660.80	24,000.00	503,663.42	0.00	0.00	0.00	0.00	0.00
1.1.8.1	Labour	Detail	34.00	Day	2,449.04	83,267.36	78,162.71	0.00	0.00	5,104.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	374.00 Each	63.82	23,868.68	22,462.44	0.00	0.00	1,406.24	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	748.00 Each	60.09	44,947.32	42,134.84	0.00	0.00	2,812.48	0.00	0.00	0.00	0.00	0.00

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1.1.8.2	Materials	Detail	1.00	LS	498,558.76	498,558.76	0.00	0.00	0.00	498,558.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1006	Building Cladding		700.00	Square Meter	175.00	122,500.00	0.00	0.00	0.00	122,500.00	0.00	0.00	0.00	0.00	0.00
IMST1005	Building Steel		18,000.00	Kilogram	4.00	72,000.00	0.00	0.00	0.00	72,000.00	0.00	0.00	0.00	0.00	0.00
IMOP1001	Rollup Door		1.00	Each	18,000.00	18,000.00	0.00	0.00	0.00	18,000.00	0.00	0.00	0.00	0.00	0.00
IMOP2000	Steel Door - Insulated		3.00	Each	1,200.00	3,600.00	0.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00
IEAC1000	300 HP Air Compressor		2.00	Each	124,300.00	248,600.00	0.00	0.00	0.00	248,600.00	0.00	0.00	0.00	0.00	0.00
AIMCO1002	Mesh and Pour Floors		34.00	Cubic Meter	279.05	9,487.70	0.00	0.00	0.00	9,487.70	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		50.00	Meter	101.36	5,068.16	0.00	0.00	0.00	5,068.16	0.00	0.00	0.00	0.00	0.00
AIMCO1001	Rebar, Form, and Pour Foundations		31.00	Cubic Meter	406.58	12,604.13	0.00	0.00	0.00	12,604.13	0.00	0.00	0.00	0.00	0.00
AIMCO1000	Rebar, Form, and Pour Walls		15.00	Cubic Meter	446.58	6,698.77	0.00	0.00	0.00	6,698.77	0.00	0.00	0.00	0.00	0.00
1.1.8.3	Equipment Operating	Detail	240.00	Hour	169.42	40,660.80	0.00	16,660.80	24,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	240.00 Each	61.10	14,664.00	0.00	14,664.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.10	24.00 Each	83.20	1,996.80	0.00	1,996.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESM1000	Crane		0.10	24.00 Each	1,000.00	24,000.00	0.00	0.00	24,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.9	Ore Pad	Detail	1.00	LS	131,708.90	131,708.90	11,395.22	7,089.60	0.00	113,224.07	0.00	0.00	0.00	0.00	0.00
1.1.9.1	Labour	Detail	3.00	Day	4,048.64	12,145.91	11,395.22	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	33.00 Each	63.82	2,106.06	1,981.98	0.00	0.00	124.08	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		4.00	132.00 Each	60.09	7,931.88	7,435.56	0.00	0.00	496.32	0.00	0.00	0.00	0.00	0.00
1.1.9.2	Materials	Detail	1.00	LS	112,473.39	112,473.39	0.00	0.00	0.00	112,473.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		990.00	Square Meter	4.97	4,920.30	0.00	0.00	0.00	4,920.30	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		297.00	Cubic Meter	262.50	77,962.50	0.00	0.00	0.00	77,962.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		495.00	Meter	4.73	2,341.35	0.00	0.00	0.00	2,341.35	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		13,365.00	Kilogram	1.50	20,047.50	0.00	0.00	0.00	20,047.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		69.00	Square Meter	40.00	2,760.00	0.00	0.00	0.00	2,760.00	0.00	0.00	0.00	0.00	0.00
IMMS1009	Geomembrane - 60 mil polyethylene		1,000.00	Square Meter	4.00	4,000.00	0.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		248.00	Meter	1.78	441.74	0.00	0.00	0.00	441.74	0.00	0.00	0.00	0.00	0.00

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1.1.9.3	Equipment Operating	Detail	48.00	Hour	147.70	7,089.60	0.00	7,089.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1004	Tandem Haul Truck		0.25	12.00 Each	180.00	2,160.00	0.00	2,160.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.50	24.00 Each	83.20	1,996.80	0.00	1,996.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.10	Ballast Pad (No Concrete) 15m x 15m	Detail	1.00	LS	5,986.38	5,986.38	3,048.66	1,607.54	0.00	1,330.18	0.00	0.00	0.00	0.00	0.00
1.1.10.1	Labour	Detail	3.00	Day	1,082.95	3,248.84	3,048.66	0.00	0.00	200.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1008	Lead Construction Miner		1.00	11.00 Each	63.82	702.02	660.66	0.00	0.00	41.36	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	33.00 Each	60.09	1,982.97	1,858.89	0.00	0.00	124.08	0.00	0.00	0.00	0.00	0.00
1.1.10.2	Materials	Detail	1.00	LS	1,130.00	1,130.00	0.00	0.00	0.00	1,130.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMFI1000	Ballast		113.00	Cubic Meter	10.00	1,130.00	0.00	0.00	0.00	1,130.00	0.00	0.00	0.00	0.00	0.00
1.1.10.3	Equipment Operating	Detail	48.00	Hour	33.49	1,607.54	0.00	1,607.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	11.00 Each	146.14	1,607.54	0.00	1,607.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.11	Waste Pad (No concrete) 30m x 30m	Detail	1.00	LS	14,212.76	14,212.76	6,097.31	3,215.08	0.00	4,900.36	0.00	0.00	0.00	0.00	0.00
1.1.11.1	Labour	Detail	3.00	Day	2,165.89	6,497.68	6,097.31	0.00	0.00	400.36	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1008	Lead Construction Miner		1.00	22.00 Each	63.82	1,404.04	1,321.32	0.00	0.00	82.72	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	66.00 Each	60.09	3,965.94	3,717.78	0.00	0.00	248.16	0.00	0.00	0.00	0.00	0.00
1.1.11.2	Materials	Detail	1.00	LS	4,500.00	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMFI1000	Ballast		450.00	Cubic Meter	10.00	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
1.1.11.3	Equipment Operating	Detail	48.00	Hour	66.98	3,215.08	0.00	3,215.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	22.00 Each	146.14	3,215.08	0.00	3,215.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.12	Waste Pad	Detail	1.00	LS	131,708.90	131,708.90	11,395.22	7,089.60	0.00	113,224.07	0.00	0.00	0.00	0.00	0.00

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1.1.12.1	Labour	Detail	3.00	Day	4,048.64	12,145.91	11,395.22	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	33.00 Each	63.82	2,106.06	1,981.98	0.00	0.00	124.08	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		4.00	132.00 Each	60.09	7,931.88	7,435.56	0.00	0.00	496.32	0.00	0.00	0.00	0.00	0.00
1.1.12.2	Materials	Detail	1.00	LS	112,473.39	112,473.39	0.00	0.00	0.00	112,473.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		990.00	Square Meter	4.97	4,920.30	0.00	0.00	0.00	4,920.30	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		297.00	Cubic Meter	262.50	77,962.50	0.00	0.00	0.00	77,962.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		495.00	Meter	4.73	2,341.35	0.00	0.00	0.00	2,341.35	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		13,365.00	Kilogram	1.50	20,047.50	0.00	0.00	0.00	20,047.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		69.00	Square Meter	40.00	2,760.00	0.00	0.00	0.00	2,760.00	0.00	0.00	0.00	0.00	0.00
IMMS1009	Geomembrane - 60 mil polyethylene		1,000.00	Square Meter	4.00	4,000.00	0.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		248.00	Meter	1.78	441.74	0.00	0.00	0.00	441.74	0.00	0.00	0.00	0.00	0.00
1.1.12.3	Equipment Operating	Detail	48.00	Hour	147.70	7,089.60	0.00	7,089.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1004	Tandem Haul Truck		0.25	12.00 Each	180.00	2,160.00	0.00	2,160.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.50	24.00 Each	83.20	1,996.80	0.00	1,996.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.13	Ramp Contractor Surface Setup	Plug	1.00	LS	150,000.00	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150,000.00
1.1.14	Portal	Detail	1.00	LS	491,068.43	491,068.43	133,609.15	16,385.41	0.00	224,199.07	92,874.80	0.00	0.00	0.00	24,000.00
1.1.14.1	Portal Construction	Detail	1.00	LS	491,068.43	491,068.43	133,609.15	16,385.41	0.00	224,199.07	92,874.80	0.00	0.00	0.00	24,000.00
1.1.14.1.1	Drilling	Detail	6,960.00	Meter	39.09	272,038.00	73,329.40	0.00	0.00	198,708.60	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	487.20 Each	67.82	33,041.90	31,210.03	0.00	0.00	1,831.87	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		1.00	487.20 Each	64.09	31,224.65	29,392.78	0.00	0.00	1,831.87	0.00	0.00	0.00	0.00	0.00
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	160,558.24	160,558.24	0.00	0.00	0.00	160,558.24	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.1.14.1.2	Blasting	Detail	85,680.00	Kilogram	1.19	101,728.78	10,292.10	0.00	0.00	1,617.83	89,818.85	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		3.00	126.00 Each	64.09	8,075.34	7,601.58	0.00	0.00	473.76	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	42.00 Each	67.82	2,848.44	2,690.52	0.00	0.00	157.92	0.00	0.00	0.00	0.00	0.00
SUEX1015	Emulsion		85,680.00	Kilogram	1.01	86,536.80	0.00	0.00	0.00	0.00	86,536.80	0.00	0.00	0.00	0.00
SUEX10016	Booster		815.00	Each	1.21	986.15	0.00	0.00	0.00	986.15	0.00	0.00	0.00	0.00	0.00
SUEX1001	Detonating Cord - B Line		1,000.00	Meter	0.78	780.00	0.00	0.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00
SUEX1012	Nonel LP		815.00	Each	3.07	2,502.05	0.00	0.00	0.00	0.00	2,502.05	0.00	0.00	0.00	0.00
1.1.14.1.3	Mucking	Detail	7,092.00	Cubic Meter	2.21	15,654.99	4,492.53	10,882.46	0.00	279.99	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	74.47 Each	146.14	10,882.46	0.00	10,882.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		1.00	74.47 Each	64.09	4,772.53	4,492.53	0.00	0.00	279.99	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.14.1.4	Ground Support	Detail	1.00	LS	19,605.00	19,605.00	10,292.10	0.00	0.00	9,312.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1001	Plate for Rebar 5"x5" x 3/8"		250.00	Each	1.42	355.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00	0.00	0.00
IMGS1003	Resin Cartridge Lokset- Slow 32mm-24in-M70 Sec		750.00	Each	1.10	825.00	0.00	0.00	0.00	825.00	0.00	0.00	0.00	0.00	0.00
IMGS1004	Resin Cartridge Lokset- Fast 32mm-24in-M35 Sec		250.00	Each	1.10	275.00	0.00	0.00	0.00	275.00	0.00	0.00	0.00	0.00	0.00
IMGS1012	2.4 m Resin Bolt		250.00	Each	12.75	3,187.50	0.00	0.00	0.00	3,187.50	0.00	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		500.00	Square Meter	4.97	2,485.00	0.00	0.00	0.00	2,485.00	0.00	0.00	0.00	0.00	0.00
IMGS1002	Dome Nut - Rebar Rockbolt #7 (7/8")		250.00	Each	1.94	485.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	126.00 Each	64.09	8,075.34	7,601.58	0.00	0.00	473.76	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	42.00 Each	67.82	2,848.44	2,690.52	0.00	0.00	157.92	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		600.00	Meter	1.78	1,068.72	0.00	0.00	0.00	1,068.72	0.00	0.00	0.00	0.00	0.00
1.1.14.1.5	Ramp Rounds (insert culvert)	Detail	15.00	Meter	3,869.44	58,041.66	35,203.01	5,502.95	0.00	14,279.75	3,055.95	0.00	0.00	0.00	0.00
1.1.14.1.5.1	4.5 x 4.7 Ramp Development - 2 m/day	Detail	15.00	Meter	3,869.44	58,041.66	35,203.01	5,502.95	0.00	14,279.75	3,055.95	0.00	0.00	0.00	0.00
1.1.14.1.5.1.1	Labour	Detail	15.00	Meter	2,490.18	37,352.70	35,203.01	0.00	0.00	2,149.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	157.50 Each	67.82	10,681.65	10,089.45	0.00	0.00	592.20	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	315.00 Each	64.09	20,188.35	19,003.95	0.00	0.00	1,184.40	0.00	0.00	0.00	0.00	0.00

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1.1.14.1.5.1.2	Materials	Detail	15.00	Meter	1,012.40	15,186.01	0.00	0.00	0.00	12,130.06	3,055.95	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		30.00	Meter	55.00	1,650.00	0.00	0.00	0.00	1,650.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		27.00	Cubic Meter	10.00	270.00	0.00	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	582.78	582.78	0.00	0.00	0.00	582.78	0.00	0.00	0.00	0.00	0.00
AIMGS1000	Ground Support - 4.5 x 4.7		1.00	Meter	2,992.06	2,992.06	0.00	0.00	0.00	2,992.06	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	428.70	85.74	0.00	0.00	0.00	85.74	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	1,520.45	1,520.45	0.00	0.00	0.00	1,520.45	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	1,069.66	1,069.66	0.00	0.00	0.00	0.00	1,069.66	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	701.34	701.34	0.00	0.00	0.00	701.34	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		84.00	Meter	46.78	3,929.60	0.00	0.00	0.00	3,929.60	0.00	0.00	0.00	0.00	0.00
ASUEX1000	Explosives - 4.5 x 4.7		1.00	Meter	1,986.29	1,986.29	0.00	0.00	0.00	0.00	1,986.29	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.90	Meter	26.72	398.10	0.00	0.00	0.00	398.10	0.00	0.00	0.00	0.00	0.00
1.1.14.1.5.1.3	Equipment Operating	Detail	15.00	Meter	366.86	5,502.95	0.00	5,502.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.20	12.66 Each	120.67	1,528.14	0.00	1,528.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.43	27.33 Each	33.57	917.53	0.00	917.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.04	2.28 Each	61.10	139.16	0.00	139.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.25	15.81 Each	184.61	2,918.12	0.00	2,918.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.14.1.6	Fencing	Plug	150.00	Meter	160.00	24,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24,000.00
1.1.15	Portal Ventilation System	Detail	1.00	LS	1,143,659.00	1,143,659.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,143,659.00	0.00
1.1.15.1	Fan, damper, silencer, 90 degree elbow, and controls	Plug	1.00	LS	395,500.00	395,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	395,500.00	0.00
1.1.15.2	Mine air heater, control, 400hp VFD drive and electrics	Plug	1.00	LS	423,159.00	423,159.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	423,159.00	0.00
1.1.15.3	Propane tank farm and installation (Temporary)	Plug	1.00	LS	225,000.00	225,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225,000.00	0.00
1.1.15.4	Engineering	Plug	1.00	LS	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50,000.00	0.00
1.1.15.5	Fan and heater installation	Plug	1.00	LS	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50,000.00	0.00

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1.1.16	Fresh Air Ventilation System	Detail	1.00	LS	1,243,659.00	1,243,659.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,243,659.00	0.00
1.1.16.1	Fan, damper, silencer, 90 degree elbow, and controls	Plug	1.00	LS	395,500.00	395,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	395,500.00	0.00
1.1.16.2	Mine air heater, control, 400hp VFD drive and electrics	Plug	1.00	LS	423,159.00	423,159.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	423,159.00	0.00
1.1.16.3	Propane tank and installation	Plug	1.00	LS	225,000.00	225,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225,000.00	0.00
1.1.16.4	Engineering	Plug	1.00	LS	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50,000.00	0.00
1.1.16.5	Fan and Heater Installation	Plug	1.00	LS	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50,000.00	0.00
1.1.16.6	Move1st fan from Portal FA raise to Main Intake raise and install	Plug	1.00	LS	100,000.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00	0.00
1.1.17	Surface Fuel Storage	Detail	1.00	LS	196,046.91	196,046.91	22,102.75	11,569.11	0.00	67,375.05	30,000.00	0.00	0.00	65,000.00	0.00
1.1.17.1	Labour	Detail	1.00	Day	23,554.07	23,554.07	22,102.75	0.00	0.00	1,451.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner	1.00	79.75	Each	63.82	5,089.65	4,789.79	0.00	0.00	299.86	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner	3.00	239.25	Each	60.09	14,376.53	13,476.95	0.00	0.00	899.58	0.00	0.00	0.00	0.00	0.00
1.1.17.2	Materials	Detail	1.00	LS	65,923.72	65,923.72	0.00	0.00	0.00	65,923.72	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMCO1003	Concrete - 35 MPa	49.00		Cubic Meter	262.50	12,862.50	0.00	0.00	0.00	12,862.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm	20.00		Meter	4.73	94.60	0.00	0.00	0.00	94.60	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar	2,450.00		Kilogram	1.50	3,675.00	0.00	0.00	0.00	3,675.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork	101.00		Square Meter	40.00	4,040.00	0.00	0.00	0.00	4,040.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	140.00		Cubic Meter	10.00	1,400.00	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00
IMST1005	Building Steel	10,954.00		Kilogram	4.00	43,816.00	0.00	0.00	0.00	43,816.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	20.00		Meter	1.78	35.62	0.00	0.00	0.00	35.62	0.00	0.00	0.00	0.00	0.00
1.1.17.3	Equipment Operating	Detail	1.00	Hour	11,569.11	11,569.11	0.00	11,569.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1005	Transmixer Concrete/Shotcrete	0.50	25.38	Each	83.20	2,111.20	0.00	2,111.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck	1.00	50.75	Each	61.10	3,100.83	0.00	3,100.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CESM1001	Cat 980 Loader	0.86	43.50	Each	146.14	6,357.09	0.00	6,357.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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		Cost Item					Total Costs by Category								
1.1.17.4	25,000 L Tank, Pump, and Controls Purchase	Plug	1.00	LS	65,000.00	65,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65,000.00	0.00
1.1.17.5	First Fills	Plug	1.00	LS	30,000.00	30,000.00	0.00	0.00	0.00	0.00	30,000.00	0.00	0.00	0.00	0.00
1.1.18	Pastefill Plant	Plug	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.19	Surface Electrical	Detail	1.00	LS	1,936,058.75	1,936,058.75	271,857.45	0.00	0.00	1,664,201.29	0.00	0.00	0.00	0.00	0.00
1.1.19.1	Surface Substation	Plug	0.90	LS	764,530.41	688,077.37	40,110.34	0.00	0.00	647,967.03	0.00	0.00	0.00	0.00	0.00
1.1.19.2	Surface Transmission	Plug	0.90	LS	135,222.55	121,700.30	24,298.25	0.00	0.00	97,402.05	0.00	0.00	0.00	0.00	0.00
1.1.19.3	Office Dry	Plug	0.90	LS	140,484.03	126,435.63	38,641.14	0.00	0.00	87,794.49	0.00	0.00	0.00	0.00	0.00
1.1.19.4	Warehouse Shop Sht 1	Plug	0.90	LS	248,795.71	223,916.14	43,976.55	0.00	0.00	179,939.59	0.00	0.00	0.00	0.00	0.00
1.1.19.5	Warehouse Shop Sht 2	Plug	0.90	LS	86,134.23	77,520.81	23,149.13	0.00	0.00	54,371.68	0.00	0.00	0.00	0.00	0.00
1.1.19.6	Pastefill Plant Sht 1	Plug	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.19.7	Pastefill Plant Sht 2	Plug	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1.19.8	Fresh Air Fans Sht 1	Plug	1.00	LS	316,079.00	316,079.00	43,935.00	0.00	0.00	272,144.00	0.00	0.00	0.00	0.00	0.00
1.1.19.9	Fresh Air Fans Sht 2	Plug	1.00	LS	42,125.00	42,125.00	6,906.00	0.00	0.00	35,219.00	0.00	0.00	0.00	0.00	0.00
1.1.19.10	Portal FAR Sht 1	Plug	1.00	LS	298,078.86	298,078.86	43,934.60	0.00	0.00	254,144.26	0.00	0.00	0.00	0.00	0.00
1.1.19.11	Portal FAR Sht 2	Plug	1.00	LS	42,125.65	42,125.65	6,906.46	0.00	0.00	35,219.19	0.00	0.00	0.00	0.00	0.00
1.2	Underground Construction	Detail	1.00	LS	8,943,041.52	8,943,041.52	1,761,546.11	279,554.52	0.00	6,685,351.84	85,350.05	0.00	0.00	131,239.00	0.00
1.2.1	PRV - 80L	Plug	1.00	LS	5,000.00	5,000.00	0.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00
1.2.2	PRV - 270L	Plug	1.00	LS	5,000.00	5,000.00	0.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00
1.2.3	PRV - 445L	Plug	1.00	LS	5,000.00	5,000.00	0.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00
1.2.4	Level Sump - 80L	Detail	1.00	LS	271,082.03	271,082.03	73,167.73	7,872.03	0.00	183,941.25	6,101.02	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.4.1	Labour	Detail	12.00	Day	6,497.68	77,972.11	73,167.73	0.00	0.00	4,804.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	264.00 Each	63.82	16,848.48	15,855.84	0.00	0.00	992.64	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	792.00 Each	60.09	47,591.28	44,613.36	0.00	0.00	2,977.92	0.00	0.00	0.00	0.00	0.00
1.2.4.2	Materials	Detail	1.00	LS	185,237.90	185,237.90	0.00	0.00	0.00	179,136.88	6,101.02	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMHO1000	2 Tonne Monorail		18.30	Meter	165.00	3,019.50	0.00	0.00	0.00	3,019.50	0.00	0.00	0.00	0.00	0.00
IMHO1001	2 Tonne Lifting Lug		1.00	Each	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		3,360.00	Kilogram	4.50	15,120.00	0.00	0.00	0.00	15,120.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		10.00	Square Meter	40.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		30.00	Meter	4.73	141.90	0.00	0.00	0.00	141.90	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		230.00	Meter	30.00	6,900.00	0.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00
SUPI1013	150 mm (6") Victaulic Coupling Type 77		30.00	Each	23.56	706.70	0.00	0.00	0.00	706.70	0.00	0.00	0.00	0.00	0.00
SUPI1045	150 mm Butterfly Valve Victaulic		4.00	Each	318.00	1,272.00	0.00	0.00	0.00	0.00	1,272.00	0.00	0.00	0.00	0.00
SUPI1037	150 mm Victaulic 90 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1038	150 mm Victaulic 45 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1040	150mm Victaulic 11.25 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
SUPI1039	150 mm victaulic 22.5 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		72.00	Square Meter	4.97	357.84	0.00	0.00	0.00	357.84	0.00	0.00	0.00	0.00	0.00
IEPU1010	100 HP Horizontal Pump		2.00	Each	65,000.00	130,000.00	0.00	0.00	0.00	130,000.00	0.00	0.00	0.00	0.00	0.00
IEPU1015	30 HP Summersible Pump		1.00	Each	17,000.00	17,000.00	0.00	0.00	0.00	17,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		50.00	Meter	71.31	3,565.52	0.00	0.00	0.00	0.00	3,565.52	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		30.00	Meter	1.78	53.44	0.00	0.00	0.00	53.44	0.00	0.00	0.00	0.00	0.00
1.2.4.3	Equipment Operating	Detail	48.00	Hour	164.00	7,872.03	0.00	7,872.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	48.00 Each	33.57	1,611.36	0.00	1,611.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.83	40.00 Each	83.20	3,327.87	0.00	3,327.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.5	Level Sump - 270L	Detail	1.00	LS	271,082.03	271,082.03	73,167.73	7,872.03	0.00	183,941.25	6,101.02	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.5.1	Labour	Detail	12.00	Day	6,497.68	77,972.11	73,167.73	0.00	0.00	4,804.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	264.00 Each	63.82	16,848.48	15,855.84	0.00	0.00	992.64	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	792.00 Each	60.09	47,591.28	44,613.36	0.00	0.00	2,977.92	0.00	0.00	0.00	0.00	0.00
1.2.5.2	Materials	Detail	1.00	LS	185,237.90	185,237.90	0.00	0.00	0.00	179,136.88	6,101.02	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMHO1000	2 Tonne Monorail		18.30	Meter	165.00	3,019.50	0.00	0.00	0.00	3,019.50	0.00	0.00	0.00	0.00	0.00
IMHO1001	2 Tonne Lifting Lug		1.00	Each	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		3,360.00	Kilogram	4.50	15,120.00	0.00	0.00	0.00	15,120.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		10.00	Square Meter	40.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		30.00	Meter	4.73	141.90	0.00	0.00	0.00	141.90	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		230.00	Meter	30.00	6,900.00	0.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00
SUPI1013	150 mm (6") Victaulic Coupling Type 77		30.00	Each	23.56	706.70	0.00	0.00	0.00	706.70	0.00	0.00	0.00	0.00	0.00
SUPI1045	150 mm Butterfly Valve Victaulic		4.00	Each	318.00	1,272.00	0.00	0.00	0.00	0.00	1,272.00	0.00	0.00	0.00	0.00
SUPI1037	150 mm Victaulic 90 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1038	150 mm Victaulic 45 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1040	150mm Victaulic 11.25 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
SUPI1039	150 mm victaulic 22.5 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		72.00	Square Meter	4.97	357.84	0.00	0.00	0.00	357.84	0.00	0.00	0.00	0.00	0.00
IEPU1010	100 HP Horizontal Pump		2.00	Each	65,000.00	130,000.00	0.00	0.00	0.00	130,000.00	0.00	0.00	0.00	0.00	0.00
IEPU1015	30 HP Summersible Pump		1.00	Each	17,000.00	17,000.00	0.00	0.00	0.00	17,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		50.00	Meter	71.31	3,565.52	0.00	0.00	0.00	0.00	3,565.52	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		30.00	Meter	1.78	53.44	0.00	0.00	0.00	53.44	0.00	0.00	0.00	0.00	0.00
1.2.5.3	Equipment Operating	Detail	48.00	Hour	164.00	7,872.03	0.00	7,872.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	48.00 Each	33.57	1,611.36	0.00	1,611.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.83	40.00 Each	83.20	3,327.87	0.00	3,327.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.6	Level Sump - 410L	Detail	1.00	LS	271,082.03	271,082.03	73,167.73	7,872.03	0.00	183,941.25	6,101.02	0.00	0.00	0.00	0.00

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1.2.6.1	Labour	Detail	12.00	Day	6,497.68	77,972.11	73,167.73	0.00	0.00	4,804.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	264.00 Each	63.82	16,848.48	15,855.84	0.00	0.00	992.64	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	792.00 Each	60.09	47,591.28	44,613.36	0.00	0.00	2,977.92	0.00	0.00	0.00	0.00	0.00
1.2.6.2	Materials	Detail	1.00	LS	185,237.90	185,237.90	0.00	0.00	0.00	179,136.88	6,101.02	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMHO1000	2 Tonne Monorail		18.30	Meter	165.00	3,019.50	0.00	0.00	0.00	3,019.50	0.00	0.00	0.00	0.00	0.00
IMHO1001	2 Tonne Lifting Lug		1.00	Each	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		3,360.00	Kilogram	4.50	15,120.00	0.00	0.00	0.00	15,120.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		10.00	Square Meter	40.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		30.00	Meter	4.73	141.90	0.00	0.00	0.00	141.90	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		230.00	Meter	30.00	6,900.00	0.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00
SUPI1013	150 mm (6") Victaulic Coupling Type 77		30.00	Each	23.56	706.70	0.00	0.00	0.00	706.70	0.00	0.00	0.00	0.00	0.00
SUPI1045	150 mm Butterfly Valve Victaulic		4.00	Each	318.00	1,272.00	0.00	0.00	0.00	0.00	1,272.00	0.00	0.00	0.00	0.00
SUPI1037	150 mm Victaulic 90 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1038	150 mm Victaulic 45 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1040	150mm Victaulic 11.25 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
SUPI1039	150 mm victaulic 22.5 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		72.00	Square Meter	4.97	357.84	0.00	0.00	0.00	357.84	0.00	0.00	0.00	0.00	0.00
IEPU1010	100 HP Horizontal Pump		2.00	Each	65,000.00	130,000.00	0.00	0.00	0.00	130,000.00	0.00	0.00	0.00	0.00	0.00
IEPU1015	30 HP Summersible Pump		1.00	Each	17,000.00	17,000.00	0.00	0.00	0.00	17,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		50.00	Meter	71.31	3,565.52	0.00	0.00	0.00	0.00	3,565.52	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		30.00	Meter	1.78	53.44	0.00	0.00	0.00	53.44	0.00	0.00	0.00	0.00	0.00
1.2.6.3	Equipment Operating	Detail	48.00	Hour	164.00	7,872.03	0.00	7,872.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	48.00 Each	33.57	1,611.36	0.00	1,611.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.83	40.00 Each	83.20	3,327.87	0.00	3,327.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.7	Level Sump - 550L	Detail	1.00	LS	271,082.03	271,082.03	73,167.73	7,872.03	0.00	183,941.25	6,101.02	0.00	0.00	0.00	0.00

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1.2.7.1	Labour	Detail	12.00	Day	6,497.68	77,972.11	73,167.73	0.00	0.00	4,804.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	264.00 Each	63.82	16,848.48	15,855.84	0.00	0.00	992.64	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	792.00 Each	60.09	47,591.28	44,613.36	0.00	0.00	2,977.92	0.00	0.00	0.00	0.00	0.00
1.2.7.2	Materials	Detail	1.00	LS	185,237.90	185,237.90	0.00	0.00	0.00	179,136.88	6,101.02	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMHO1000	2 Tonne Monorail		18.30	Meter	165.00	3,019.50	0.00	0.00	0.00	3,019.50	0.00	0.00	0.00	0.00	0.00
IMHO1001	2 Tonne Lifting Lug		1.00	Each	1,500.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		3,360.00	Kilogram	4.50	15,120.00	0.00	0.00	0.00	15,120.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		10.00	Square Meter	40.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		30.00	Meter	4.73	141.90	0.00	0.00	0.00	141.90	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		230.00	Meter	30.00	6,900.00	0.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00
SUPI1013	150 mm (6") Victaulic Coupling Type 77		30.00	Each	23.56	706.70	0.00	0.00	0.00	706.70	0.00	0.00	0.00	0.00	0.00
SUPI1045	150 mm Butterfly Valve Victaulic		4.00	Each	318.00	1,272.00	0.00	0.00	0.00	0.00	1,272.00	0.00	0.00	0.00	0.00
SUPI1037	150 mm Victaulic 90 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1038	150 mm Victaulic 45 Degrees Elbow		10.00	Each	39.75	397.50	0.00	0.00	0.00	0.00	397.50	0.00	0.00	0.00	0.00
SUPI1040	150mm Victaulic 11.25 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
SUPI1039	150 mm victaulic 22.5 Degrees Elbow		5.00	Each	46.85	234.25	0.00	0.00	0.00	0.00	234.25	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		72.00	Square Meter	4.97	357.84	0.00	0.00	0.00	357.84	0.00	0.00	0.00	0.00	0.00
IEPU1010	100 HP Horizontal Pump		2.00	Each	65,000.00	130,000.00	0.00	0.00	0.00	130,000.00	0.00	0.00	0.00	0.00	0.00
IEPU1015	30 HP Summersible Pump		1.00	Each	17,000.00	17,000.00	0.00	0.00	0.00	17,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		50.00	Meter	71.31	3,565.52	0.00	0.00	0.00	0.00	3,565.52	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		30.00	Meter	1.78	53.44	0.00	0.00	0.00	53.44	0.00	0.00	0.00	0.00	0.00
1.2.7.3	Equipment Operating	Detail	48.00	Hour	164.00	7,872.03	0.00	7,872.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	48.00 Each	33.57	1,611.36	0.00	1,611.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	48.00 Each	61.10	2,932.80	0.00	2,932.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.83	40.00 Each	83.20	3,327.87	0.00	3,327.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.8	Powder Magazine - 80L	Detail	1.00	LS	77,611.94	77,611.94	25,078.94	8,845.74	0.00	43,687.26	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.8.1	Labour	Detail	5.00	Day	5,343.36	26,716.80	25,078.94	0.00	0.00	1,637.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	120.00 Each	63.82	7,658.40	7,207.20	0.00	0.00	451.20	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	240.00 Each	60.09	14,421.60	13,519.20	0.00	0.00	902.40	0.00	0.00	0.00	0.00	0.00
1.2.8.2	Materials	Detail	1.00	LS	42,049.40	42,049.40	0.00	0.00	0.00	42,049.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		20.00	Square Meter	4.97	99.40	0.00	0.00	0.00	99.40	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		1,000.00	Kilogram	4.50	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		18.00	Cubic Meter	350.00	6,300.00	0.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		1,000.00	Meter	30.00	30,000.00	0.00	0.00	0.00	30,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		115.00	Cubic Meter	10.00	1,150.00	0.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00
1.2.8.3	Equipment Operating	Detail	48.00	Hour	184.29	8,845.74	0.00	8,845.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.75	36.00 Each	33.57	1,208.52	0.00	1,208.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.75	36.00 Each	61.10	2,199.60	0.00	2,199.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.33	16.00 Each	90.26	1,444.02	0.00	1,444.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.00	48.00 Each	83.20	3,993.60	0.00	3,993.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.9	Powder Magazine - 375L	Detail	1.00	LS	77,611.94	77,611.94	25,078.94	8,845.74	0.00	43,687.26	0.00	0.00	0.00	0.00	0.00
1.2.9.1	Labour	Detail	5.00	Day	5,343.36	26,716.80	25,078.94	0.00	0.00	1,637.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	120.00 Each	63.82	7,658.40	7,207.20	0.00	0.00	451.20	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	240.00 Each	60.09	14,421.60	13,519.20	0.00	0.00	902.40	0.00	0.00	0.00	0.00	0.00
1.2.9.2	Materials	Detail	1.00	LS	42,049.40	42,049.40	0.00	0.00	0.00	42,049.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		20.00	Square Meter	4.97	99.40	0.00	0.00	0.00	99.40	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		1,000.00	Kilogram	4.50	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		18.00	Cubic Meter	350.00	6,300.00	0.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		1,000.00	Meter	30.00	30,000.00	0.00	0.00	0.00	30,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		115.00	Cubic Meter	10.00	1,150.00	0.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.9.3	Equipment Operating	Detail	48.00	Hour	184.29	8,845.74	0.00	8,845.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.75	36.00 Each	33.57	1,208.52	0.00	1,208.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.75	36.00 Each	61.10	2,199.60	0.00	2,199.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.33	16.00 Each	90.26	1,444.02	0.00	1,444.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.00	48.00 Each	83.20	3,993.60	0.00	3,993.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.10	Cap Magazine - 80L	Detail	1.00	LS	44,697.82	44,697.82	25,078.94	4,422.87	0.00	15,196.01	0.00	0.00	0.00	0.00	0.00
1.2.10.1	Labour	Detail	5.00	Day	5,343.36	26,716.80	25,078.94	0.00	0.00	1,637.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	120.00 Each	63.82	7,658.40	7,207.20	0.00	0.00	451.20	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	240.00 Each	60.09	14,421.60	13,519.20	0.00	0.00	902.40	0.00	0.00	0.00	0.00	0.00
1.2.10.2	Materials	Detail	1.00	LS	13,558.15	13,558.15	0.00	0.00	0.00	13,558.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		20.00	Square Meter	4.97	99.40	0.00	0.00	0.00	99.40	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		3.50	Cubic Meter	262.50	918.75	0.00	0.00	0.00	918.75	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		1,000.00	Kilogram	4.50	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		5.40	Cubic Meter	350.00	1,890.00	0.00	0.00	0.00	1,890.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		200.00	Meter	30.00	6,000.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		15.00	Cubic Meter	10.00	150.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
1.2.10.3	Equipment Operating	Detail	24.00	Hour	184.29	4,422.87	0.00	4,422.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.75	18.00 Each	33.57	604.26	0.00	604.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.75	18.00 Each	61.10	1,099.80	0.00	1,099.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.33	8.00 Each	90.26	722.01	0.00	722.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.00	24.00 Each	83.20	1,996.80	0.00	1,996.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.11	Cap Magazine - 375L	Detail	1.00	LS	44,697.82	44,697.82	25,078.94	4,422.87	0.00	15,196.01	0.00	0.00	0.00	0.00	0.00
1.2.11.1	Labour	Detail	5.00	Day	5,343.36	26,716.80	25,078.94	0.00	0.00	1,637.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	120.00 Each	63.82	7,658.40	7,207.20	0.00	0.00	451.20	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	240.00 Each	60.09	14,421.60	13,519.20	0.00	0.00	902.40	0.00	0.00	0.00	0.00	0.00

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1.2.11.2	Materials	Detail	1.00	LS	13,558.15	13,558.15	0.00	0.00	0.00	13,558.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		20.00	Square Meter	4.97	99.40	0.00	0.00	0.00	99.40	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		3.50	Cubic Meter	262.50	918.75	0.00	0.00	0.00	918.75	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		1,000.00	Kilogram	4.50	4,500.00	0.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		5.40	Cubic Meter	350.00	1,890.00	0.00	0.00	0.00	1,890.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		200.00	Meter	30.00	6,000.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		15.00	Cubic Meter	10.00	150.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
1.2.11.3	Equipment Operating	Detail	24.00	Hour	184.29	4,422.87	0.00	4,422.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.75	18.00 Each	33.57	604.26	0.00	604.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.75	18.00 Each	61.10	1,099.80	0.00	1,099.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.33	8.00 Each	90.26	722.01	0.00	722.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.00	24.00 Each	83.20	1,996.80	0.00	1,996.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.12	Sat Stat & Lube Station - 410L	Detail	1.00	LS	119,706.16	119,706.16	6,097.31	144.30	0.00	3,464.54	10,000.00	0.00	0.00	100,000.00	0.00
1.2.12.1	Labour	Detail	1.00	Day	6,497.68	6,497.68	6,097.31	0.00	0.00	400.36	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	22.00 Each	63.82	1,404.04	1,321.32	0.00	0.00	82.72	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	66.00 Each	60.09	3,965.94	3,717.78	0.00	0.00	248.16	0.00	0.00	0.00	0.00	0.00
1.2.12.2	Materials	Detail	1.00	LS	3,064.18	3,064.18	0.00	0.00	0.00	3,064.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMCO1003	Concrete - 35 MPa		8.00	Cubic Meter	262.50	2,100.00	0.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		16.00	Meter	4.73	75.68	0.00	0.00	0.00	75.68	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		360.00	Kilogram	1.50	540.00	0.00	0.00	0.00	540.00	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		8.00	Square Meter	40.00	320.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		16.00	Meter	1.78	28.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00	0.00	0.00
1.2.12.3	Equipment Operating	Detail	1.00	Hour	144.30	144.30	0.00	144.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1005	Transmixer Concrete/Shotcrete		1.00	1.00 Each	83.20	83.20	0.00	83.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	1.00 Each	61.10	61.10	0.00	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.12.4	4090 L Sat Stat Purchase	Plug	1.00	LS	100,000.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00	0.00

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1.2.12.5	First Fills	Plug	1.00	LS	10,000.00	10,000.00	0.00	0.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00
1.2.13	Satellite Wash Bay - 410L	Detail	1.00	LS	178,247.29	178,247.29	42,196.16	15,716.87	0.00	120,007.53	326.73	0.00	0.00	0.00	0.00
1.2.13.1	Labour	Detail	1.00	LS	44,966.87	44,966.87	42,196.16	0.00	0.00	2,770.71	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	456.75 Each	60.09	27,446.11	25,728.73	0.00	0.00	1,717.38	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	152.25 Each	63.82	9,716.60	9,144.14	0.00	0.00	572.46	0.00	0.00	0.00	0.00	0.00
1.2.13.2	Materials	Detail	1.00	LS	115,063.55	115,063.55	0.00	0.00	0.00	114,736.82	326.73	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMCO1003	Concrete - 35 MPa		63.00	Cubic Meter	262.50	16,537.50	0.00	0.00	0.00	16,537.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		140.00	Square Meter	40.00	5,600.00	0.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		59.00	Cubic Meter	350.00	20,650.00	0.00	0.00	0.00	20,650.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		30.00	Meter	50.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMCO1004	Mesh		140.00	Square Meter	7.50	1,050.00	0.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00
IEVE1000	Fan and Silencer		1.00	LS	12,000.00	12,000.00	0.00	0.00	0.00	12,000.00	0.00	0.00	0.00	0.00	0.00
IMVE1001	Vent Duct (610 mm dia)		12.00	Meter	95.00	1,140.00	0.00	0.00	0.00	1,140.00	0.00	0.00	0.00	0.00	0.00
IEGE1002	Pressure Washer		1.00	LS	7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00
IEGE1003	Oil Water Separator		1.00	LS	43,000.00	43,000.00	0.00	0.00	0.00	43,000.00	0.00	0.00	0.00	0.00	0.00
IEGE1004	Sump Pump		1.00	LS	5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00
SUPI1014	100 mm (4") Steel Pipe SCHD 40		30.00	Meter	22.11	663.26	0.00	0.00	0.00	663.26	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		30.00	Meter	14.09	422.79	0.00	0.00	0.00	96.06	326.73	0.00	0.00	0.00	0.00
1.2.13.3	Equipment Operating	Detail	1.00	LS	15,716.87	15,716.87	0.00	15,716.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	58.00 Each	33.57	1,947.06	0.00	1,947.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	72.50 Each	61.10	4,429.75	0.00	4,429.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	75.65 Each	83.20	6,293.79	0.00	6,293.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.47	33.75 Each	90.26	3,046.27	0.00	3,046.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.13.4	Material Allowance	Plug	1.00	LS	2,500.00	2,500.00	0.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00
1.2.14	Service Bay - 410L	Detail	1.00	LS	176,698.48	176,698.48	66,516.12	24,483.45	0.00	54,272.70	31,426.21	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.14.1	Labour	Detail	10.00	Day	7,088.37	70,883.74	66,516.12	0.00	0.00	4,367.62	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	240.00 Each	63.82	15,316.80	14,414.40	0.00	0.00	902.40	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		3.00	720.00 Each	60.09	43,264.80	40,557.60	0.00	0.00	2,707.20	0.00	0.00	0.00	0.00	0.00
1.2.14.2	Materials	Detail	1.00	LS	51,331.29	51,331.29	0.00	0.00	0.00	49,905.08	1,426.21	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMCO1003	Concrete - 35 MPa		80.00	Cubic Meter	262.50	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		208.00	Square Meter	4.97	1,033.76	0.00	0.00	0.00	1,033.76	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		46.00	Cubic Meter	350.00	16,100.00	0.00	0.00	0.00	16,100.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		50.00	Meter	4.73	236.50	0.00	0.00	0.00	236.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		9.00	Square Meter	40.00	360.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00	0.00	0.00
IMVE1000	54" Steel Ducting		2.00	Meter	440.00	880.00	0.00	0.00	0.00	880.00	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		500.00	Kilogram	4.50	2,250.00	0.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00
IEHO1000	8 Ton Chain Block		1.00	Each	5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00
IMST1009	Bollard Pipe - 1.8 m		2.00	Each	450.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		20.00	Meter	101.36	2,027.26	0.00	0.00	0.00	2,027.26	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		20.00	Meter	71.31	1,426.21	0.00	0.00	0.00	0.00	1,426.21	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		66.00	Meter	1.78	117.56	0.00	0.00	0.00	117.56	0.00	0.00	0.00	0.00	0.00
1.2.14.3	Equipment Operating	Detail	216.00	Hour	113.35	24,483.45	0.00	24,483.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.51	110.16 Each	33.57	3,698.07	0.00	3,698.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.51	110.16 Each	61.10	6,730.78	0.00	6,730.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.26	56.16 Each	90.26	5,069.00	0.00	5,069.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.50	108.00 Each	83.20	8,985.60	0.00	8,985.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.14.4	Miscellaneous Tools	Plug	1.00	LS	30,000.00	30,000.00	0.00	0.00	0.00	0.00	30,000.00	0.00	0.00	0.00	0.00
1.2.15	Permanent Refuge Station - 65L	Detail	1.00	LS	114,361.22	114,361.22	50,575.87	8,404.88	0.00	55,217.10	163.37	0.00	0.00	0.00	0.00
1.2.15.1	Labour	Detail	11.00	Day	4,898.08	53,878.88	50,575.87	0.00	0.00	3,303.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	242.00 Each	63.82	15,444.44	14,534.52	0.00	0.00	909.92	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	484.00 Each	60.09	29,083.56	27,263.72	0.00	0.00	1,819.84	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.15.2	Materials	Detail	1.00	LS	30,077.46	30,077.46	0.00	0.00	0.00	29,914.09	163.37	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		50.00	Square Meter	4.97	248.50	0.00	0.00	0.00	248.50	0.00	0.00	0.00	0.00	0.00
IMVE1000	54" Steel Ducting		4.00	Meter	440.00	1,760.00	0.00	0.00	0.00	1,760.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		76.00	Square Meter	40.00	3,040.00	0.00	0.00	0.00	3,040.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		100.00	Meter	4.73	473.00	0.00	0.00	0.00	473.00	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		1,232.00	Kilogram	1.50	1,848.00	0.00	0.00	0.00	1,848.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		32.00	Cubic Meter	350.00	11,200.00	0.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		32.00	Square Meter	35.00	1,120.00	0.00	0.00	0.00	1,120.00	0.00	0.00	0.00	0.00	0.00
IMOP1000	Mandoor		2.00	Each	3,000.00	6,000.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00
IMPI1000	1" Pipe		15.00	Meter	10.00	150.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		15.00	Meter	14.09	211.40	0.00	0.00	0.00	48.03	163.37	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		50.00	Meter	1.78	89.06	0.00	0.00	0.00	89.06	0.00	0.00	0.00	0.00	0.00
1.2.15.3	Equipment Operating	Detail	44.00	Hour	191.02	8,404.88	0.00	8,404.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	22.00 Each	33.57	738.54	0.00	738.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.80	35.20 Each	61.10	2,150.72	0.00	2,150.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.55	24.20 Each	90.26	2,184.29	0.00	2,184.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.91	40.04 Each	83.20	3,331.33	0.00	3,331.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.15.4	Miscellaneous Supplies (tables, coolers, etc, appliances, furniture, Sink/Millwork)	Plug	1.00	LS	22,000.00	22,000.00	0.00	0.00	0.00	22,000.00	0.00	0.00	0.00	0.00	0.00
1.2.16	Permanent Refuge Station - 200L	Detail	1.00	LS	114,361.22	114,361.22	50,575.87	8,404.88	0.00	55,217.10	163.37	0.00	0.00	0.00	0.00
1.2.16.1	Labour	Detail	11.00	Day	4,898.08	53,878.88	50,575.87	0.00	0.00	3,303.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	242.00 Each	63.82	15,444.44	14,534.52	0.00	0.00	909.92	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	484.00 Each	60.09	29,083.56	27,263.72	0.00	0.00	1,819.84	0.00	0.00	0.00	0.00	0.00

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1.2.16.2	Materials	Detail	1.00	LS	30,077.46	30,077.46	0.00	0.00	0.00	29,914.09	163.37	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		50.00	Square Meter	4.97	248.50	0.00	0.00	0.00	248.50	0.00	0.00	0.00	0.00	0.00
IMVE1000	54" Steel Ducting		4.00	Meter	440.00	1,760.00	0.00	0.00	0.00	1,760.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		76.00	Square Meter	40.00	3,040.00	0.00	0.00	0.00	3,040.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		100.00	Meter	4.73	473.00	0.00	0.00	0.00	473.00	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		1,232.00	Kilogram	1.50	1,848.00	0.00	0.00	0.00	1,848.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		32.00	Cubic Meter	350.00	11,200.00	0.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		32.00	Square Meter	35.00	1,120.00	0.00	0.00	0.00	1,120.00	0.00	0.00	0.00	0.00	0.00
IMOP1000	Mandoor		2.00	Each	3,000.00	6,000.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00
IMPI1000	1" Pipe		15.00	Meter	10.00	150.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		15.00	Meter	14.09	211.40	0.00	0.00	0.00	48.03	163.37	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		50.00	Meter	1.78	89.06	0.00	0.00	0.00	89.06	0.00	0.00	0.00	0.00	0.00
1.2.16.3	Equipment Operating	Detail	44.00	Hour	191.02	8,404.88	0.00	8,404.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	22.00 Each	33.57	738.54	0.00	738.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.80	35.20 Each	61.10	2,150.72	0.00	2,150.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.55	24.20 Each	90.26	2,184.29	0.00	2,184.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.91	40.04 Each	83.20	3,331.33	0.00	3,331.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.16.4	Miscellaneous Supplies (tables, coolers, etc, appliances, furniture, Sink/Millwork)	Plug	1.00	LS	22,000.00	22,000.00	0.00	0.00	0.00	22,000.00	0.00	0.00	0.00	0.00	0.00
1.2.17	Permanent Refuge Station - 410L	Detail	1.00	LS	114,361.22	114,361.22	50,575.87	8,404.88	0.00	55,217.10	163.37	0.00	0.00	0.00	0.00
1.2.17.1	Labour	Detail	11.00	Day	4,898.08	53,878.88	50,575.87	0.00	0.00	3,303.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	242.00 Each	63.82	15,444.44	14,534.52	0.00	0.00	909.92	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	484.00 Each	60.09	29,083.56	27,263.72	0.00	0.00	1,819.84	0.00	0.00	0.00	0.00	0.00

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1.2.17.2	Materials	Detail	1.00	LS	30,077.46	30,077.46	0.00	0.00	0.00	29,914.09	163.37	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1007	100 m x 100 mm #6 Welded Wire Mesh		50.00	Square Meter	4.97	248.50	0.00	0.00	0.00	248.50	0.00	0.00	0.00	0.00	0.00
IMVE1000	54" Steel Ducting		4.00	Meter	440.00	1,760.00	0.00	0.00	0.00	1,760.00	0.00	0.00	0.00	0.00	0.00
IMCO1003	Concrete - 35 MPa		15.00	Cubic Meter	262.50	3,937.50	0.00	0.00	0.00	3,937.50	0.00	0.00	0.00	0.00	0.00
SULU1000	Concrete Formwork		76.00	Square Meter	40.00	3,040.00	0.00	0.00	0.00	3,040.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		100.00	Meter	4.73	473.00	0.00	0.00	0.00	473.00	0.00	0.00	0.00	0.00	0.00
IMST1004	Rebar		1,232.00	Kilogram	1.50	1,848.00	0.00	0.00	0.00	1,848.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		32.00	Cubic Meter	350.00	11,200.00	0.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		32.00	Square Meter	35.00	1,120.00	0.00	0.00	0.00	1,120.00	0.00	0.00	0.00	0.00	0.00
IMOP1000	Mandoor		2.00	Each	3,000.00	6,000.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00
IMPI1000	1" Pipe		15.00	Meter	10.00	150.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		15.00	Meter	14.09	211.40	0.00	0.00	0.00	48.03	163.37	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		50.00	Meter	1.78	89.06	0.00	0.00	0.00	89.06	0.00	0.00	0.00	0.00	0.00
1.2.17.3	Equipment Operating	Detail	44.00	Hour	191.02	8,404.88	0.00	8,404.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	22.00 Each	33.57	738.54	0.00	738.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.80	35.20 Each	61.10	2,150.72	0.00	2,150.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.55	24.20 Each	90.26	2,184.29	0.00	2,184.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.91	40.04 Each	83.20	3,331.33	0.00	3,331.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.17.4	Miscellaneous Supplies (tables, coolers, etc, appliances, furniture, Sink/Millwork)	Plug	1.00	LS	22,000.00	22,000.00	0.00	0.00	0.00	22,000.00	0.00	0.00	0.00	0.00	0.00
1.2.18	Comfort Station - 65L	Detail	1.00	LS	11,317.11	11,317.11	591.49	244.40	0.00	68.22	0.00	0.00	0.00	10,413.00	0.00
1.2.18.1	Labour	Detail	0.20	Day	3,148.55	629.71	591.49	0.00	0.00	38.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	4.20 Each	63.82	268.04	252.25	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		1.00	4.20 Each	60.09	252.38	236.59	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
1.2.18.2	Materials	Detail	1.00	LS	30.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMFI1000	Ballast		3.00	Cubic Meter	10.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.18.3	Equipment Operating	Detail	4.00	Hour	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	4.00 Each	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.18.4	Mining Toilet Purchase	Plug	1.00	LS	10,413.00	10,413.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,413.00	0.00
1.2.19	Comfort Station - 200L	Detail	1.00	LS	11,317.11	11,317.11	591.49	244.40	0.00	68.22	0.00	0.00	0.00	10,413.00	0.00
1.2.19.1	Labour	Detail	0.20	Day	3,148.55	629.71	591.49	0.00	0.00	38.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	4.20 Each	63.82	268.04	252.25	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		1.00	4.20 Each	60.09	252.38	236.59	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
1.2.19.2	Materials	Detail	1.00	LS	30.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMFI1000	Ballast		3.00	Cubic Meter	10.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00
1.2.19.3	Equipment Operating	Detail	4.00	Hour	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	4.00 Each	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.19.4	Mining Toilet Purchase	Plug	1.00	LS	10,413.00	10,413.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,413.00	0.00
1.2.20	Comfort Station - 410L	Detail	1.00	LS	11,317.11	11,317.11	591.49	244.40	0.00	68.22	0.00	0.00	0.00	10,413.00	0.00
1.2.20.1	Labour	Detail	0.20	Day	3,148.55	629.71	591.49	0.00	0.00	38.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	4.20 Each	63.82	268.04	252.25	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		1.00	4.20 Each	60.09	252.38	236.59	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
1.2.20.2	Materials	Detail	1.00	LS	30.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMFI1000	Ballast		3.00	Cubic Meter	10.00	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00
1.2.20.3	Equipment Operating	Detail	4.00	Hour	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	4.00 Each	61.10	244.40	0.00	244.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.20.4	Mining Toilet Purchase	Plug	1.00	LS	10,413.00	10,413.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,413.00	0.00
1.2.21	Diamond Drill Cut Out - 80L	Detail	4.00	LS	3,560.45	14,241.81	11,829.88	977.60	0.00	1,434.33	0.00	0.00	0.00	0.00	0.00
1.2.21.1	Labour	Detail	4.00	Day	3,148.55	12,594.21	11,829.88	0.00	0.00	764.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner	1.00	84.00	Each	63.82	5,360.88	5,045.04	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner	1.00	84.00	Each	60.09	5,047.56	4,731.72	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
1.2.21.2	Materials	Detail	1.00	LS	670.00	670.00	0.00	0.00	0.00	670.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMLU1000	100 mm x 100 mm Timber	20.00		Meter	30.00	600.00	0.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	7.00		Cubic Meter	10.00	70.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	0.00	0.00
1.2.21.3	Equipment Operating	Detail	16.00	Hour	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck	1.00	16.00	Each	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.22	Diamond Drill Cut Out - 270L	Detail	4.00	LS	3,560.45	14,241.81	11,829.88	977.60	0.00	1,434.33	0.00	0.00	0.00	0.00	0.00
1.2.22.1	Labour	Detail	4.00	Day	3,148.55	12,594.21	11,829.88	0.00	0.00	764.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner	1.00	84.00	Each	63.82	5,360.88	5,045.04	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner	1.00	84.00	Each	60.09	5,047.56	4,731.72	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
1.2.22.2	Materials	Detail	1.00	LS	670.00	670.00	0.00	0.00	0.00	670.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMLU1000	100 mm x 100 mm Timber	20.00		Meter	30.00	600.00	0.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	7.00		Cubic Meter	10.00	70.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	0.00	0.00
1.2.22.3	Equipment Operating	Detail	16.00	Hour	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck	1.00	16.00	Each	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.23	Diamond Drill Cut Out - 410L	Detail	4.00	LS	3,560.45	14,241.81	11,829.88	977.60	0.00	1,434.33	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.23.1	Labour	Detail	4.00	Day	3,148.55	12,594.21	11,829.88	0.00	0.00	764.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1008	Lead Construction Miner		1.00	84.00 Each	63.82	5,360.88	5,045.04	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		1.00	84.00 Each	60.09	5,047.56	4,731.72	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
1.2.23.2	Materials	Detail	1.00	LS	670.00	670.00	0.00	0.00	0.00	670.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMLU1000	100 mm x 100 mm Timber		20.00	Meter	30.00	600.00	0.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		7.00	Cubic Meter	10.00	70.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	0.00	0.00
1.2.23.3	Equipment Operating	Detail	16.00	Hour	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	16.00 Each	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.24	Diamond Drill Cut Out - 305L HW	Detail	4.00	LS	3,560.45	14,241.81	11,829.88	977.60	0.00	1,434.33	0.00	0.00	0.00	0.00	0.00
1.2.24.1	Labour	Detail	4.00	Day	3,148.55	12,594.21	11,829.88	0.00	0.00	764.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1008	Lead Construction Miner		1.00	84.00 Each	63.82	5,360.88	5,045.04	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		1.00	84.00 Each	60.09	5,047.56	4,731.72	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
1.2.24.2	Materials	Detail	1.00	LS	670.00	670.00	0.00	0.00	0.00	670.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMLU1000	100 mm x 100 mm Timber		20.00	Meter	30.00	600.00	0.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		7.00	Cubic Meter	10.00	70.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	0.00	0.00
1.2.24.3	Equipment Operating	Detail	16.00	Hour	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	16.00 Each	61.10	977.60	0.00	977.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.25	U/G Backfill Station - 45L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.25.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.25.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.25.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.26	U/G Backfill Station - 65L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.26.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.26.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.26.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.27	U/G Backfill Station - 80L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.27.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.27.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.27.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.28	U/G Backfill Station - 110L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.28.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.28.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.28.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.29	U/G Backfill Station - 140L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.29.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.29.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.29.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.30	U/G Backfill Station - 170L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.30.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.30.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.30.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.31	U/G Backfill Station - 200L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.31.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.31.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.31.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.32	U/G Backfill Station - 235L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.32.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.32.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.32.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.33	U/G Backfill Station - 270L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.33.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.33.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.33.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.34	U/G Backfill Station - 305L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.34.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.34.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.34.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.35	U/G Backfill Station - 340L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.35.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.35.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.35.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.36	U/G Backfill Station - 375L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.36.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.36.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.36.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.37	U/G Backfill Station - 410L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.37.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.37.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.37.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.38	U/G Backfill Station - 445L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.38.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.38.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.38.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.39	U/G Backfill Station - 480L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.39.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.39.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.39.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.40	U/G Backfill Station - 515L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.40.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.40.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.40.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.41	U/G Backfill Station - 550L	Detail	1.00	LS	13,018.52	13,018.52	5,820.16	4,409.33	0.00	2,571.21	217.82	0.00	0.00	0.00	0.00
1.2.41.1	Labour	Detail	1.00	LS	6,202.33	6,202.33	5,820.16	0.00	0.00	382.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1009	Construction Miner		3.00	63.00 Each	60.09	3,785.67	3,548.79	0.00	0.00	236.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		1.00	21.00 Each	63.82	1,340.22	1,261.26	0.00	0.00	78.96	0.00	0.00	0.00	0.00	0.00
1.2.41.2	Materials	Detail	1.00	LS	2,406.86	2,406.86	0.00	0.00	0.00	2,189.04	217.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMST1003	Fabricated Steel		250.00	Kilogram	4.50	1,125.00	0.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		20.00	Meter	50.00	1,000.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		20.00	Meter	14.09	281.86	0.00	0.00	0.00	64.04	217.82	0.00	0.00	0.00	0.00
1.2.41.3	Equipment Operating	Detail	1.00	LS	4,409.33	4,409.33	0.00	4,409.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.80	16.80 Each	33.57	563.98	0.00	563.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	21.00 Each	61.10	1,283.10	0.00	1,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		1.04	21.91 Each	83.20	1,823.03	0.00	1,823.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.39	8.19 Each	90.26	739.23	0.00	739.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.42	Portable Refuge Station - 65L	Detail	1.00	LS	82,807.33	82,807.33	2,298.90	358.29	0.00	80,150.14	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.42.1	Labour	Detail	0.50	Day	4,898.08	2,449.04	2,298.90	0.00	0.00	150.14	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	11.00 Each	63.82	702.02	660.66	0.00	0.00	41.36	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	22.00 Each	60.09	1,321.98	1,239.26	0.00	0.00	82.72	0.00	0.00	0.00	0.00	0.00
1.2.42.2	Materials	Detail	1.00	LS	80,000.00	80,000.00	0.00	0.00	0.00	80,000.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IEGE1000	Portable Refuge Station - Extras Included		1.00	Each	80,000.00	80,000.00	0.00	0.00	0.00	80,000.00	0.00	0.00	0.00	0.00	0.00
1.2.42.3	Equipment Operating	Detail	2.00	Hour	179.14	358.29	0.00	358.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.17	0.35 Each	33.57	11.68	0.00	11.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.52	1.04 Each	90.26	94.18	0.00	94.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.78	1.57 Each	83.20	130.23	0.00	130.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	2.00 Each	61.10	122.20	0.00	122.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.43	Ventilation Bulkhead Type A - 45L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.43.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.43.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.43.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.45	Ventilation Bulkhead Type A - 65L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.45.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.45.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.45.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.47	Ventilation Bulkhead Type A - 80L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.47.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.47.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.47.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.49	Ventilation Bulkhead Type A - 110L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.49.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.49.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.49.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.51	Ventilation Bulkhead Type A - 140L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.51.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.51.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.51.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.53	Ventilation Bulkhead Type A - 170L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.53.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.53.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.53.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.55	Ventilation Bulkhead Type A - 200L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.55.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.55.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.55.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.57	Ventilation Bulkhead Type A - 235L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.57.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.57.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.57.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.59	Ventilation Bulkhead Type A - 270L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.59.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.59.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.59.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.61	Ventilation Bulkhead Type A - 305L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.61.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.61.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.61.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.63	Ventilation Bulkhead Type A - 340L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.63.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.63.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.63.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.65	Ventilation Bulkhead Type A - 375L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.65.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00

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1.2.65.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.65.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.67	Ventilation Bulkhead Type A - 410L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.67.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.67.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.67.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.69	Ventilation Bulkhead Type A - 445L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.69.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.69.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.69.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.71	Ventilation Bulkhead Type A - 480L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.71.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.71.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.71.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.73	Ventilation Bulkhead Type A - 515L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.73.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.73.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.73.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.75	Ventilation Bulkhead Type A - 550L	Detail	1.00	LS	21,457.62	21,457.62	11,494.52	4,471.14	0.00	5,491.96	0.00	0.00	0.00	0.00	0.00
1.2.75.1	Labour	Detail	2.50	Day	4,898.08	12,245.20	11,494.52	0.00	0.00	750.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1008	Lead Construction Miner		1.00	55.00 Each	63.82	3,510.10	3,303.30	0.00	0.00	206.80	0.00	0.00	0.00	0.00	0.00
LASC1009	Construction Miner		2.00	110.00 Each	60.09	6,609.90	6,196.30	0.00	0.00	413.60	0.00	0.00	0.00	0.00	0.00
1.2.75.2	Materials	Detail	1.00	LS	4,741.28	4,741.28	0.00	0.00	0.00	4,741.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMOP1005	Hollow Steel Mandoor		1.00	Each	900.00	900.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
IMST1002	Dowel Pins - 22 mm		25.00	Meter	4.73	118.25	0.00	0.00	0.00	118.25	0.00	0.00	0.00	0.00	0.00
IMST1003	Fabricated Steel		258.00	Kilogram	4.50	1,161.00	0.00	0.00	0.00	1,161.00	0.00	0.00	0.00	0.00	0.00
IMGS1010	Shotcrete		2.75	Cubic Meter	350.00	962.50	0.00	0.00	0.00	962.50	0.00	0.00	0.00	0.00	0.00
IMGS1011	Shotcrete Bedsprings		17.00	Square Meter	35.00	595.00	0.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
IMLU1000	100 mm x 100 mm Timber		32.00	Meter	30.00	960.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		25.00	Meter	1.78	44.53	0.00	0.00	0.00	44.53	0.00	0.00	0.00	0.00	0.00
1.2.75.3	Equipment Operating	Detail	1.00	LS	4,471.14	4,471.14	0.00	4,471.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		0.50	12.00 Each	33.57	402.84	0.00	402.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	24.00 Each	61.10	1,466.40	0.00	1,466.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1004	Shotcrete Sprayer		0.63	15.00 Each	90.26	1,353.90	0.00	1,353.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1005	Transmixer Concrete/Shotcrete		0.63	15.00 Each	83.20	1,248.00	0.00	1,248.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.77	Underground Electrical	Detail	1.00	LS	5,493,537.97	5,493,537.97	756,279.80	0.00	0.00	4,737,258.17	0.00	0.00	0.00	0.00	0.00
1.2.77.1	Underground Ramp Distribution	Detail	1.00	LS	2,132,181.64	2,132,181.64	429,652.01	0.00	0.00	1,702,529.63	0.00	0.00	0.00	0.00	0.00
1.2.77.1.1	2012	Plug	0.90	LS	592,272.68	533,045.41	107,413.00	0.00	0.00	425,632.41	0.00	0.00	0.00	0.00	0.00
1.2.77.1.2	2013	Plug	0.90	LS	592,272.68	533,045.41	107,413.00	0.00	0.00	425,632.41	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.77.1.3	2014	Plug	0.90	LS	592,272.68	533,045.41	107,413.00	0.00	0.00	425,632.41	0.00	0.00	0.00	0.00	0.00
1.2.77.1.4	2015	Plug	0.90	LS	592,272.68	533,045.41	107,413.00	0.00	0.00	425,632.41	0.00	0.00	0.00	0.00	0.00
1.2.77.2	Portal (MLC #1 & #2)	Plug	0.90	LS	501,365.75	451,229.18	25,760.74	0.00	0.00	425,468.44	0.00	0.00	0.00	0.00	0.00
1.2.77.3	Main Sump	Plug	0.90	LS	325,323.18	292,790.86	29,172.53	0.00	0.00	263,618.33	0.00	0.00	0.00	0.00	0.00
1.2.77.4	45L	Plug	0.90	LS	295,472.20	265,924.98	24,689.74	0.00	0.00	241,235.24	0.00	0.00	0.00	0.00	0.00
1.2.77.5	65L	Plug	0.90	LS	275,291.29	247,762.16	20,106.21	0.00	0.00	227,655.95	0.00	0.00	0.00	0.00	0.00
1.2.77.6	80L	Plug	0.90	LS	591,980.00	532,782.00	52,666.23	0.00	0.00	480,115.77	0.00	0.00	0.00	0.00	0.00
1.2.77.7	110L	Plug	0.90	LS	295,472.20	265,924.98	24,689.74	0.00	0.00	241,235.24	0.00	0.00	0.00	0.00	0.00
1.2.77.8	140L	Plug	0.90	LS	295,986.63	266,387.96	25,152.72	0.00	0.00	241,235.24	0.00	0.00	0.00	0.00	0.00
1.2.77.9	170L	Plug	0.90	LS	250,933.45	225,840.10	13,105.88	0.00	0.00	212,734.22	0.00	0.00	0.00	0.00	0.00
1.2.77.10	200L & 235L	Plug	0.90	LS	8,230.80	7,407.72	7,407.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2.77.11	270L	Plug	0.90	LS	276,364.12	248,727.71	22,150.63	0.00	0.00	226,577.08	0.00	0.00	0.00	0.00	0.00
1.2.77.12	305L to 515L	Plug	0.90	LS	39,038.60	35,134.74	33,334.74	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00
1.2.77.13	550L	Plug	0.90	LS	353,764.83	318,388.35	24,234.05	0.00	0.00	294,154.30	0.00	0.00	0.00	0.00	0.00
1.2.77.14	580L	Plug	0.90	LS	225,617.35	203,055.62	24,156.88	0.00	0.00	178,898.73	0.00	0.00	0.00	0.00	0.00
1.2.78	Auxiliary Fans	Detail	1.00	LS	528,000.00	528,000.00	0.00	0.00	0.00	528,000.00	0.00	0.00	0.00	0.00	0.00
1.2.78.1	2012	Detail	1.00	LS	96,000.00	96,000.00	0.00	0.00	0.00	96,000.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
IEVE1001	Auxiliary Fan - 75 HP	4.00		Each	24,000.00	96,000.00	0.00	0.00	0.00	96,000.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.2.78.2	2013	Detail	1.00	LS	144,000.00	144,000.00	0.00	0.00	0.00	144,000.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IEVE1001	Auxiliary Fan - 75 HP		6.00	Each	24,000.00	144,000.00	0.00	0.00	0.00	144,000.00	0.00	0.00	0.00	0.00	0.00
1.2.78.3	2014	Detail	1.00	LS	192,000.00	192,000.00	0.00	0.00	0.00	192,000.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IEVE1001	Auxiliary Fan - 75 HP		8.00	Each	24,000.00	192,000.00	0.00	0.00	0.00	192,000.00	0.00	0.00	0.00	0.00	0.00
1.2.78.4	2015	Detail	1.00	LS	96,000.00	96,000.00	0.00	0.00	0.00	96,000.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IEVE1001	Auxiliary Fan - 75 HP		4.00	Each	24,000.00	96,000.00	0.00	0.00	0.00	96,000.00	0.00	0.00	0.00	0.00	0.00
1.3	Ramp	Detail	1.00	LS	20,701,799.55	20,701,799.55	9,354,513.47	4,133,167.46	0.00	5,841,834.03	1,372,284.60	0.00	0.00	0.00	0.00
1.3.1	Portal to Ramp Raise	Detail	48.00	Meter	4,064.56	195,098.99	118,013.91	19,733.96	0.00	46,968.13	10,382.99	0.00	0.00	0.00	0.00
1.3.1.1	5.0 x 5.2 Ramp Development - 2 m/day	Detail	48.00	Meter	4,064.56	195,098.99	118,013.91	19,733.96	0.00	46,968.13	10,382.99	0.00	0.00	0.00	0.00
1.3.1.1.1	Labour	Detail	48.00	Meter	2,608.76	125,220.48	118,013.91	0.00	0.00	7,206.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	528.00 Each	67.82	35,808.96	33,823.68	0.00	0.00	1,985.28	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,056.00 Each	64.09	67,679.04	63,708.48	0.00	0.00	3,970.56	0.00	0.00	0.00	0.00	0.00
1.3.1.1.2	Materials	Detail	48.00	Meter	1,044.68	50,144.55	0.00	0.00	0.00	39,761.56	10,382.99	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		96.00	Meter	55.00	5,280.00	0.00	0.00	0.00	5,280.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		139.20	Cubic Meter	10.00	1,392.00	0.00	0.00	0.00	1,392.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,864.90	1,864.90	0.00	0.00	0.00	1,864.90	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	1,371.84	274.37	0.00	0.00	0.00	274.37	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	4,865.43	4,865.43	0.00	0.00	0.00	4,865.43	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	3,422.90	3,422.90	0.00	0.00	0.00	0.00	3,422.90	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	2,244.29	2,244.29	0.00	0.00	0.00	2,244.29	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	149.70	12,425.01	0.00	0.00	0.00	12,425.01	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	85.50	1,538.96	0.00	0.00	0.00	1,538.96	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	6,960.09	6,960.09	0.00	0.00	0.00	0.00	6,960.09	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	9,876.60	9,876.60	0.00	0.00	0.00	9,876.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.3.1.1.3	Equipment Operating	Detail	48.00	Meter	411.12	19,733.96	0.00	19,733.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD	1.00	49.48	Each	120.67	5,970.57	0.00	5,970.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift	1.00	98.80	Each	33.57	3,316.86	0.00	3,316.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck	1.00	7.64	Each	61.10	466.53	0.00	466.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo	1.00	54.06	Each	184.61	9,979.99	0.00	9,979.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.2	Ramp Raise to Sump	Detail	60.00	Meter	3,194.98	191,698.54	98,344.93	24,667.45	0.00	55,707.43	12,978.73	0.00	0.00	0.00	0.00
1.3.2.1	5.0 x 5.2 Ramp Development - 3 m/day	Detail	60.00	Meter	3,194.98	191,698.54	98,344.93	24,667.45	0.00	55,707.43	12,978.73	0.00	0.00	0.00	0.00
1.3.2.1.1	Labour	Detail	60.00	Meter	1,739.17	104,350.40	98,344.93	0.00	0.00	6,005.47	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	440.00	Each	67.82	29,840.80	28,186.40	0.00	0.00	1,654.40	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	880.00	Each	64.09	56,399.20	53,090.40	0.00	0.00	3,308.80	0.00	0.00	0.00	0.00	0.00
1.3.2.1.2	Materials	Detail	60.00	Meter	1,044.68	62,680.69	0.00	0.00	0.00	49,701.96	12,978.73	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)	120.00		Meter	55.00	6,600.00	0.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	174.00		Cubic Meter	10.00	1,740.00	0.00	0.00	0.00	1,740.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40	1.00		Meter	2,331.13	2,331.13	0.00	0.00	0.00	2,331.13	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m	0.20		Each	1,714.80	342.96	0.00	0.00	0.00	342.96	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40	1.00		Meter	6,081.79	6,081.79	0.00	0.00	0.00	6,081.79	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40	1.00		Meter	4,278.62	4,278.62	0.00	0.00	0.00	0.00	4,278.62	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables	1.00		Meter	2,805.37	2,805.37	0.00	0.00	0.00	2,805.37	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling	83.00		Meter	187.12	15,531.26	0.00	0.00	0.00	15,531.26	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	18.00		Meter	106.87	1,923.70	0.00	0.00	0.00	1,923.70	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2	1.00		Meter	8,700.11	8,700.11	0.00	0.00	0.00	0.00	8,700.11	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2	1.00		Meter	12,345.75	12,345.75	0.00	0.00	0.00	12,345.75	0.00	0.00	0.00	0.00	0.00
1.3.2.1.3	Equipment Operating	Detail	60.00	Meter	411.12	24,667.45	0.00	24,667.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD	1.00	61.85	Each	120.67	7,463.22	0.00	7,463.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift	1.00	123.51	Each	33.57	4,146.08	0.00	4,146.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck	1.00	9.54	Each	61.10	583.17	0.00	583.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo	1.00	67.57	Each	184.61	12,474.99	0.00	12,474.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.3.3	Sump TO 80 Level	Detail	811.00	Meter	3,032.57	2,459,410.81	1,118,078.85	424,720.58	0.00	741,182.18	175,429.19	0.00	0.00	0.00	0.00
1.3.3.1	Haulage - Mining Block 1 (45L to 80L)	Detail	65,472.03	Tonne	2.38	155,747.89	60,010.78	91,298.86	0.00	4,438.25	0.00	0.00	0.00	0.00	0.00
1.3.3.1.1	Truck Haulage Labour	Detail	65,472.03	Tonne	0.98	64,449.03	60,010.78	0.00	0.00	4,438.25	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	1,180.39 Each	54.60	64,449.03	60,010.78	0.00	0.00	4,438.25	0.00	0.00	0.00	0.00	0.00
1.3.3.1.2	Truck Haulage Equipment	Detail	65,472.03	Tonne	1.39	91,298.86	0.00	91,298.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	786.92 Each	116.02	91,298.86	0.00	91,298.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.3.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	811.00	Meter	2,840.52	2,303,662.92	1,058,068.07	333,421.72	0.00	736,743.93	175,429.19	0.00	0.00	0.00	0.00
1.3.3.2.1	Labour	Detail	811.00	Meter	1,384.72	1,123,007.24	1,058,068.07	0.00	0.00	64,939.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	3,568.40 Each	67.82	242,008.89	228,591.70	0.00	0.00	13,417.18	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	10,705.20 Each	64.09	686,096.27	645,844.72	0.00	0.00	40,251.55	0.00	0.00	0.00	0.00	0.00
1.3.3.2.2	Materials	Detail	811.00	Meter	1,044.68	847,233.96	0.00	0.00	0.00	671,804.76	175,429.19	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		1,622.00	Meter	55.00	89,210.00	0.00	0.00	0.00	89,210.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		2,351.90	Cubic Meter	10.00	23,519.00	0.00	0.00	0.00	23,519.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	31,509.05	31,509.05	0.00	0.00	0.00	31,509.05	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	23,178.38	4,635.68	0.00	0.00	0.00	4,635.68	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	82,205.55	82,205.55	0.00	0.00	0.00	82,205.55	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	57,832.73	57,832.73	0.00	0.00	0.00	0.00	57,832.73	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	37,919.22	37,919.22	0.00	0.00	0.00	37,919.22	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	2,529.29	209,930.92	0.00	0.00	0.00	209,930.92	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	1,444.55	26,001.96	0.00	0.00	0.00	26,001.96	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	117,596.46	117,596.46	0.00	0.00	0.00	0.00	117,596.46	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	166,873.39	166,873.39	0.00	0.00	0.00	166,873.39	0.00	0.00	0.00	0.00	0.00

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1.3.3.2.3	Equipment Operating	Detail	811.00	Meter	411.12	333,421.72	0.00	333,421.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**					**Total Costs by Category**				
CEUM1008	4.5 m3 LHD		1.00	835.98 Each	120.67	100,877.82	0.00	100,877.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	1,669.38 Each	33.57	56,041.14	0.00	56,041.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	129.01 Each	61.10	7,882.47	0.00	7,882.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	913.39 Each	184.61	168,620.29	0.00	168,620.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.4	80 Level TO 170 Level	Detail	1,010.00	Meter	3,084.62	3,115,462.39	1,412,687.68	559,750.52	0.00	924,548.87	218,475.32	0.00	0.00	0.00	0.00
1.3.4.1	Haulage - Mining Block 2 (110L to 170L)	Detail	81,537.30	Tonne	3.02	246,535.70	94,995.02	144,515.09	0.00	7,025.60	0.00	0.00	0.00	0.00	0.00
1.3.4.1.1	Truck Haulage Labour	Detail	81,537.30	Tonne	1.25	102,020.61	94,995.02	0.00	0.00	7,025.60	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**					**Total Costs by Category**				
LASC1012	Haulage Truck Driver		1.00	1,868.51 Each	54.60	102,020.61	94,995.02	0.00	0.00	7,025.60	0.00	0.00	0.00	0.00	0.00
1.3.4.1.2	Truck Haulage Equipment	Detail	81,537.30	Tonne	1.77	144,515.09	0.00	144,515.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**					**Total Costs by Category**				
CEUM1006	Haulage Truck 28 t		1.00	1,245.60 Each	116.02	144,515.09	0.00	144,515.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.4.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	1,010.00	Meter	2,840.52	2,868,926.69	1,317,692.66	415,235.44	0.00	917,523.27	218,475.32	0.00	0.00	0.00	0.00
1.3.4.2.1	Labour	Detail	1,010.00	Meter	1,384.72	1,398,566.35	1,317,692.66	0.00	0.00	80,873.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**					**Total Costs by Category**				
LALD1000	Lead Miner		1.00	4,444.00 Each	67.82	301,392.08	284,682.64	0.00	0.00	16,709.44	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	13,332.00 Each	64.09	854,447.88	804,319.56	0.00	0.00	50,128.32	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.3.4.2.2	Materials	Detail	1,010.00	Meter	1,044.68	1,055,124.90	0.00	0.00	0.00	836,649.58	218,475.32	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		2,020.00	Meter	55.00	111,100.00	0.00	0.00	0.00	111,100.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		2,929.00	Cubic Meter	10.00	29,290.00	0.00	0.00	0.00	29,290.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	39,240.62	39,240.62	0.00	0.00	0.00	39,240.62	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	28,865.80	5,773.16	0.00	0.00	0.00	5,773.16	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	102,376.83	102,376.83	0.00	0.00	0.00	102,376.83	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	72,023.50	72,023.50	0.00	0.00	0.00	0.00	72,023.50	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	47,223.69	47,223.69	0.00	0.00	0.00	47,223.69	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	3,149.91	261,442.94	0.00	0.00	0.00	261,442.94	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	1,799.01	32,382.22	0.00	0.00	0.00	32,382.22	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	146,451.82	146,451.82	0.00	0.00	0.00	0.00	146,451.82	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	207,820.13	207,820.13	0.00	0.00	0.00	207,820.13	0.00	0.00	0.00	0.00	0.00
1.3.4.2.3	Equipment Operating	Detail	1,010.00	Meter	411.12	415,235.44	0.00	415,235.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,041.11 Each	120.67	125,630.82	0.00	125,630.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	2,079.01 Each	33.57	69,792.30	0.00	69,792.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	160.67 Each	61.10	9,816.64	0.00	9,816.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	1,137.51 Each	184.61	209,995.68	0.00	209,995.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.5	170 Level TO 270 Level	Detail	1,152.00	Meter	3,176.28	3,659,072.84	1,651,994.07	700,342.78	0.00	1,057,544.34	249,191.65	0.00	0.00	0.00	0.00
1.3.5.1	Haulage - Mining Block 3 (200L to 270L)	Detail	93,000.96	Tonne	4.16	386,792.10	149,041.65	226,727.70	0.00	11,022.75	0.00	0.00	0.00	0.00	0.00
1.3.5.1.1	Truck Haulage Labour	Detail	93,000.96	Tonne	1.72	160,064.40	149,041.65	0.00	0.00	11,022.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	2,931.58 Each	54.60	160,064.40	149,041.65	0.00	0.00	11,022.75	0.00	0.00	0.00	0.00	0.00
1.3.5.1.2	Truck Haulage Equipment	Detail	93,000.96	Tonne	2.44	226,727.70	0.00	226,727.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	1,954.21 Each	116.02	226,727.70	0.00	226,727.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.5.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	1,152.00	Meter	2,840.52	3,272,280.74	1,502,952.42	473,615.07	0.00	1,046,521.59	249,191.65	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.3.5.2.1	Labour	Detail	1,152.00	Meter	1,384.72	1,595,196.47	1,502,952.42	0.00	0.00	92,244.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	5,068.80 Each	67.82	343,766.02	324,707.33	0.00	0.00	19,058.69	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	15,206.40 Each	64.09	974,578.18	917,402.11	0.00	0.00	57,176.06	0.00	0.00	0.00	0.00	0.00
1.3.5.2.2	Materials	Detail	1,152.00	Meter	1,044.68	1,203,469.20	0.00	0.00	0.00	954,277.54	249,191.65	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		2,304.00	Meter	55.00	126,720.00	0.00	0.00	0.00	126,720.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		3,340.80	Cubic Meter	10.00	33,408.00	0.00	0.00	0.00	33,408.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	44,757.61	44,757.61	0.00	0.00	0.00	44,757.61	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	32,924.16	6,584.83	0.00	0.00	0.00	6,584.83	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	116,770.40	116,770.40	0.00	0.00	0.00	116,770.40	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	82,149.58	82,149.58	0.00	0.00	0.00	0.00	82,149.58	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	53,863.06	53,863.06	0.00	0.00	0.00	53,863.06	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	3,592.77	298,200.27	0.00	0.00	0.00	298,200.27	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	2,051.94	36,934.96	0.00	0.00	0.00	36,934.96	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	167,042.07	167,042.07	0.00	0.00	0.00	0.00	167,042.07	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	237,038.40	237,038.40	0.00	0.00	0.00	237,038.40	0.00	0.00	0.00	0.00	0.00
1.3.5.2.3	Equipment Operating	Detail	1,152.00	Meter	411.12	473,615.07	0.00	473,615.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,187.48 Each	120.67	143,293.77	0.00	143,293.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	2,371.30 Each	33.57	79,604.68	0.00	79,604.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	183.25 Each	61.10	11,196.81	0.00	11,196.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	1,297.44 Each	184.61	239,519.82	0.00	239,519.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.6	270 Level TO 410 Level	Detail	1,543.00	Meter	3,312.80	5,111,646.85	2,293,826.67	1,061,565.13	0.00	1,422,485.33	333,769.72	0.00	0.00	0.00	0.00
1.3.6.1	Haulage - Mining Block 4 (305L to 410L)	Detail	124,566.39	Tonne	5.85	728,722.21	280,757.59	427,200.49	0.00	20,764.13	0.00	0.00	0.00	0.00	0.00
1.3.6.1.1	Truck Haulage Labour	Detail	124,566.39	Tonne	2.42	301,521.72	280,757.59	0.00	0.00	20,764.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	5,522.38 Each	54.60	301,521.72	280,757.59	0.00	0.00	20,764.13	0.00	0.00	0.00	0.00	0.00

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1.3.6.1.2	Truck Haulage Equipment	Detail	124,566.39	Tonne	3.43	427,200.49	0.00	427,200.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	3,682.13 Each	116.02	427,200.49	0.00	427,200.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.6.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	1,543.00	Meter	2,840.52	4,382,924.64	2,013,069.09	634,364.64	0.00	1,401,721.20	333,769.72	0.00	0.00	0.00	0.00
1.3.6.2.1	Labour	Detail	1,543.00	Meter	1,384.72	2,136,621.66	2,013,069.09	0.00	0.00	123,552.58	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	6,789.20 Each	67.82	460,443.54	434,916.15	0.00	0.00	25,527.39	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	20,367.60 Each	64.09	1,305,359.48	1,228,777.31	0.00	0.00	76,582.18	0.00	0.00	0.00	0.00	0.00
1.3.6.2.2	Materials	Detail	1,543.00	Meter	1,044.68	1,611,938.34	0.00	0.00	0.00	1,278,168.62	333,769.72	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		3,086.00	Meter	55.00	169,730.00	0.00	0.00	0.00	169,730.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		4,474.70	Cubic Meter	10.00	44,747.00	0.00	0.00	0.00	44,747.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	59,948.78	59,948.78	0.00	0.00	0.00	59,948.78	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	44,098.94	8,819.79	0.00	0.00	0.00	8,819.79	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	156,403.41	156,403.41	0.00	0.00	0.00	156,403.41	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	110,031.95	110,031.95	0.00	0.00	0.00	0.00	110,031.95	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	72,144.71	72,144.71	0.00	0.00	0.00	72,144.71	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	4,812.20	399,412.34	0.00	0.00	0.00	399,412.34	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	2,748.39	49,471.05	0.00	0.00	0.00	49,471.05	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	223,737.78	223,737.78	0.00	0.00	0.00	0.00	223,737.78	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	317,491.54	317,491.54	0.00	0.00	0.00	317,491.54	0.00	0.00	0.00	0.00	0.00
1.3.6.2.3	Equipment Operating	Detail	1,543.00	Meter	411.12	634,364.64	0.00	634,364.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,590.53 Each	120.67	191,929.06	0.00	191,929.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	3,176.15 Each	33.57	106,623.28	0.00	106,623.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	245.45 Each	61.10	14,997.11	0.00	14,997.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	1,737.80 Each	184.61	320,815.18	0.00	320,815.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.7	410 Level TO 550 Level	Detail	1,475.00	Meter	3,470.59	5,119,115.39	2,282,448.75	1,151,174.93	0.00	1,366,431.21	319,060.50	0.00	0.00	0.00	0.00
1.3.7.1	Haulage - Mining Block 5 (445L to 550L)	Detail	119,076.75	Tonne	7.80	929,346.21	358,095.60	544,766.74	0.00	26,483.86	0.00	0.00	0.00	0.00	0.00

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1.3.7.1.1	Truck Haulage Labour	Detail	119,076.75	Tonne	3.23	384,579.46	358,095.60	0.00	0.00	26,483.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	7,043.58 Each	54.60	384,579.46	358,095.60	0.00	0.00	26,483.86	0.00	0.00	0.00	0.00	0.00
1.3.7.1.2	Truck Haulage Equipment	Detail	119,076.75	Tonne	4.57	544,766.74	0.00	544,766.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	4,695.46 Each	116.02	544,766.74	0.00	544,766.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.7.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	1,475.00	Meter	2,840.52	4,189,769.18	1,924,353.15	606,408.19	0.00	1,339,947.35	319,060.50	0.00	0.00	0.00	0.00
1.3.7.2.1	Labour	Detail	1,475.00	Meter	1,384.72	2,042,460.76	1,924,353.15	0.00	0.00	118,107.62	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	6,490.00 Each	67.82	440,151.80	415,749.40	0.00	0.00	24,402.40	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	19,470.00 Each	64.09	1,247,832.30	1,174,625.10	0.00	0.00	73,207.20	0.00	0.00	0.00	0.00	0.00
1.3.7.2.2	Materials	Detail	1,475.00	Meter	1,044.68	1,540,900.23	0.00	0.00	0.00	1,221,839.74	319,060.50	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		2,950.00	Meter	55.00	162,250.00	0.00	0.00	0.00	162,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		4,277.50	Cubic Meter	10.00	42,775.00	0.00	0.00	0.00	42,775.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	57,306.84	57,306.84	0.00	0.00	0.00	57,306.84	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	42,155.50	8,431.10	0.00	0.00	0.00	8,431.10	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	149,510.72	149,510.72	0.00	0.00	0.00	149,510.72	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	105,182.84	105,182.84	0.00	0.00	0.00	0.00	105,182.84	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	68,965.29	68,965.29	0.00	0.00	0.00	68,965.29	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	4,600.12	381,810.24	0.00	0.00	0.00	381,810.24	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	2,627.27	47,290.86	0.00	0.00	0.00	47,290.86	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	213,877.66	213,877.66	0.00	0.00	0.00	0.00	213,877.66	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	303,499.69	303,499.69	0.00	0.00	0.00	303,499.69	0.00	0.00	0.00	0.00	0.00
1.3.7.2.3	Equipment Operating	Detail	1,475.00	Meter	411.12	606,408.19	0.00	606,408.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,520.43 Each	120.67	183,470.75	0.00	183,470.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	3,036.17 Each	33.57	101,924.39	0.00	101,924.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	234.63 Each	61.10	14,336.19	0.00	14,336.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	1,661.21 Each	184.61	306,676.86	0.00	306,676.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.3.8	550 Level TO 580 Level	Detail	245.00	Meter	3,470.59	850,293.74	379,118.61	191,212.11	0.00	226,966.54	52,996.49	0.00	0.00	0.00	0.00
1.3.8.1	Haulage - Mining Block 5 (445L to 550L)	Detail	19,778.85	Tonne	7.80	154,365.98	59,480.29	90,486.68	0.00	4,399.01	0.00	0.00	0.00	0.00	0.00
1.3.8.1.1	Truck Haulage Labour	Detail	19,778.85	Tonne	3.23	63,879.30	59,480.29	0.00	0.00	4,399.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	1,169.95 Each	54.60	63,879.30	59,480.29	0.00	0.00	4,399.01	0.00	0.00	0.00	0.00	0.00
1.3.8.1.2	Truck Haulage Equipment	Detail	19,778.85	Tonne	4.57	90,486.68	0.00	90,486.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	779.92 Each	116.02	90,486.68	0.00	90,486.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3.8.2	5.0 x 5.2 Ramp Development - 5 m/day	Detail	245.00	Meter	2,840.52	695,927.76	319,638.32	100,725.43	0.00	222,567.53	52,996.49	0.00	0.00	0.00	0.00
1.3.8.2.1	Labour	Detail	245.00	Meter	1,384.72	339,256.19	319,638.32	0.00	0.00	19,617.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,078.00 Each	67.82	73,109.96	69,056.68	0.00	0.00	4,053.28	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		3.00	3,234.00 Each	64.09	207,267.06	195,107.22	0.00	0.00	12,159.84	0.00	0.00	0.00	0.00	0.00
1.3.8.2.2	Materials	Detail	245.00	Meter	1,044.68	255,946.14	0.00	0.00	0.00	202,949.65	52,996.49	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVE1005	48" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		490.00	Meter	55.00	26,950.00	0.00	0.00	0.00	26,950.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		710.50	Cubic Meter	10.00	7,105.00	0.00	0.00	0.00	7,105.00	0.00	0.00	0.00	0.00	0.00
ASUPI1000	Water- 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	9,518.76	9,518.76	0.00	0.00	0.00	9,518.76	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	7,002.10	1,400.42	0.00	0.00	0.00	1,400.42	0.00	0.00	0.00	0.00	0.00
ASUPI1001	Air - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	24,833.98	24,833.98	0.00	0.00	0.00	24,833.98	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		1.00	Meter	17,471.05	17,471.05	0.00	0.00	0.00	0.00	17,471.05	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		1.00	Meter	11,455.25	11,455.25	0.00	0.00	0.00	11,455.25	0.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		83.00	Meter	764.09	63,419.33	0.00	0.00	0.00	63,419.33	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		18.00	Meter	436.39	7,855.09	0.00	0.00	0.00	7,855.09	0.00	0.00	0.00	0.00	0.00
ASUEX1002	Explosives - 5.0 x 5.2		1.00	Meter	35,525.44	35,525.44	0.00	0.00	0.00	0.00	35,525.44	0.00	0.00	0.00	0.00
AIMGS1004	Ground Support - 5.0 x 5.2		1.00	Meter	50,411.81	50,411.81	0.00	0.00	0.00	50,411.81	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.3.8.2.3	Equipment Operating	Detail	245.00	Meter	411.12	100,725.43	0.00	100,725.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	252.55 Each	120.67	30,474.80	0.00	30,474.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		1.00	504.31 Each	33.57	16,929.81	0.00	16,929.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		1.00	38.97 Each	61.10	2,381.27	0.00	2,381.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		1.00	275.93 Each	184.61	50,939.55	0.00	50,939.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	Lateral Waste Development	Detail	1.00	LS	10,046,225.31	10,046,225.31	4,632,482.17	2,092,561.13	0.00	2,685,001.56	636,180.45	0.00	0.00	0.00	0.00
1.4.1	80 Block	Detail	1.00	LS	1,386,462.43	1,386,462.43	657,180.14	242,404.93	0.00	393,254.25	93,623.11	0.00	0.00	0.00	0.00
1.4.1.1	45 Sub Level Lateral Development	Detail	1.00	LS	461,732.98	461,732.98	210,864.69	83,264.95	0.00	135,177.77	32,425.57	0.00	0.00	0.00	0.00
1.4.1.1.1	Capital	Detail	145.00	Meter	2,167.76	314,325.26	143,546.38	56,682.71	0.00	92,022.43	22,073.74	0.00	0.00	0.00	0.00
1.4.1.1.1.1	4 x 4.5 Development - 5 m/day	Detail	145.00	Meter	2,034.81	295,046.98	136,118.32	45,381.85	0.00	91,473.07	22,073.74	0.00	0.00	0.00	0.00
1.4.1.1.1.1.1	Labour	Detail	145.00	Meter	996.07	144,430.44	136,118.32	0.00	0.00	8,312.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	609.00 Each	67.82	41,302.38	39,012.54	0.00	0.00	2,289.84	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,218.00 Each	64.09	78,061.62	73,481.94	0.00	0.00	4,579.68	0.00	0.00	0.00	0.00	0.00
1.4.1.1.1.1.2	Materials	Detail	145.00	Meter	725.76	105,234.69	0.00	0.00	0.00	83,160.95	22,073.74	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		145.00	Meter	50.00	7,250.00	0.00	0.00	0.00	7,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		232.00	Cubic Meter	10.00	2,320.00	0.00	0.00	0.00	2,320.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,043.50	2,043.50	0.00	0.00	0.00	464.31	1,579.20	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,633.55	5,633.55	0.00	0.00	0.00	5,633.55	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,144.10	828.82	0.00	0.00	0.00	828.82	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	10,340.01	2,585.00	0.00	0.00	0.00	0.00	2,585.00	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,944.23	23,944.23	0.00	0.00	0.00	23,944.23	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,779.64	5,084.73	0.00	0.00	0.00	5,084.73	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,909.54	17,909.54	0.00	0.00	0.00	0.00	17,909.54	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	452.22	33,916.16	0.00	0.00	0.00	33,916.16	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	258.27	3,719.15	0.00	0.00	0.00	3,719.15	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.1.1.1.1.3	Equipment Operating	Detail	145.00	Meter	312.98	45,381.85	0.00	45,381.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	107.88 Each	120.67	13,017.88	0.00	13,017.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	200.97 Each	33.57	6,746.56	0.00	6,746.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	138.77 Each	184.61	25,617.41	0.00	25,617.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.1.1.2	Haulage - Mining Block 1 (45L to 80L)	Detail	8,104.05	Tonne	2.38	19,278.29	7,428.06	11,300.86	0.00	549.36	0.00	0.00	0.00	0.00	0.00
1.4.1.1.1.2.1	Truck Haulage Labour	Detail	8,104.05	Tonne	0.98	7,977.42	7,428.06	0.00	0.00	549.36	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	146.11 Each	54.60	7,977.42	7,428.06	0.00	0.00	549.36	0.00	0.00	0.00	0.00	0.00
1.4.1.1.1.2.2	Truck Haulage Equipment	Detail	8,104.05	Tonne	1.39	11,300.86	0.00	11,300.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	97.40 Each	116.02	11,300.86	0.00	11,300.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.1.2	Operating	Detail	68.00	Meter	2,167.76	147,407.71	67,318.30	26,582.24	0.00	43,155.34	10,351.82	0.00	0.00	0.00	0.00
1.4.1.1.2.1	4 x 4.5 Development - 5 m/day	Detail	68.00	Meter	2,034.81	138,366.86	63,834.80	21,282.52	0.00	42,897.71	10,351.82	0.00	0.00	0.00	0.00
1.4.1.1.2.1.1	Labour	Detail	68.00	Meter	996.07	67,732.90	63,834.80	0.00	0.00	3,898.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	285.60 Each	67.82	19,369.39	18,295.54	0.00	0.00	1,073.86	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	571.20 Each	64.09	36,608.21	34,460.50	0.00	0.00	2,147.71	0.00	0.00	0.00	0.00	0.00

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1.4.1.1.2.1.2	Materials	Detail	68.00	Meter	725.76	49,351.44	0.00	0.00	0.00	38,999.62	10,351.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		68.00	Meter	50.00	3,400.00	0.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		108.80	Cubic Meter	10.00	1,088.00	0.00	0.00	0.00	1,088.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	958.33	958.33	0.00	0.00	0.00	217.74	740.59	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	2,641.94	2,641.94	0.00	0.00	0.00	2,641.94	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	1,943.44	388.69	0.00	0.00	0.00	388.69	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	4,849.11	1,212.28	0.00	0.00	0.00	0.00	1,212.28	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	11,229.02	11,229.02	0.00	0.00	0.00	11,229.02	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	3,179.42	2,384.56	0.00	0.00	0.00	2,384.56	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	8,398.96	8,398.96	0.00	0.00	0.00	0.00	8,398.96	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	212.07	15,905.51	0.00	0.00	0.00	15,905.51	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	121.12	1,744.15	0.00	0.00	0.00	1,744.15	0.00	0.00	0.00	0.00	0.00
1.4.1.1.2.1.3	Equipment Operating	Detail	68.00	Meter	312.98	21,282.52	0.00	21,282.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	50.59 Each	120.67	6,104.94	0.00	6,104.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	94.25 Each	33.57	3,163.91	0.00	3,163.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	65.08 Each	184.61	12,013.68	0.00	12,013.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.1.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	3,800.52	Tonne	2.38	9,040.85	3,483.51	5,299.72	0.00	257.63	0.00	0.00	0.00	0.00	0.00
1.4.1.1.2.2.1	Truck Haulage Labour	Detail	3,800.52	Tonne	0.98	3,741.14	3,483.51	0.00	0.00	257.63	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	68.52 Each	54.60	3,741.14	3,483.51	0.00	0.00	257.63	0.00	0.00	0.00	0.00	0.00
1.4.1.1.2.2.2	Truck Haulage Equipment	Detail	3,800.52	Tonne	1.39	5,299.72	0.00	5,299.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	45.68 Each	116.02	5,299.72	0.00	5,299.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.2	65 Sub Level Lateral Development	Detail	1.00	LS	424,881.05	424,881.05	194,035.11	76,619.39	0.00	124,388.93	29,837.61	0.00	0.00	0.00	0.00
1.4.1.2.1	Capital	Detail	145.00	Meter	2,167.76	314,325.26	143,546.38	56,682.71	0.00	92,022.43	22,073.74	0.00	0.00	0.00	0.00
1.4.1.2.1.1	4 x 4.5 Development - 5 m/day	Detail	145.00	Meter	2,034.81	295,046.98	136,118.32	45,381.85	0.00	91,473.07	22,073.74	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.1.2.1.1.1	Labour	Detail	145.00	Meter	996.07	144,430.44	136,118.32	0.00	0.00	8,312.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	609.00 Each	67.82	41,302.38	39,012.54	0.00	0.00	2,289.84	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,218.00 Each	64.09	78,061.62	73,481.94	0.00	0.00	4,579.68	0.00	0.00	0.00	0.00	0.00
1.4.1.2.1.1.2	Materials	Detail	145.00	Meter	725.76	105,234.69	0.00	0.00	0.00	83,160.95	22,073.74	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		145.00	Meter	50.00	7,250.00	0.00	0.00	0.00	7,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		232.00	Cubic Meter	10.00	2,320.00	0.00	0.00	0.00	2,320.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,043.50	2,043.50	0.00	0.00	0.00	464.31	1,579.20	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,633.55	5,633.55	0.00	0.00	0.00	5,633.55	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,144.10	828.82	0.00	0.00	0.00	828.82	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	10,340.01	2,585.00	0.00	0.00	0.00	0.00	2,585.00	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,944.23	23,944.23	0.00	0.00	0.00	23,944.23	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,779.64	5,084.73	0.00	0.00	0.00	5,084.73	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,909.54	17,909.54	0.00	0.00	0.00	0.00	17,909.54	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	452.22	33,916.16	0.00	0.00	0.00	33,916.16	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	258.27	3,719.15	0.00	0.00	0.00	3,719.15	0.00	0.00	0.00	0.00	0.00
1.4.1.2.1.1.3	Equipment Operating	Detail	145.00	Meter	312.98	45,381.85	0.00	45,381.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	107.88 Each	120.67	13,017.88	0.00	13,017.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	200.97 Each	33.57	6,746.56	0.00	6,746.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	138.77 Each	184.61	25,617.41	0.00	25,617.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.2.1.2	Haulage - Mining Block 1 (45L to 80L)	Detail	8,104.05	Tonne	2.38	19,278.29	7,428.06	11,300.86	0.00	549.36	0.00	0.00	0.00	0.00	0.00
1.4.1.2.1.2.1	Truck Haulage Labour	Detail	8,104.05	Tonne	0.98	7,977.42	7,428.06	0.00	0.00	549.36	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	146.11 Each	54.60	7,977.42	7,428.06	0.00	0.00	549.36	0.00	0.00	0.00	0.00	0.00
1.4.1.2.1.2.2	Truck Haulage Equipment	Detail	8,104.05	Tonne	1.39	11,300.86	0.00	11,300.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	97.40 Each	116.02	11,300.86	0.00	11,300.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2	Operating	Detail	51.00	Meter	2,167.76	110,555.78	50,488.73	19,936.68	0.00	32,366.51	7,763.87	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.1.2.2.1	4 x 4.5 Development - 5 m/day	Detail	51.00	Meter	2,034.81	103,775.14	47,876.10	15,961.89	0.00	32,173.28	7,763.87	0.00	0.00	0.00	0.00
1.4.1.2.2.1.1	Labour	Detail	51.00	Meter	996.07	50,799.67	47,876.10	0.00	0.00	2,923.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	214.20 Each	67.82	14,527.04	13,721.65	0.00	0.00	805.39	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	428.40 Each	64.09	27,456.16	25,845.37	0.00	0.00	1,610.78	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2.1.2	Materials	Detail	51.00	Meter	725.76	37,013.58	0.00	0.00	0.00	29,249.71	7,763.87	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		51.00	Meter	50.00	2,550.00	0.00	0.00	0.00	2,550.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		81.60	Cubic Meter	10.00	816.00	0.00	0.00	0.00	816.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	718.75	718.75	0.00	0.00	0.00	163.31	555.44	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,981.46	1,981.46	0.00	0.00	0.00	1,981.46	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	1,457.58	291.52	0.00	0.00	0.00	291.52	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	3,636.83	909.21	0.00	0.00	0.00	0.00	909.21	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	8,421.76	8,421.76	0.00	0.00	0.00	8,421.76	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	2,384.56	1,788.42	0.00	0.00	0.00	1,788.42	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	6,299.22	6,299.22	0.00	0.00	0.00	0.00	6,299.22	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	159.06	11,929.13	0.00	0.00	0.00	11,929.13	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	90.84	1,308.11	0.00	0.00	0.00	1,308.11	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2.1.3	Equipment Operating	Detail	51.00	Meter	312.98	15,961.89	0.00	15,961.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	37.94 Each	120.67	4,578.70	0.00	4,578.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	70.69 Each	33.57	2,372.93	0.00	2,372.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	48.81 Each	184.61	9,010.26	0.00	9,010.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	2,850.39	Tonne	2.38	6,780.64	2,612.63	3,974.79	0.00	193.22	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2.2.1	Truck Haulage Labour	Detail	2,850.39	Tonne	0.98	2,805.85	2,612.63	0.00	0.00	193.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	51.39 Each	54.60	2,805.85	2,612.63	0.00	0.00	193.22	0.00	0.00	0.00	0.00	0.00
1.4.1.2.2.2.2	Truck Haulage Equipment	Detail	2,850.39	Tonne	1.39	3,974.79	0.00	3,974.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	34.26 Each	116.02	3,974.79	0.00	3,974.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.4.1.3	80 Level Lateral Development	Detail	1.00	LS	499,848.40	499,848.40	252,280.34	82,520.59	0.00	133,687.54	31,359.94	0.00	0.00	0.00	0.00
1.4.1.3.1	Capital	Detail	172.00	Meter	2,428.36	417,677.94	210,641.83	69,229.47	0.00	111,622.61	26,184.02	0.00	0.00	0.00	0.00
1.4.1.3.1.1	4 x 4.5 Development - 4 m/day	Detail	172.00	Meter	2,295.41	394,809.90	201,830.61	55,824.31	0.00	110,970.95	26,184.02	0.00	0.00	0.00	0.00
1.4.1.3.1.1.1	Labour	Detail	172.00	Meter	1,245.09	214,155.48	201,830.61	0.00	0.00	12,324.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	903.00 Each	67.82	61,241.46	57,846.18	0.00	0.00	3,395.28	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,806.00 Each	64.09	115,746.54	108,955.98	0.00	0.00	6,790.56	0.00	0.00	0.00	0.00	0.00
1.4.1.3.1.1.2	Materials	Detail	172.00	Meter	725.76	124,830.11	0.00	0.00	0.00	98,646.09	26,184.02	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		172.00	Meter	50.00	8,600.00	0.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		275.20	Cubic Meter	10.00	2,752.00	0.00	0.00	0.00	2,752.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,424.02	2,424.02	0.00	0.00	0.00	550.76	1,873.25	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	6,682.56	6,682.56	0.00	0.00	0.00	6,682.56	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,915.76	983.15	0.00	0.00	0.00	983.15	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	12,265.39	3,066.35	0.00	0.00	0.00	0.00	3,066.35	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	28,402.81	28,402.81	0.00	0.00	0.00	28,402.81	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	8,042.05	6,031.54	0.00	0.00	0.00	6,031.54	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	21,244.43	21,244.43	0.00	0.00	0.00	0.00	21,244.43	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	536.42	40,231.59	0.00	0.00	0.00	40,231.59	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	306.37	4,411.68	0.00	0.00	0.00	4,411.68	0.00	0.00	0.00	0.00	0.00
1.4.1.3.1.1.3	Equipment Operating	Detail	172.00	Meter	324.56	55,824.31	0.00	55,824.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	127.97 Each	120.67	15,441.90	0.00	15,441.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.41	297.73 Each	33.57	9,994.86	0.00	9,994.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	164.60 Each	184.61	30,387.54	0.00	30,387.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.3.1.2	Haulage - Mining Block 1 (45L to 80L)	Detail	9,613.08	Tonne	2.38	22,868.04	8,811.22	13,405.16	0.00	651.66	0.00	0.00	0.00	0.00	0.00
1.4.1.3.1.2.1	Truck Haulage Labour	Detail	9,613.08	Tonne	0.98	9,462.88	8,811.22	0.00	0.00	651.66	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	173.31 Each	54.60	9,462.88	8,811.22	0.00	0.00	651.66	0.00	0.00	0.00	0.00	0.00

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1.4.1.3.1.2.2	Truck Haulage Equipment	Detail	9,613.08	Tonne	1.39	13,405.16	0.00	13,405.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	115.54 Each	116.02	13,405.16	0.00	13,405.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.3.2	Operating	Detail		34.00 Meter	2,416.78	82,170.47	41,638.50	13,291.12	0.00	22,064.93	5,175.91	0.00	0.00	0.00	0.00
1.4.1.3.2.1	4 x 4.5 Development - 4 m/day	Detail		34.00 Meter	2,283.82	77,650.04	39,896.75	10,641.26	0.00	21,936.12	5,175.91	0.00	0.00	0.00	0.00
1.4.1.3.2.1.1	Labour	Detail		34.00 Meter	1,245.09	42,333.06	39,896.75	0.00	0.00	2,436.31	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	178.50 Each	67.82	12,105.87	11,434.71	0.00	0.00	671.16	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	357.00 Each	64.09	22,880.13	21,537.81	0.00	0.00	1,342.32	0.00	0.00	0.00	0.00	0.00
1.4.1.3.2.1.2	Materials	Detail		34.00 Meter	725.76	24,675.72	0.00	0.00	0.00	19,499.81	5,175.91	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		34.00	Meter	50.00	1,700.00	0.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		54.40	Cubic Meter	10.00	544.00	0.00	0.00	0.00	544.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	479.17	479.17	0.00	0.00	0.00	108.87	370.29	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,320.97	1,320.97	0.00	0.00	0.00	1,320.97	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	971.72	194.34	0.00	0.00	0.00	194.34	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	2,424.55	606.14	0.00	0.00	0.00	0.00	606.14	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	5,614.51	5,614.51	0.00	0.00	0.00	5,614.51	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,589.71	1,192.28	0.00	0.00	0.00	1,192.28	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	4,199.48	4,199.48	0.00	0.00	0.00	0.00	4,199.48	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	106.04	7,952.76	0.00	0.00	0.00	7,952.76	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	60.56	872.08	0.00	0.00	0.00	872.08	0.00	0.00	0.00	0.00	0.00
1.4.1.3.2.1.3	Equipment Operating	Detail		34.00 Meter	312.98	10,641.26	0.00	10,641.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	25.30 Each	120.67	3,052.47	0.00	3,052.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	47.12 Each	33.57	1,581.95	0.00	1,581.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	32.54 Each	184.61	6,006.84	0.00	6,006.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.1.3.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	1,900.26	Tonne	2.38	4,520.43	1,741.75	2,649.86	0.00	128.82	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.1.3.2.2.1	Truck Haulage Labour	Detail	1,900.26	Tonne	0.98	1,870.57	1,741.75	0.00	0.00	128.82	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	34.26 Each	54.60	1,870.57	1,741.75	0.00	0.00	128.82	0.00	0.00	0.00	0.00	0.00
1.4.1.3.2.2.2	Truck Haulage Equipment	Detail	1,900.26	Tonne	1.39	2,649.86	0.00	2,649.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	22.84 Each	116.02	2,649.86	0.00	2,649.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2	170 Block	Detail	1.00	LS	1,070,915.54	1,070,915.54	517,474.81	189,063.35	0.00	294,654.79	69,722.58	0.00	0.00	0.00	0.00
1.4.2.1	110 Sub Level Lateral Development	Detail	1.00	LS	398,886.97	398,886.97	181,698.96	74,578.62	0.00	115,055.26	27,554.12	0.00	0.00	0.00	0.00
1.4.2.1.1	Capital	Detail	156.00	Meter	2,203.80	343,792.08	156,602.42	64,277.71	0.00	99,163.65	23,748.30	0.00	0.00	0.00	0.00
1.4.2.1.1.1	4 x 4.5 Development - 5 m/day	Detail	156.00	Meter	2,034.81	317,429.85	146,444.54	48,824.61	0.00	98,412.40	23,748.30	0.00	0.00	0.00	0.00
1.4.2.1.1.1.1	Labour	Detail	156.00	Meter	996.07	155,387.23	146,444.54	0.00	0.00	8,942.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	655.20 Each	67.82	44,435.66	41,972.11	0.00	0.00	2,463.55	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,310.40 Each	64.09	83,983.54	79,056.43	0.00	0.00	4,927.10	0.00	0.00	0.00	0.00	0.00
1.4.2.1.1.1.2	Materials	Detail	156.00	Meter	725.76	113,218.01	0.00	0.00	0.00	89,469.71	23,748.30	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		156.00	Meter	50.00	7,800.00	0.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		249.60	Cubic Meter	10.00	2,496.00	0.00	0.00	0.00	2,496.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,198.53	2,198.53	0.00	0.00	0.00	499.53	1,699.00	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	6,060.93	6,060.93	0.00	0.00	0.00	6,060.93	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,458.48	891.70	0.00	0.00	0.00	891.70	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	11,124.42	2,781.11	0.00	0.00	0.00	0.00	2,781.11	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	25,760.69	25,760.69	0.00	0.00	0.00	25,760.69	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	7,293.96	5,470.47	0.00	0.00	0.00	5,470.47	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	19,268.20	19,268.20	0.00	0.00	0.00	0.00	19,268.20	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	486.52	36,489.11	0.00	0.00	0.00	36,489.11	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	277.87	4,001.29	0.00	0.00	0.00	4,001.29	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.2.1.1.1.3	Equipment Operating	Detail	156.00	Meter	312.98	48,824.61	0.00	48,824.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	116.06 Each	120.67	14,005.44	0.00	14,005.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	216.22 Each	33.57	7,258.37	0.00	7,258.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	149.29 Each	184.61	27,560.80	0.00	27,560.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.1.1.2	Haulage - Mining Block 2 (110L to 170L)	Detail	8,718.84	Tonne	3.02	26,362.23	10,157.88	15,453.10	0.00	751.25	0.00	0.00	0.00	0.00	0.00
1.4.2.1.1.2.1	Truck Haulage Labour	Detail	8,718.84	Tonne	1.25	10,909.13	10,157.88	0.00	0.00	751.25	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	199.80 Each	54.60	10,909.13	10,157.88	0.00	0.00	751.25	0.00	0.00	0.00	0.00	0.00
1.4.2.1.1.2.2	Truck Haulage Equipment	Detail	8,718.84	Tonne	1.77	15,453.10	0.00	15,453.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	133.19 Each	116.02	15,453.10	0.00	15,453.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.1.2	Operating	Detail	25.00	Meter	2,203.80	55,094.89	25,096.54	10,300.91	0.00	15,891.61	3,805.82	0.00	0.00	0.00	0.00
1.4.2.1.2.1	4 x 4.5 Development - 5 m/day	Detail	25.00	Meter	2,034.81	50,870.17	23,468.68	7,824.46	0.00	15,771.22	3,805.82	0.00	0.00	0.00	0.00
1.4.2.1.2.1.1	Labour	Detail	25.00	Meter	996.07	24,901.80	23,468.68	0.00	0.00	1,433.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	105.00 Each	67.82	7,121.10	6,726.30	0.00	0.00	394.80	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	210.00 Each	64.09	13,458.90	12,669.30	0.00	0.00	789.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.2.1.2.1.2	Materials	Detail	25.00	Meter	725.76	18,143.91	0.00	0.00	0.00	14,338.09	3,805.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		25.00	Meter	50.00	1,250.00	0.00	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		40.00	Cubic Meter	10.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	352.33	352.33	0.00	0.00	0.00	80.05	272.28	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	971.30	971.30	0.00	0.00	0.00	971.30	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	714.50	142.90	0.00	0.00	0.00	142.90	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,782.76	445.69	0.00	0.00	0.00	0.00	445.69	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,128.32	4,128.32	0.00	0.00	0.00	4,128.32	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,168.90	876.68	0.00	0.00	0.00	876.68	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,087.85	3,087.85	0.00	0.00	0.00	0.00	3,087.85	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	77.97	5,847.61	0.00	0.00	0.00	5,847.61	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	44.53	641.23	0.00	0.00	0.00	641.23	0.00	0.00	0.00	0.00	0.00
1.4.2.1.2.1.3	Equipment Operating	Detail	25.00	Meter	312.98	7,824.46	0.00	7,824.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	18.60 Each	120.67	2,244.46	0.00	2,244.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	34.65 Each	33.57	1,163.20	0.00	1,163.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	23.93 Each	184.61	4,416.79	0.00	4,416.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.1.2.2	Haulage - Mining Block 2 (110L to 170L)	Detail	1,397.25	Tonne	3.02	4,224.72	1,627.87	2,476.46	0.00	120.39	0.00	0.00	0.00	0.00	0.00
1.4.2.1.2.2.1	Truck Haulage Labour	Detail	1,397.25	Tonne	1.25	1,748.26	1,627.87	0.00	0.00	120.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	32.02 Each	54.60	1,748.26	1,627.87	0.00	0.00	120.39	0.00	0.00	0.00	0.00	0.00
1.4.2.1.2.2.2	Truck Haulage Equipment	Detail	1,397.25	Tonne	1.77	2,476.46	0.00	2,476.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	21.35 Each	116.02	2,476.46	0.00	2,476.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.2	110 Sub Level Sill Pillar Access	Detail	1.00	LS	66,183.66	66,183.66	29,854.39	12,711.69	0.00	19,050.60	4,566.98	0.00	0.00	0.00	0.00
1.4.2.2.1	Capital	Detail	30.00	Meter	2,206.12	66,183.66	29,854.39	12,711.69	0.00	19,050.60	4,566.98	0.00	0.00	0.00	0.00
1.4.2.2.1.1	4 x 4.5 Development - 5 m/day	Detail	30.00	Meter	2,034.81	61,044.20	28,162.41	9,389.35	0.00	18,925.46	4,566.98	0.00	0.00	0.00	0.00

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1.4.2.2.1.1.1	Labour	Detail	30.00	Meter	996.07	29,882.16	28,162.41	0.00	0.00	1,719.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	126.00 Each	67.82	8,545.32	8,071.56	0.00	0.00	473.76	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	252.00 Each	64.09	16,150.68	15,203.16	0.00	0.00	947.52	0.00	0.00	0.00	0.00	0.00
1.4.2.2.1.1.2	Materials	Detail	30.00	Meter	725.76	21,772.69	0.00	0.00	0.00	17,205.71	4,566.98	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		30.00	Meter	50.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		48.00	Cubic Meter	10.00	480.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	422.79	422.79	0.00	0.00	0.00	96.06	326.73	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,165.56	1,165.56	0.00	0.00	0.00	1,165.56	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	857.40	171.48	0.00	0.00	0.00	171.48	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	2,139.31	534.83	0.00	0.00	0.00	0.00	534.83	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,953.98	4,953.98	0.00	0.00	0.00	4,953.98	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,402.68	1,052.01	0.00	0.00	0.00	1,052.01	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,705.42	3,705.42	0.00	0.00	0.00	0.00	3,705.42	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	93.56	7,017.14	0.00	0.00	0.00	7,017.14	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	53.44	769.48	0.00	0.00	0.00	769.48	0.00	0.00	0.00	0.00	0.00
1.4.2.2.1.1.3	Equipment Operating	Detail	30.00	Meter	312.98	9,389.35	0.00	9,389.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	22.32 Each	120.67	2,693.35	0.00	2,693.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	41.58 Each	33.57	1,395.84	0.00	1,395.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	28.71 Each	184.61	5,300.15	0.00	5,300.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.2.1.2	Haulage - Mining Block 2 (110L to 170L)	Detail	1,676.70	Tonne	3.07	5,139.45	1,691.98	3,322.34	0.00	125.13	0.00	0.00	0.00	0.00	0.00
1.4.2.2.1.2.1	Truck Haulage Labour	Detail	1,676.70	Tonne	1.08	1,817.11	1,691.98	0.00	0.00	125.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	33.28 Each	54.60	1,817.11	1,691.98	0.00	0.00	125.13	0.00	0.00	0.00	0.00	0.00
1.4.2.2.1.2.2	Truck Haulage Equipment	Detail	1,676.70	Tonne	1.98	3,322.34	0.00	3,322.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	22.18 Each	149.76	3,322.34	0.00	3,322.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.3	140 Sub Level Lateral Development	Detail	1.00	LS	321,318.56	321,318.56	162,249.84	53,976.79	0.00	85,149.43	19,942.48	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.2.3.1	Capital	Detail	104.00	Meter	2,452.81	255,092.59	128,809.04	42,851.81	0.00	67,599.55	15,832.20	0.00	0.00	0.00	0.00
1.4.2.3.1.1	Haulage - Mining Block 2 (110L to 170L)	Detail	5,812.56	Tonne	3.02	17,574.82	6,771.92	10,302.07	0.00	500.83	0.00	0.00	0.00	0.00	0.00
1.4.2.3.1.1.1	Truck Haulage Labour	Detail	5,812.56	Tonne	1.25	7,272.76	6,771.92	0.00	0.00	500.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	133.20	Each	54.60	7,272.76	6,771.92	0.00	0.00	500.83	0.00	0.00	0.00	0.00	0.00
1.4.2.3.1.1.2	Truck Haulage Equipment	Detail	5,812.56	Tonne	1.77	10,302.07	0.00	10,302.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t	1.00	88.80	Each	116.02	10,302.07	0.00	10,302.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.3.1.2	4 x 4.5 Development - 4 m/day	Detail	104.00	Meter	2,283.82	237,517.77	122,037.12	32,549.74	0.00	67,098.72	15,832.20	0.00	0.00	0.00	0.00
1.4.2.3.1.2.1	Labour	Detail	104.00	Meter	1,245.09	129,489.36	122,037.12	0.00	0.00	7,452.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	546.00	Each	67.82	37,029.72	34,976.76	0.00	0.00	2,052.96	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	1,092.00	Each	64.09	69,986.28	65,880.36	0.00	0.00	4,105.92	0.00	0.00	0.00	0.00	0.00
1.4.2.3.1.2.2	Materials	Detail	104.00	Meter	725.76	75,478.67	0.00	0.00	0.00	59,646.47	15,832.20	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)	104.00		Meter	50.00	5,200.00	0.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	166.40		Cubic Meter	10.00	1,664.00	0.00	0.00	0.00	1,664.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40	1.00		Meter	1,465.68	1,465.68	0.00	0.00	0.00	333.02	1,132.66	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40	1.00		Meter	4,040.62	4,040.62	0.00	0.00	0.00	4,040.62	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m	0.20		Each	2,972.32	594.46	0.00	0.00	0.00	594.46	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40	0.25		Meter	7,416.28	1,854.07	0.00	0.00	0.00	0.00	1,854.07	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5	1.00		Meter	17,173.79	17,173.79	0.00	0.00	0.00	17,173.79	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables	0.75		Meter	4,862.64	3,646.98	0.00	0.00	0.00	3,646.98	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5	1.00		Meter	12,845.47	12,845.47	0.00	0.00	0.00	0.00	12,845.47	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling	75.00		Meter	324.35	24,326.08	0.00	0.00	0.00	24,326.08	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	14.40		Meter	185.24	2,667.53	0.00	0.00	0.00	2,667.53	0.00	0.00	0.00	0.00	0.00

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1.4.2.3.1.2.3	Equipment Operating	Detail	104.00	Meter	312.98	32,549.74	0.00	32,549.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	77.38 Each	120.67	9,336.96	0.00	9,336.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	144.14 Each	33.57	4,838.91	0.00	4,838.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	99.53 Each	184.61	18,373.86	0.00	18,373.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.3.2	Operating	Detail	27.00	Meter	2,452.81	66,225.96	33,440.81	11,124.99	0.00	17,549.88	4,110.28	0.00	0.00	0.00	0.00
1.4.2.3.2.1	Haulage - Mining Block 2 (110L to 170L)	Detail	1,509.03	Tonne	3.02	4,562.69	1,758.10	2,674.57	0.00	130.02	0.00	0.00	0.00	0.00	0.00
1.4.2.3.2.1.1	Truck Haulage Labour	Detail	1,509.03	Tonne	1.25	1,888.12	1,758.10	0.00	0.00	130.02	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	34.58 Each	54.60	1,888.12	1,758.10	0.00	0.00	130.02	0.00	0.00	0.00	0.00	0.00
1.4.2.3.2.1.2	Truck Haulage Equipment	Detail	1,509.03	Tonne	1.77	2,674.57	0.00	2,674.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	23.05 Each	116.02	2,674.57	0.00	2,674.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.3.2.2	4 x 4.5 Development - 4 m/day	Detail	27.00	Meter	2,283.82	61,663.27	31,682.71	8,450.41	0.00	17,419.86	4,110.28	0.00	0.00	0.00	0.00
1.4.2.3.2.2.1	Labour	Detail	27.00	Meter	1,245.09	33,617.43	31,682.71	0.00	0.00	1,934.72	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	141.75 Each	67.82	9,613.49	9,080.51	0.00	0.00	532.98	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	283.50 Each	64.09	18,169.52	17,103.56	0.00	0.00	1,065.96	0.00	0.00	0.00	0.00	0.00

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1.4.2.3.2.2.2	Materials	Detail	27.00	Meter	725.76	19,595.42	0.00	0.00	0.00	15,485.14	4,110.28	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		27.00	Meter	50.00	1,350.00	0.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		43.20	Cubic Meter	10.00	432.00	0.00	0.00	0.00	432.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	380.51	380.51	0.00	0.00	0.00	86.46	294.06	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,049.01	1,049.01	0.00	0.00	0.00	1,049.01	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	771.66	154.33	0.00	0.00	0.00	154.33	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,925.38	481.35	0.00	0.00	0.00	0.00	481.35	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,458.58	4,458.58	0.00	0.00	0.00	4,458.58	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,262.42	946.81	0.00	0.00	0.00	946.81	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,334.88	3,334.88	0.00	0.00	0.00	0.00	3,334.88	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	84.21	6,315.42	0.00	0.00	0.00	6,315.42	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	48.09	692.53	0.00	0.00	0.00	692.53	0.00	0.00	0.00	0.00	0.00
1.4.2.3.2.2.3	Equipment Operating	Detail	27.00	Meter	312.98	8,450.41	0.00	8,450.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.09 Each	120.67	2,424.02	0.00	2,424.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	37.42 Each	33.57	1,256.26	0.00	1,256.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	25.84 Each	184.61	4,770.14	0.00	4,770.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.4	170 Level Lateral Development	Detail	1.00	LS	284,526.36	284,526.36	143,671.62	47,796.24	0.00	75,399.50	17,658.99	0.00	0.00	0.00	0.00
1.4.2.4.1	Capital	Detail	91.00	Meter	2,452.81	223,206.02	112,707.91	37,495.33	0.00	59,149.61	13,853.18	0.00	0.00	0.00	0.00
1.4.2.4.1.1	Haulage - Mining Block 2 (110L to 170L)	Detail	5,085.99	Tonne	3.02	15,377.97	5,925.43	9,014.31	0.00	438.23	0.00	0.00	0.00	0.00	0.00
1.4.2.4.1.1.1	Truck Haulage Labour	Detail	5,085.99	Tonne	1.25	6,363.66	5,925.43	0.00	0.00	438.23	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	116.55 Each	54.60	6,363.66	5,925.43	0.00	0.00	438.23	0.00	0.00	0.00	0.00	0.00
1.4.2.4.1.1.2	Truck Haulage Equipment	Detail	5,085.99	Tonne	1.77	9,014.31	0.00	9,014.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	77.70 Each	116.02	9,014.31	0.00	9,014.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.4.1.2	4 x 4.5 Development - 4 m/day	Detail	91.00	Meter	2,283.82	207,828.05	106,782.48	28,481.02	0.00	58,711.38	13,853.18	0.00	0.00	0.00	0.00

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1.4.2.4.1.2.1	Labour	Detail	91.00	Meter	1,245.09	113,303.19	106,782.48	0.00	0.00	6,520.71	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	477.75 Each	67.82	32,401.01	30,604.67	0.00	0.00	1,796.34	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	955.50 Each	64.09	61,238.00	57,645.32	0.00	0.00	3,592.68	0.00	0.00	0.00	0.00	0.00
1.4.2.4.1.2.2	Materials	Detail	91.00	Meter	725.76	66,043.84	0.00	0.00	0.00	52,190.66	13,853.18	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		91.00	Meter	50.00	4,550.00	0.00	0.00	0.00	4,550.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		145.60	Cubic Meter	10.00	1,456.00	0.00	0.00	0.00	1,456.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,282.47	1,282.47	0.00	0.00	0.00	291.39	991.08	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	3,535.54	3,535.54	0.00	0.00	0.00	3,535.54	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	2,600.78	520.16	0.00	0.00	0.00	520.16	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	6,489.25	1,622.31	0.00	0.00	0.00	0.00	1,622.31	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	15,027.07	15,027.07	0.00	0.00	0.00	15,027.07	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	4,254.81	3,191.11	0.00	0.00	0.00	3,191.11	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	11,239.78	11,239.78	0.00	0.00	0.00	0.00	11,239.78	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	283.80	21,285.32	0.00	0.00	0.00	21,285.32	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	162.09	2,334.08	0.00	0.00	0.00	2,334.08	0.00	0.00	0.00	0.00	0.00
1.4.2.4.1.2.3	Equipment Operating	Detail	91.00	Meter	312.98	28,481.02	0.00	28,481.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	67.70 Each	120.67	8,169.84	0.00	8,169.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	126.13 Each	33.57	4,234.05	0.00	4,234.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	87.09 Each	184.61	16,077.13	0.00	16,077.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.2.4.2	Operating	Detail	25.00	Meter	2,452.81	61,320.34	30,963.71	10,300.91	0.00	16,249.89	3,805.82	0.00	0.00	0.00	0.00
1.4.2.4.2.1	Haulage - Mining Block 2 (110L to 170L)	Detail	1,397.25	Tonne	3.02	4,224.72	1,627.87	2,476.46	0.00	120.39	0.00	0.00	0.00	0.00	0.00
1.4.2.4.2.1.1	Truck Haulage Labour	Detail	1,397.25	Tonne	1.25	1,748.26	1,627.87	0.00	0.00	120.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	32.02 Each	54.60	1,748.26	1,627.87	0.00	0.00	120.39	0.00	0.00	0.00	0.00	0.00
1.4.2.4.2.1.2	Truck Haulage Equipment	Detail	1,397.25	Tonne	1.77	2,476.46	0.00	2,476.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	21.35 Each	116.02	2,476.46	0.00	2,476.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.4.2.4.2.2	4 x 4.5 Development - 4 m/day	Detail	25.00	Meter	2,283.82	57,095.62	29,335.85	7,824.46	0.00	16,129.50	3,805.82	0.00	0.00	0.00	0.00
1.4.2.4.2.2.1	Labour	Detail	25.00	Meter	1,245.09	31,127.25	29,335.85	0.00	0.00	1,791.41	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	131.25 Each	67.82	8,901.38	8,407.88	0.00	0.00	493.50	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	262.50 Each	64.09	16,823.63	15,836.63	0.00	0.00	987.00	0.00	0.00	0.00	0.00	0.00
1.4.2.4.2.2.2	Materials	Detail	25.00	Meter	725.76	18,143.91	0.00	0.00	0.00	14,338.09	3,805.82	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		25.00	Meter	50.00	1,250.00	0.00	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		40.00	Cubic Meter	10.00	400.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	352.33	352.33	0.00	0.00	0.00	80.05	272.28	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	971.30	971.30	0.00	0.00	0.00	971.30	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	714.50	142.90	0.00	0.00	0.00	142.90	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,782.76	445.69	0.00	0.00	0.00	0.00	445.69	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,128.32	4,128.32	0.00	0.00	0.00	4,128.32	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,168.90	876.68	0.00	0.00	0.00	876.68	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,087.85	3,087.85	0.00	0.00	0.00	0.00	3,087.85	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	77.97	5,847.61	0.00	0.00	0.00	5,847.61	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	44.53	641.23	0.00	0.00	0.00	641.23	0.00	0.00	0.00	0.00	0.00
1.4.2.4.2.2.3	Equipment Operating	Detail	25.00	Meter	312.98	7,824.46	0.00	7,824.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	18.60 Each	120.67	2,244.46	0.00	2,244.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	34.65 Each	33.57	1,163.20	0.00	1,163.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	23.93 Each	184.61	4,416.79	0.00	4,416.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3	270 Block	Detail	1.00	LS	1,323,133.74	1,323,133.74	595,023.15	268,043.85	0.00	371,315.07	88,751.66	0.00	0.00	0.00	0.00
1.4.3.1	200 Sub Level Lateral Development	Detail	1.00	LS	390,572.05	390,572.05	174,824.17	80,069.82	0.00	109,494.03	26,184.02	0.00	0.00	0.00	0.00
1.4.3.1.1	Capital	Detail	145.00	Meter	2,270.77	329,261.32	147,380.84	67,500.72	0.00	92,306.01	22,073.74	0.00	0.00	0.00	0.00
1.4.3.1.1.1	4 x 4.5 Development - 5 m/day	Detail	145.00	Meter	2,034.81	295,046.98	136,118.32	45,381.85	0.00	91,473.07	22,073.74	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.3.1.1.1.1	Labour	Detail	145.00	Meter	996.07	144,430.44	136,118.32	0.00	0.00	8,312.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	609.00 Each	67.82	41,302.38	39,012.54	0.00	0.00	2,289.84	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,218.00 Each	64.09	78,061.62	73,481.94	0.00	0.00	4,579.68	0.00	0.00	0.00	0.00	0.00
1.4.3.1.1.1.2	Materials	Detail	145.00	Meter	725.76	105,234.69	0.00	0.00	0.00	83,160.95	22,073.74	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		145.00	Meter	50.00	7,250.00	0.00	0.00	0.00	7,250.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		232.00	Cubic Meter	10.00	2,320.00	0.00	0.00	0.00	2,320.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,043.50	2,043.50	0.00	0.00	0.00	464.31	1,579.20	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,633.55	5,633.55	0.00	0.00	0.00	5,633.55	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,144.10	828.82	0.00	0.00	0.00	828.82	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	10,340.01	2,585.00	0.00	0.00	0.00	0.00	2,585.00	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,944.23	23,944.23	0.00	0.00	0.00	23,944.23	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,779.64	5,084.73	0.00	0.00	0.00	5,084.73	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,909.54	17,909.54	0.00	0.00	0.00	0.00	17,909.54	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	452.22	33,916.16	0.00	0.00	0.00	33,916.16	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	258.27	3,719.15	0.00	0.00	0.00	3,719.15	0.00	0.00	0.00	0.00	0.00
1.4.3.1.1.1.3	Equipment Operating	Detail	145.00	Meter	312.98	45,381.85	0.00	45,381.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	107.88 Each	120.67	13,017.88	0.00	13,017.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	200.97 Each	33.57	6,746.56	0.00	6,746.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	138.77 Each	184.61	25,617.41	0.00	25,617.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.1.1.2	Haulage - Mining Block 3 (200L to 270L)	Detail	8,104.05	Tonne	4.22	34,214.34	11,262.52	22,118.87	0.00	832.95	0.00	0.00	0.00	0.00	0.00
1.4.3.1.1.2.1	Truck Haulage Labour	Detail	8,104.05	Tonne	1.49	12,095.47	11,262.52	0.00	0.00	832.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	221.53 Each	54.60	12,095.47	11,262.52	0.00	0.00	832.95	0.00	0.00	0.00	0.00	0.00
1.4.3.1.1.2.2	Truck Haulage Equipment	Detail	8,104.05	Tonne	2.73	22,118.87	0.00	22,118.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	147.70 Each	149.76	22,118.87	0.00	22,118.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2	Operating	Detail	27.00	Meter	2,270.77	61,310.73	27,443.33	12,569.10	0.00	17,188.02	4,110.28	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.3.1.2.1	4 x 4.5 Development - 5 m/day	Detail	27.00	Meter	2,034.81	54,939.78	25,346.17	8,450.41	0.00	17,032.92	4,110.28	0.00	0.00	0.00	0.00
1.4.3.1.2.1.1	Labour	Detail	27.00	Meter	996.07	26,893.94	25,346.17	0.00	0.00	1,547.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	113.40 Each	67.82	7,690.79	7,264.40	0.00	0.00	426.38	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	226.80 Each	64.09	14,535.61	13,682.84	0.00	0.00	852.77	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2.1.2	Materials	Detail	27.00	Meter	725.76	19,595.42	0.00	0.00	0.00	15,485.14	4,110.28	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		27.00	Meter	50.00	1,350.00	0.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		43.20	Cubic Meter	10.00	432.00	0.00	0.00	0.00	432.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	380.51	380.51	0.00	0.00	0.00	86.46	294.06	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,049.01	1,049.01	0.00	0.00	0.00	1,049.01	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	771.66	154.33	0.00	0.00	0.00	154.33	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,925.38	481.35	0.00	0.00	0.00	0.00	481.35	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,458.58	4,458.58	0.00	0.00	0.00	4,458.58	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,262.42	946.81	0.00	0.00	0.00	946.81	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,334.88	3,334.88	0.00	0.00	0.00	0.00	3,334.88	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	84.21	6,315.42	0.00	0.00	0.00	6,315.42	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	48.09	692.53	0.00	0.00	0.00	692.53	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2.1.3	Equipment Operating	Detail	27.00	Meter	312.98	8,450.41	0.00	8,450.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.09 Each	120.67	2,424.02	0.00	2,424.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	37.42 Each	33.57	1,256.26	0.00	1,256.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	25.84 Each	184.61	4,770.14	0.00	4,770.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2.2	Haulage - Mining Block 3 (200L to 270L)	Detail	1,509.03	Tonne	4.22	6,370.95	2,097.16	4,118.69	0.00	155.10	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2.2.1	Truck Haulage Labour	Detail	1,509.03	Tonne	1.49	2,252.26	2,097.16	0.00	0.00	155.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	41.25 Each	54.60	2,252.26	2,097.16	0.00	0.00	155.10	0.00	0.00	0.00	0.00	0.00
1.4.3.1.2.2.2	Truck Haulage Equipment	Detail	1,509.03	Tonne	2.73	4,118.69	0.00	4,118.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	27.50 Each	149.76	4,118.69	0.00	4,118.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.3.2	235 Sub Level Lateral Development	Detail	1.00	LS	465,507.38	465,507.38	208,366.02	95,432.05	0.00	130,501.61	31,207.70	0.00	0.00	0.00	0.00
1.4.3.2.1	Capital	Detail	177.00	Meter	2,270.77	401,925.89	179,906.27	82,397.43	0.00	112,677.00	26,945.19	0.00	0.00	0.00	0.00
1.4.3.2.1.1	4 x 4.5 Development - 5 m/day	Detail	177.00	Meter	2,034.81	360,160.79	166,158.23	55,397.15	0.00	111,660.22	26,945.19	0.00	0.00	0.00	0.00
1.4.3.2.1.1.1	Labour	Detail	177.00	Meter	996.07	176,304.74	166,158.23	0.00	0.00	10,146.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1000	Lead Miner		1.00	743.40 Each	67.82	50,417.39	47,622.20	0.00	0.00	2,795.18	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,486.80 Each	64.09	95,289.01	89,698.64	0.00	0.00	5,590.37	0.00	0.00	0.00	0.00	0.00
1.4.3.2.1.1.2	Materials	Detail	177.00	Meter	725.76	128,458.89	0.00	0.00	0.00	101,513.71	26,945.19	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		177.00	Meter	50.00	8,850.00	0.00	0.00	0.00	8,850.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		283.20	Cubic Meter	10.00	2,832.00	0.00	0.00	0.00	2,832.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,494.48	2,494.48	0.00	0.00	0.00	566.77	1,927.71	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	6,876.82	6,876.82	0.00	0.00	0.00	6,876.82	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	5,058.66	1,011.73	0.00	0.00	0.00	1,011.73	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	12,621.94	3,155.49	0.00	0.00	0.00	0.00	3,155.49	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	29,228.47	29,228.47	0.00	0.00	0.00	29,228.47	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	8,275.84	6,206.88	0.00	0.00	0.00	6,206.88	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	21,862.00	21,862.00	0.00	0.00	0.00	0.00	21,862.00	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	552.01	41,401.11	0.00	0.00	0.00	41,401.11	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	315.27	4,539.92	0.00	0.00	0.00	4,539.92	0.00	0.00	0.00	0.00	0.00
1.4.3.2.1.1.3	Equipment Operating	Detail	177.00	Meter	312.98	55,397.15	0.00	55,397.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1008	4.5 m3 LHD		0.18	131.69 Each	120.67	15,890.79	0.00	15,890.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	245.32 Each	33.57	8,235.46	0.00	8,235.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	169.39 Each	184.61	31,270.90	0.00	31,270.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.2.1.2	Haulage - Mining Block 3 (200L to 270L)	Detail	9,892.53	Tonne	4.22	41,765.10	13,748.05	27,000.28	0.00	1,016.77	0.00	0.00	0.00	0.00	0.00
1.4.3.2.1.2.1	Truck Haulage Labour	Detail	9,892.53	Tonne	1.49	14,764.82	13,748.05	0.00	0.00	1,016.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1012	Haulage Truck Driver		1.00	270.42 Each	54.60	14,764.82	13,748.05	0.00	0.00	1,016.77	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.3.2.1.2.2	Truck Haulage Equipment	Detail	9,892.53	Tonne	2.73	27,000.28	0.00	27,000.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	180.29 Each	149.76	27,000.28	0.00	27,000.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.2.2	Operating	Detail	28.00	Meter	2,270.77	63,581.50	28,459.75	13,034.62	0.00	17,824.61	4,262.52	0.00	0.00	0.00	0.00
1.4.3.2.2.1	4 x 4.5 Development - 5 m/day	Detail	28.00	Meter	2,034.81	56,974.59	26,284.92	8,763.39	0.00	17,663.76	4,262.52	0.00	0.00	0.00	0.00
1.4.3.2.2.1.1	Labour	Detail	28.00	Meter	996.07	27,890.02	26,284.92	0.00	0.00	1,605.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	117.60 Each	67.82	7,975.63	7,533.46	0.00	0.00	442.18	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	235.20 Each	64.09	15,073.97	14,189.62	0.00	0.00	884.35	0.00	0.00	0.00	0.00	0.00
1.4.3.2.2.1.2	Materials	Detail	28.00	Meter	725.76	20,321.18	0.00	0.00	0.00	16,058.67	4,262.52	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		28.00	Meter	50.00	1,400.00	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		44.80	Cubic Meter	10.00	448.00	0.00	0.00	0.00	448.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	394.61	394.61	0.00	0.00	0.00	89.66	304.95	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,087.86	1,087.86	0.00	0.00	0.00	1,087.86	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	800.24	160.05	0.00	0.00	0.00	160.05	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,996.69	499.17	0.00	0.00	0.00	0.00	499.17	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,623.71	4,623.71	0.00	0.00	0.00	4,623.71	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,309.17	981.88	0.00	0.00	0.00	981.88	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,458.39	3,458.39	0.00	0.00	0.00	0.00	3,458.39	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	87.32	6,549.33	0.00	0.00	0.00	6,549.33	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	49.87	718.18	0.00	0.00	0.00	718.18	0.00	0.00	0.00	0.00	0.00
1.4.3.2.2.1.3	Equipment Operating	Detail	28.00	Meter	312.98	8,763.39	0.00	8,763.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.83 Each	120.67	2,513.80	0.00	2,513.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	38.81 Each	33.57	1,302.78	0.00	1,302.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	26.80 Each	184.61	4,946.81	0.00	4,946.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.2.2.2	Haulage - Mining Block 3 (200L to 270L)	Detail	1,564.92	Tonne	4.22	6,606.91	2,174.83	4,271.23	0.00	160.85	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.3.2.2.2.1	Truck Haulage Labour	Detail	1,564.92	Tonne	1.49	2,335.68	2,174.83	0.00	0.00	160.85	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	42.78 Each	54.60	2,335.68	2,174.83	0.00	0.00	160.85	0.00	0.00	0.00	0.00	0.00
1.4.3.2.2.2.2	Truck Haulage Equipment	Detail	1,564.92	Tonne	2.73	4,271.23	0.00	4,271.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	28.52 Each	149.76	4,271.23	0.00	4,271.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.3	270 Level Lateral Development	Detail	1.00	LS	467,054.31	467,054.31	211,832.96	92,541.98	0.00	131,319.43	31,359.94	0.00	0.00	0.00	0.00
1.4.3.3.1	Capital	Detail	178.00	Meter	2,267.25	403,571.20	183,040.13	79,963.46	0.00	113,470.19	27,097.42	0.00	0.00	0.00	0.00
1.4.3.3.1.1	4 x 4.5 Development - 5 m/day	Detail	178.00	Meter	2,034.81	362,195.60	167,096.97	55,710.13	0.00	112,291.07	27,097.42	0.00	0.00	0.00	0.00
1.4.3.3.1.1.1	Labour	Detail	178.00	Meter	996.07	177,300.82	167,096.97	0.00	0.00	10,203.84	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	747.60 Each	67.82	50,702.23	47,891.26	0.00	0.00	2,810.98	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,495.20 Each	64.09	95,827.37	90,205.42	0.00	0.00	5,621.95	0.00	0.00	0.00	0.00	0.00
1.4.3.3.1.1.2	Materials	Detail	178.00	Meter	725.76	129,184.65	0.00	0.00	0.00	102,087.23	27,097.42	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		178.00	Meter	50.00	8,900.00	0.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		284.80	Cubic Meter	10.00	2,848.00	0.00	0.00	0.00	2,848.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,508.57	2,508.57	0.00	0.00	0.00	569.98	1,938.60	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	6,915.67	6,915.67	0.00	0.00	0.00	6,915.67	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	5,087.24	1,017.45	0.00	0.00	0.00	1,017.45	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	12,693.25	3,173.31	0.00	0.00	0.00	0.00	3,173.31	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	29,393.60	29,393.60	0.00	0.00	0.00	29,393.60	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	8,322.59	6,241.94	0.00	0.00	0.00	6,241.94	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	21,985.51	21,985.51	0.00	0.00	0.00	0.00	21,985.51	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	555.13	41,635.01	0.00	0.00	0.00	41,635.01	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	317.05	4,565.57	0.00	0.00	0.00	4,565.57	0.00	0.00	0.00	0.00	0.00

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1.4.3.3.1.1.3	Equipment Operating	Detail	178.00	Meter	312.98	55,710.13	0.00	55,710.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	132.43 Each	120.67	15,980.57	0.00	15,980.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	246.71 Each	33.57	8,281.99	0.00	8,281.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	170.35 Each	184.61	31,447.58	0.00	31,447.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.3.1.2	Haulage - Mining Block 3 (200L to 270L)	Detail	9,948.42	Tonne	4.16	41,375.60	15,943.16	24,253.32	0.00	1,179.12	0.00	0.00	0.00	0.00	0.00
1.4.3.3.1.2.1	Truck Haulage Labour	Detail	9,948.42	Tonne	1.72	17,122.27	15,943.16	0.00	0.00	1,179.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	313.59 Each	54.60	17,122.27	15,943.16	0.00	0.00	1,179.12	0.00	0.00	0.00	0.00	0.00
1.4.3.3.1.2.2	Truck Haulage Equipment	Detail	9,948.42	Tonne	2.44	24,253.32	0.00	24,253.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	209.04 Each	116.02	24,253.32	0.00	24,253.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.3.2	Operating	Detail	28.00	Meter	2,267.25	63,483.11	28,792.83	12,578.52	0.00	17,849.24	4,262.52	0.00	0.00	0.00	0.00
1.4.3.3.2.1	4 x 4.5 Development - 5 m/day	Detail	28.00	Meter	2,034.81	56,974.59	26,284.92	8,763.39	0.00	17,663.76	4,262.52	0.00	0.00	0.00	0.00
1.4.3.3.2.1.1	Labour	Detail	28.00	Meter	996.07	27,890.02	26,284.92	0.00	0.00	1,605.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	117.60 Each	67.82	7,975.63	7,533.46	0.00	0.00	442.18	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	235.20 Each	64.09	15,073.97	14,189.62	0.00	0.00	884.35	0.00	0.00	0.00	0.00	0.00

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1.4.3.3.2.1.2	Materials	Detail	28.00	Meter	725.76	20,321.18	0.00	0.00	0.00	16,058.67	4,262.52	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		28.00	Meter	50.00	1,400.00	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		44.80	Cubic Meter	10.00	448.00	0.00	0.00	0.00	448.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	394.61	394.61	0.00	0.00	0.00	89.66	304.95	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,087.86	1,087.86	0.00	0.00	0.00	1,087.86	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	800.24	160.05	0.00	0.00	0.00	160.05	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,996.69	499.17	0.00	0.00	0.00	0.00	499.17	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,623.71	4,623.71	0.00	0.00	0.00	4,623.71	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,309.17	981.88	0.00	0.00	0.00	981.88	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,458.39	3,458.39	0.00	0.00	0.00	0.00	3,458.39	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	87.32	6,549.33	0.00	0.00	0.00	6,549.33	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	49.87	718.18	0.00	0.00	0.00	718.18	0.00	0.00	0.00	0.00	0.00
1.4.3.3.2.1.3	Equipment Operating	Detail	28.00	Meter	312.98	8,763.39	0.00	8,763.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.83 Each	120.67	2,513.80	0.00	2,513.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	38.81 Each	33.57	1,302.78	0.00	1,302.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	26.80 Each	184.61	4,946.81	0.00	4,946.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.3.3.2.2	Haulage - Mining Block 3 (200L to 270L)	Detail	1,564.92	Tonne	4.16	6,508.52	2,507.91	3,815.13	0.00	185.48	0.00	0.00	0.00	0.00	0.00
1.4.3.3.2.2.1	Truck Haulage Labour	Detail	1,564.92	Tonne	1.72	2,693.39	2,507.91	0.00	0.00	185.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	49.33 Each	54.60	2,693.39	2,507.91	0.00	0.00	185.48	0.00	0.00	0.00	0.00	0.00
1.4.3.3.2.2.2	Truck Haulage Equipment	Detail	1,564.92	Tonne	2.44	3,815.13	0.00	3,815.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	32.88 Each	116.02	3,815.13	0.00	3,815.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4	410 Block	Detail	1.00	LS	4,144,344.42	4,144,344.42	1,934,351.86	879,685.88	0.00	1,076,534.77	253,771.91	0.00	0.00	0.00	0.00
1.4.4.1	305 Sub Level Lateral Development	Detail	1.00	LS	250,891.77	250,891.77	111,091.55	55,936.83	0.00	67,726.72	16,136.67	0.00	0.00	0.00	0.00
1.4.4.1.1	Capital	Detail	80.00	Meter	2,366.90	189,352.28	83,842.68	42,216.48	0.00	51,114.50	12,178.62	0.00	0.00	0.00	0.00

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1.4.4.1.1.1	4 x 4.5 Development - 5 m/day	Detail	80.00	Meter	2,034.81	162,784.54	75,099.76	25,038.26	0.00	50,467.90	12,178.62	0.00	0.00	0.00	0.00
1.4.4.1.1.1.1	Labour	Detail	80.00	Meter	996.07	79,685.76	75,099.76	0.00	0.00	4,586.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	336.00 Each	67.82	22,787.52	21,524.16	0.00	0.00	1,263.36	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	672.00 Each	64.09	43,068.48	40,541.76	0.00	0.00	2,526.72	0.00	0.00	0.00	0.00	0.00
1.4.4.1.1.1.2	Materials	Detail	80.00	Meter	725.76	58,060.52	0.00	0.00	0.00	45,881.90	12,178.62	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		80.00	Meter	50.00	4,000.00	0.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		128.00	Cubic Meter	10.00	1,280.00	0.00	0.00	0.00	1,280.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,127.45	1,127.45	0.00	0.00	0.00	256.17	871.28	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	3,108.17	3,108.17	0.00	0.00	0.00	3,108.17	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	2,286.40	457.28	0.00	0.00	0.00	457.28	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	5,704.83	1,426.21	0.00	0.00	0.00	0.00	1,426.21	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	13,210.61	13,210.61	0.00	0.00	0.00	13,210.61	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	3,740.49	2,805.37	0.00	0.00	0.00	2,805.37	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	9,881.13	9,881.13	0.00	0.00	0.00	0.00	9,881.13	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	249.50	18,712.37	0.00	0.00	0.00	18,712.37	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	142.50	2,051.94	0.00	0.00	0.00	2,051.94	0.00	0.00	0.00	0.00	0.00
1.4.4.1.1.1.3	Equipment Operating	Detail	80.00	Meter	312.98	25,038.26	0.00	25,038.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	59.52 Each	120.67	7,182.28	0.00	7,182.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	110.88 Each	33.57	3,722.24	0.00	3,722.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	76.56 Each	184.61	14,133.74	0.00	14,133.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.1.1.2	Haulage - Mining Block 4 (305L to 410L)	Detail	4,471.20	Tonne	5.94	26,567.74	8,742.92	17,178.22	0.00	646.60	0.00	0.00	0.00	0.00	0.00
1.4.4.1.1.2.1	Truck Haulage Labour	Detail	4,471.20	Tonne	2.10	9,389.52	8,742.92	0.00	0.00	646.60	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	171.97 Each	54.60	9,389.52	8,742.92	0.00	0.00	646.60	0.00	0.00	0.00	0.00	0.00
1.4.4.1.1.2.2	Truck Haulage Equipment	Detail	4,471.20	Tonne	3.84	17,178.22	0.00	17,178.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	114.70 Each	149.76	17,178.22	0.00	17,178.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.1.2	Operating	Detail	26.00	Meter	2,366.90	61,539.49	27,248.87	13,720.36	0.00	16,612.21	3,958.05	0.00	0.00	0.00	0.00
1.4.4.1.2.1	4 x 4.5 Development - 5 m/day	Detail	26.00	Meter	2,034.81	52,904.98	24,407.42	8,137.44	0.00	16,402.07	3,958.05	0.00	0.00	0.00	0.00
1.4.4.1.2.1.1	Labour	Detail	26.00	Meter	996.07	25,897.87	24,407.42	0.00	0.00	1,490.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	109.20 Each	67.82	7,405.94	6,995.35	0.00	0.00	410.59	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	218.40 Each	64.09	13,997.26	13,176.07	0.00	0.00	821.18	0.00	0.00	0.00	0.00	0.00
1.4.4.1.2.1.2	Materials	Detail	26.00	Meter	725.76	18,869.67	0.00	0.00	0.00	14,911.62	3,958.05	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		26.00	Meter	50.00	1,300.00	0.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		41.60	Cubic Meter	10.00	416.00	0.00	0.00	0.00	416.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	366.42	366.42	0.00	0.00	0.00	83.25	283.17	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,010.15	1,010.15	0.00	0.00	0.00	1,010.15	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	743.08	148.62	0.00	0.00	0.00	148.62	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,854.07	463.52	0.00	0.00	0.00	0.00	463.52	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,293.45	4,293.45	0.00	0.00	0.00	4,293.45	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,215.66	911.74	0.00	0.00	0.00	911.74	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,211.37	3,211.37	0.00	0.00	0.00	0.00	3,211.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	81.09	6,081.52	0.00	0.00	0.00	6,081.52	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	46.31	666.88	0.00	0.00	0.00	666.88	0.00	0.00	0.00	0.00	0.00
1.4.4.1.2.1.3	Equipment Operating	Detail	26.00	Meter	312.98	8,137.44	0.00	8,137.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	19.34 Each	120.67	2,334.24	0.00	2,334.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	36.04 Each	33.57	1,209.73	0.00	1,209.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	24.88 Each	184.61	4,593.47	0.00	4,593.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.1.2.2	Haulage - Mining Block 4 (305L to 410L)	Detail	1,453.14	Tonne	5.94	8,634.51	2,841.45	5,582.92	0.00	210.15	0.00	0.00	0.00	0.00	0.00
1.4.4.1.2.2.1	Truck Haulage Labour	Detail	1,453.14	Tonne	2.10	3,051.59	2,841.45	0.00	0.00	210.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	55.89 Each	54.60	3,051.59	2,841.45	0.00	0.00	210.15	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.1.2.2.2	Truck Haulage Equipment	Detail	1,453.14	Tonne	3.84	5,582.92	0.00	5,582.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	37.28	Each	149.76	5,582.92	0.00	5,582.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.2	305 Sub Level - HW Exploration Drift	Detail	1.00	LS	1,648,030.51	1,648,030.51	808,113.76	332,454.77	0.00	411,555.39	95,906.60	0.00	0.00	0.00	0.00
1.4.4.2.1	Capital	Detail	630.00	Meter	2,615.92	1,648,030.51	808,113.76	332,454.77	0.00	411,555.39	95,906.60	0.00	0.00	0.00	0.00
1.4.4.2.1.1	Haulage - Mining Block 4 (305L to 410L)	Detail	35,210.70	Tonne	5.94	209,220.93	68,850.46	135,278.46	0.00	5,092.01	0.00	0.00	0.00	0.00	0.00
1.4.4.2.1.1.1	Truck Haulage Labour	Detail	35,210.70	Tonne	2.10	73,942.47	68,850.46	0.00	0.00	5,092.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	1,354.26	Each	54.60	73,942.47	68,850.46	0.00	0.00	5,092.01	0.00	0.00	0.00	0.00	0.00
1.4.4.2.1.1.2	Truck Haulage Equipment	Detail	35,210.70	Tonne	3.84	135,278.46	0.00	135,278.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	903.30	Each	149.76	135,278.46	0.00	135,278.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.2.1.2	4 x 4.5 Development - 4 m/day	Detail	630.00	Meter	2,283.82	1,438,809.58	739,263.29	197,176.31	0.00	406,463.38	95,906.60	0.00	0.00	0.00	0.00
1.4.4.2.1.2.1	Labour	Detail	630.00	Meter	1,245.09	784,406.70	739,263.29	0.00	0.00	45,143.41	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	3,307.50	Each	67.82	224,314.65	211,878.45	0.00	0.00	12,436.20	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	6,615.00	Each	64.09	423,955.35	399,082.95	0.00	0.00	24,872.40	0.00	0.00	0.00	0.00	0.00

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1.4.4.2.1.2.2	Materials	Detail	630.00	Meter	725.76	457,226.57	0.00	0.00	0.00	361,319.97	95,906.60	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		630.00	Meter	50.00	31,500.00	0.00	0.00	0.00	31,500.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		1,008.00	Cubic Meter	10.00	10,080.00	0.00	0.00	0.00	10,080.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	8,878.66	8,878.66	0.00	0.00	0.00	2,017.33	6,861.33	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	24,476.82	24,476.82	0.00	0.00	0.00	24,476.82	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	18,005.40	3,601.08	0.00	0.00	0.00	3,601.08	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	44,925.55	11,231.39	0.00	0.00	0.00	0.00	11,231.39	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	104,033.54	104,033.54	0.00	0.00	0.00	104,033.54	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	29,456.36	22,092.27	0.00	0.00	0.00	22,092.27	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	77,813.88	77,813.88	0.00	0.00	0.00	0.00	77,813.88	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	1,964.80	147,359.88	0.00	0.00	0.00	147,359.88	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	1,122.16	16,159.05	0.00	0.00	0.00	16,159.05	0.00	0.00	0.00	0.00	0.00
1.4.4.2.1.2.3	Equipment Operating	Detail	630.00	Meter	312.98	197,176.31	0.00	197,176.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	468.72 Each	120.67	56,560.44	0.00	56,560.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	873.18 Each	33.57	29,312.65	0.00	29,312.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	602.91 Each	184.61	111,303.22	0.00	111,303.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.3	305 Sub Level Sill Pillar Access	Detail	1.00	LS	194,086.08	194,086.08	85,938.75	43,271.89	0.00	52,392.36	12,483.08	0.00	0.00	0.00	0.00
1.4.4.3.1	Capital	Detail	82.00	Meter	2,366.90	194,086.08	85,938.75	43,271.89	0.00	52,392.36	12,483.08	0.00	0.00	0.00	0.00
1.4.4.3.1.1	4 x 4.5 Development - 5 m/day	Detail	82.00	Meter	2,034.81	166,854.15	76,977.26	25,664.22	0.00	51,729.60	12,483.08	0.00	0.00	0.00	0.00
1.4.4.3.1.1.1	Labour	Detail	82.00	Meter	996.07	81,677.90	76,977.26	0.00	0.00	4,700.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	344.40 Each	67.82	23,357.21	22,062.26	0.00	0.00	1,294.94	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	688.80 Each	64.09	44,145.19	41,555.30	0.00	0.00	2,589.89	0.00	0.00	0.00	0.00	0.00

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1.4.4.3.1.1.2	Materials	Detail	82.00	Meter	725.76	59,512.03	0.00	0.00	0.00	47,028.95	12,483.08	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		82.00	Meter	50.00	4,100.00	0.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		131.20	Cubic Meter	10.00	1,312.00	0.00	0.00	0.00	1,312.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,155.64	1,155.64	0.00	0.00	0.00	262.57	893.06	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	3,185.87	3,185.87	0.00	0.00	0.00	3,185.87	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	2,343.56	468.71	0.00	0.00	0.00	468.71	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	5,847.45	1,461.86	0.00	0.00	0.00	0.00	1,461.86	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	13,540.87	13,540.87	0.00	0.00	0.00	13,540.87	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	3,834.00	2,875.50	0.00	0.00	0.00	2,875.50	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	10,128.16	10,128.16	0.00	0.00	0.00	0.00	10,128.16	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	255.74	19,180.18	0.00	0.00	0.00	19,180.18	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	146.06	2,103.24	0.00	0.00	0.00	2,103.24	0.00	0.00	0.00	0.00	0.00
1.4.4.3.1.1.3	Equipment Operating	Detail	82.00	Meter	312.98	25,664.22	0.00	25,664.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	61.01 Each	120.67	7,361.84	0.00	7,361.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	113.65 Each	33.57	3,815.30	0.00	3,815.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	78.47 Each	184.61	14,487.09	0.00	14,487.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.3.1.2	Haulage - Mining Block 4 (305L to 410L)	Detail	4,582.98	Tonne	5.94	27,231.93	8,961.49	17,607.67	0.00	662.77	0.00	0.00	0.00	0.00	0.00
1.4.4.3.1.2.1	Truck Haulage Labour	Detail	4,582.98	Tonne	2.10	9,624.26	8,961.49	0.00	0.00	662.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	176.27 Each	54.60	9,624.26	8,961.49	0.00	0.00	662.77	0.00	0.00	0.00	0.00	0.00
1.4.4.3.1.2.2	Truck Haulage Equipment	Detail	4,582.98	Tonne	3.84	17,607.67	0.00	17,607.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	117.57 Each	149.76	17,607.67	0.00	17,607.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.4	340 Sub Level Lateral Development	Detail	1.00	LS	956,228.99	956,228.99	423,405.53	213,193.22	0.00	258,128.24	61,502.01	0.00	0.00	0.00	0.00
1.4.4.4.1	Capital	Detail	374.00	Meter	2,366.90	885,221.89	391,964.52	197,362.04	0.00	238,960.30	56,935.03	0.00	0.00	0.00	0.00
1.4.4.4.1.1	4 x 4.5 Development - 5 m/day	Detail	374.00	Meter	2,034.81	761,017.72	351,091.39	117,053.87	0.00	235,937.42	56,935.03	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.4.1.1.1	Labour	Detail	374.00	Meter	996.07	372,530.93	351,091.39	0.00	0.00	21,439.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,570.80 Each	67.82	106,531.66	100,625.45	0.00	0.00	5,906.21	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	3,141.60 Each	64.09	201,345.14	189,532.73	0.00	0.00	11,812.42	0.00	0.00	0.00	0.00	0.00
1.4.4.4.1.1.2	Materials	Detail	374.00	Meter	725.76	271,432.92	0.00	0.00	0.00	214,497.89	56,935.03	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		374.00	Meter	50.00	18,700.00	0.00	0.00	0.00	18,700.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		598.40	Cubic Meter	10.00	5,984.00	0.00	0.00	0.00	5,984.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	5,270.82	5,270.82	0.00	0.00	0.00	1,197.59	4,073.23	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	14,530.68	14,530.68	0.00	0.00	0.00	14,530.68	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	10,688.92	2,137.78	0.00	0.00	0.00	2,137.78	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	26,670.09	6,667.52	0.00	0.00	0.00	0.00	6,667.52	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	61,759.59	61,759.59	0.00	0.00	0.00	61,759.59	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	17,486.79	13,115.09	0.00	0.00	0.00	13,115.09	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	46,194.27	46,194.27	0.00	0.00	0.00	0.00	46,194.27	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	1,166.40	87,480.31	0.00	0.00	0.00	87,480.31	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	666.17	9,592.83	0.00	0.00	0.00	9,592.83	0.00	0.00	0.00	0.00	0.00
1.4.4.4.1.1.3	Equipment Operating	Detail	374.00	Meter	312.98	117,053.87	0.00	117,053.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	278.26 Each	120.67	33,577.15	0.00	33,577.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	518.36 Each	33.57	17,401.48	0.00	17,401.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	357.92 Each	184.61	66,075.24	0.00	66,075.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.4.1.2	Haulage - Mining Block 4 (305L to 410L)	Detail	20,902.86	Tonne	5.94	124,204.17	40,873.13	80,308.17	0.00	3,022.88	0.00	0.00	0.00	0.00	0.00
1.4.4.4.1.2.1	Truck Haulage Labour	Detail	20,902.86	Tonne	2.10	43,896.01	40,873.13	0.00	0.00	3,022.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	803.96 Each	54.60	43,896.01	40,873.13	0.00	0.00	3,022.88	0.00	0.00	0.00	0.00	0.00
1.4.4.4.1.2.2	Truck Haulage Equipment	Detail	20,902.86	Tonne	3.84	80,308.17	0.00	80,308.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	536.25 Each	149.76	80,308.17	0.00	80,308.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2	Operating	Detail	30.00	Meter	2,366.90	71,007.10	31,441.00	15,831.18	0.00	19,167.94	4,566.98	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.4.2.1	4 x 4.5 Development - 5 m/day	Detail	30.00	Meter	2,034.81	61,044.20	28,162.41	9,389.35	0.00	18,925.46	4,566.98	0.00	0.00	0.00	0.00
1.4.4.4.2.1.1	Labour	Detail	30.00	Meter	996.07	29,882.16	28,162.41	0.00	0.00	1,719.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	126.00 Each	67.82	8,545.32	8,071.56	0.00	0.00	473.76	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	252.00 Each	64.09	16,150.68	15,203.16	0.00	0.00	947.52	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2.1.2	Materials	Detail	30.00	Meter	725.76	21,772.69	0.00	0.00	0.00	17,205.71	4,566.98	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		30.00	Meter	50.00	1,500.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		48.00	Cubic Meter	10.00	480.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	422.79	422.79	0.00	0.00	0.00	96.06	326.73	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,165.56	1,165.56	0.00	0.00	0.00	1,165.56	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	857.40	171.48	0.00	0.00	0.00	171.48	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	2,139.31	534.83	0.00	0.00	0.00	0.00	534.83	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,953.98	4,953.98	0.00	0.00	0.00	4,953.98	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,402.68	1,052.01	0.00	0.00	0.00	1,052.01	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,705.42	3,705.42	0.00	0.00	0.00	0.00	3,705.42	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	93.56	7,017.14	0.00	0.00	0.00	7,017.14	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	53.44	769.48	0.00	0.00	0.00	769.48	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2.1.3	Equipment Operating	Detail	30.00	Meter	312.98	9,389.35	0.00	9,389.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	22.32 Each	120.67	2,693.35	0.00	2,693.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	41.58 Each	33.57	1,395.84	0.00	1,395.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	28.71 Each	184.61	5,300.15	0.00	5,300.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2.2	Haulage - Mining Block 4 (305L to 410L)	Detail	1,676.70	Tonne	5.94	9,962.90	3,278.59	6,441.83	0.00	242.48	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2.2.1	Truck Haulage Labour	Detail	1,676.70	Tonne	2.10	3,521.07	3,278.59	0.00	0.00	242.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	64.49 Each	54.60	3,521.07	3,278.59	0.00	0.00	242.48	0.00	0.00	0.00	0.00	0.00
1.4.4.4.2.2.2	Truck Haulage Equipment	Detail	1,676.70	Tonne	3.84	6,441.83	0.00	6,441.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	43.01 Each	149.76	6,441.83	0.00	6,441.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.5	375 Sub Level Lateral Development	Detail	1.00	LS	655,632.26	655,632.26	290,305.28	146,174.56	0.00	176,983.96	42,168.46	0.00	0.00	0.00	0.00
1.4.4.5.1	Capital	Detail	249.00	Meter	2,366.90	589,358.96	260,960.34	131,398.79	0.00	159,093.89	37,905.94	0.00	0.00	0.00	0.00
1.4.4.5.1.1	4 x 4.5 Development - 5 m/day	Detail	249.00	Meter	2,034.81	506,666.88	233,748.01	77,931.59	0.00	157,081.33	37,905.94	0.00	0.00	0.00	0.00
1.4.4.5.1.1.1	Labour	Detail	249.00	Meter	996.07	248,021.93	233,748.01	0.00	0.00	14,273.92	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,045.80 Each	67.82	70,926.16	66,993.95	0.00	0.00	3,932.21	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,091.60 Each	64.09	134,050.64	126,186.23	0.00	0.00	7,864.42	0.00	0.00	0.00	0.00	0.00
1.4.4.5.1.1.2	Materials	Detail	249.00	Meter	725.76	180,713.36	0.00	0.00	0.00	142,807.42	37,905.94	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		249.00	Meter	50.00	12,450.00	0.00	0.00	0.00	12,450.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		398.40	Cubic Meter	10.00	3,984.00	0.00	0.00	0.00	3,984.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,509.19	3,509.19	0.00	0.00	0.00	797.33	2,711.86	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	9,674.17	9,674.17	0.00	0.00	0.00	9,674.17	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	7,116.42	1,423.28	0.00	0.00	0.00	1,423.28	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	17,756.29	4,439.07	0.00	0.00	0.00	0.00	4,439.07	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	41,118.02	41,118.02	0.00	0.00	0.00	41,118.02	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	11,642.28	8,731.71	0.00	0.00	0.00	8,731.71	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	30,755.01	30,755.01	0.00	0.00	0.00	0.00	30,755.01	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	776.56	58,242.24	0.00	0.00	0.00	58,242.24	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	443.52	6,386.67	0.00	0.00	0.00	6,386.67	0.00	0.00	0.00	0.00	0.00
1.4.4.5.1.1.3	Equipment Operating	Detail	249.00	Meter	312.98	77,931.59	0.00	77,931.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	185.26 Each	120.67	22,354.84	0.00	22,354.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	345.11 Each	33.57	11,585.48	0.00	11,585.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	238.29 Each	184.61	43,991.27	0.00	43,991.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.5.1.2	Haulage - Mining Block 4 (305L to 410L)	Detail	13,916.61	Tonne	5.94	82,692.08	27,212.33	53,467.20	0.00	2,012.56	0.00	0.00	0.00	0.00	0.00
1.4.4.5.1.2.1	Truck Haulage Labour	Detail	13,916.61	Tonne	2.10	29,224.88	27,212.33	0.00	0.00	2,012.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	535.25 Each	54.60	29,224.88	27,212.33	0.00	0.00	2,012.56	0.00	0.00	0.00	0.00	0.00

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1.4.4.5.1.2.2	Truck Haulage Equipment	Detail	13,916.61	Tonne	3.84	53,467.20	0.00	53,467.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	357.02 Each	149.76	53,467.20	0.00	53,467.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.5.2	Operating	Detail	28.00	Meter	2,366.90	66,273.30	29,344.94	14,775.77	0.00	17,890.08	4,262.52	0.00	0.00	0.00	0.00
1.4.4.5.2.1	4 x 4.5 Development - 5 m/day	Detail	28.00	Meter	2,034.81	56,974.59	26,284.92	8,763.39	0.00	17,663.76	4,262.52	0.00	0.00	0.00	0.00
1.4.4.5.2.1.1	Labour	Detail	28.00	Meter	996.07	27,890.02	26,284.92	0.00	0.00	1,605.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	117.60 Each	67.82	7,975.63	7,533.46	0.00	0.00	442.18	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	235.20 Each	64.09	15,073.97	14,189.62	0.00	0.00	884.35	0.00	0.00	0.00	0.00	0.00
1.4.4.5.2.1.2	Materials	Detail	28.00	Meter	725.76	20,321.18	0.00	0.00	0.00	16,058.67	4,262.52	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		28.00	Meter	50.00	1,400.00	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		44.80	Cubic Meter	10.00	448.00	0.00	0.00	0.00	448.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	394.61	394.61	0.00	0.00	0.00	89.66	304.95	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,087.86	1,087.86	0.00	0.00	0.00	1,087.86	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	800.24	160.05	0.00	0.00	0.00	160.05	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,996.69	499.17	0.00	0.00	0.00	0.00	499.17	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,623.71	4,623.71	0.00	0.00	0.00	4,623.71	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,309.17	981.88	0.00	0.00	0.00	981.88	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,458.39	3,458.39	0.00	0.00	0.00	0.00	3,458.39	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	87.32	6,549.33	0.00	0.00	0.00	6,549.33	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	49.87	718.18	0.00	0.00	0.00	718.18	0.00	0.00	0.00	0.00	0.00
1.4.4.5.2.1.3	Equipment Operating	Detail	28.00	Meter	312.98	8,763.39	0.00	8,763.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.83 Each	120.67	2,513.80	0.00	2,513.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	38.81 Each	33.57	1,302.78	0.00	1,302.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	26.80 Each	184.61	4,946.81	0.00	4,946.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.5.2.2	Haulage - Mining Block 4 (305L to 410L)	Detail	1,564.92	Tonne	5.94	9,298.71	3,060.02	6,012.38	0.00	226.31	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.5.2.2.1	Truck Haulage Labour	Detail	1,564.92	Tonne	2.10	3,286.33	3,060.02	0.00	0.00	226.31	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	60.19 Each	54.60	3,286.33	3,060.02	0.00	0.00	226.31	0.00	0.00	0.00	0.00	0.00
1.4.4.5.2.2.2	Truck Haulage Equipment	Detail	1,564.92	Tonne	3.84	6,012.38	0.00	6,012.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	40.15 Each	149.76	6,012.38	0.00	6,012.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.6	410 Level Lateral Development	Detail	1.00	LS	439,474.80	439,474.80	215,497.00	88,654.61	0.00	109,748.10	25,575.09	0.00	0.00	0.00	0.00
1.4.4.6.1	Capital	Detail	140.00	Meter	2,615.92	366,229.00	179,580.83	73,878.84	0.00	91,456.75	21,312.58	0.00	0.00	0.00	0.00
1.4.4.6.1.1	Haulage - Mining Block 4 (305L to 410L)	Detail	7,824.60	Tonne	5.94	46,493.54	15,300.10	30,061.88	0.00	1,131.56	0.00	0.00	0.00	0.00	0.00
1.4.4.6.1.1.1	Truck Haulage Labour	Detail	7,824.60	Tonne	2.10	16,431.66	15,300.10	0.00	0.00	1,131.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	300.95 Each	54.60	16,431.66	15,300.10	0.00	0.00	1,131.56	0.00	0.00	0.00	0.00	0.00
1.4.4.6.1.1.2	Truck Haulage Equipment	Detail	7,824.60	Tonne	3.84	30,061.88	0.00	30,061.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	200.73 Each	149.76	30,061.88	0.00	30,061.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.6.1.2	4 x 4.5 Development - 4 m/day	Detail	140.00	Meter	2,283.82	319,735.46	164,280.73	43,816.96	0.00	90,325.20	21,312.58	0.00	0.00	0.00	0.00
1.4.4.6.1.2.1	Labour	Detail	140.00	Meter	1,245.09	174,312.60	164,280.73	0.00	0.00	10,031.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	735.00 Each	67.82	49,847.70	47,084.10	0.00	0.00	2,763.60	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,470.00 Each	64.09	94,212.30	88,685.10	0.00	0.00	5,527.20	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.6.1.2.2	Materials	Detail	140.00	Meter	725.76	101,605.91	0.00	0.00	0.00	80,293.33	21,312.58	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		140.00	Meter	50.00	7,000.00	0.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		224.00	Cubic Meter	10.00	2,240.00	0.00	0.00	0.00	2,240.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,973.04	1,973.04	0.00	0.00	0.00	448.30	1,524.74	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,439.29	5,439.29	0.00	0.00	0.00	5,439.29	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,001.20	800.24	0.00	0.00	0.00	800.24	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	9,983.46	2,495.86	0.00	0.00	0.00	0.00	2,495.86	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,118.56	23,118.56	0.00	0.00	0.00	23,118.56	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,545.86	4,909.39	0.00	0.00	0.00	4,909.39	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,291.97	17,291.97	0.00	0.00	0.00	0.00	17,291.97	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	436.62	32,746.64	0.00	0.00	0.00	32,746.64	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	249.37	3,590.90	0.00	0.00	0.00	3,590.90	0.00	0.00	0.00	0.00	0.00
1.4.4.6.1.2.3	Equipment Operating	Detail	140.00	Meter	312.98	43,816.96	0.00	43,816.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	104.16 Each	120.67	12,568.99	0.00	12,568.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	194.04 Each	33.57	6,513.92	0.00	6,513.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	133.98 Each	184.61	24,734.05	0.00	24,734.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2	Operating	Detail	28.00	Meter	2,615.92	73,245.80	35,916.17	14,775.77	0.00	18,291.35	4,262.52	0.00	0.00	0.00	0.00
1.4.4.6.2.1	Haulage - Mining Block 4 (305L to 410L)	Detail	1,564.92	Tonne	5.94	9,298.71	3,060.02	6,012.38	0.00	226.31	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2.1.1	Truck Haulage Labour	Detail	1,564.92	Tonne	2.10	3,286.33	3,060.02	0.00	0.00	226.31	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	60.19 Each	54.60	3,286.33	3,060.02	0.00	0.00	226.31	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2.1.2	Truck Haulage Equipment	Detail	1,564.92	Tonne	3.84	6,012.38	0.00	6,012.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	40.15 Each	149.76	6,012.38	0.00	6,012.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2.2	4 x 4.5 Development - 4 m/day	Detail	28.00	Meter	2,283.82	63,947.09	32,856.15	8,763.39	0.00	18,065.04	4,262.52	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.4.6.2.2.1	Labour	Detail	28.00	Meter	1,245.09	34,862.52	32,856.15	0.00	0.00	2,006.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	147.00 Each	67.82	9,969.54	9,416.82	0.00	0.00	552.72	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	294.00 Each	64.09	18,842.46	17,737.02	0.00	0.00	1,105.44	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2.2.2	Materials	Detail	28.00	Meter	725.76	20,321.18	0.00	0.00	0.00	16,058.67	4,262.52	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		28.00	Meter	50.00	1,400.00	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		44.80	Cubic Meter	10.00	448.00	0.00	0.00	0.00	448.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	394.61	394.61	0.00	0.00	0.00	89.66	304.95	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,087.86	1,087.86	0.00	0.00	0.00	1,087.86	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	800.24	160.05	0.00	0.00	0.00	160.05	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,996.69	499.17	0.00	0.00	0.00	0.00	499.17	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,623.71	4,623.71	0.00	0.00	0.00	4,623.71	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,309.17	981.88	0.00	0.00	0.00	981.88	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,458.39	3,458.39	0.00	0.00	0.00	0.00	3,458.39	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	87.32	6,549.33	0.00	0.00	0.00	6,549.33	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	49.87	718.18	0.00	0.00	0.00	718.18	0.00	0.00	0.00	0.00	0.00
1.4.4.6.2.2.3	Equipment Operating	Detail	28.00	Meter	312.98	8,763.39	0.00	8,763.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	20.83 Each	120.67	2,513.80	0.00	2,513.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	38.81 Each	33.57	1,302.78	0.00	1,302.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	26.80 Each	184.61	4,946.81	0.00	4,946.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5	550 Block	Detail	1.00	LS	2,121,369.19	2,121,369.19	928,452.21	513,363.11	0.00	549,242.67	130,311.19	0.00	0.00	0.00	0.00
1.4.5.1	445 Sub Level Lateral Development	Detail	1.00	LS	421,299.96	421,299.96	184,388.87	101,952.96	0.00	109,078.57	25,879.56	0.00	0.00	0.00	0.00
1.4.5.1.1	Capital	Detail	144.00	Meter	2,478.24	356,865.85	156,188.22	86,360.15	0.00	92,395.96	21,921.51	0.00	0.00	0.00	0.00
1.4.5.1.1.1	4 x 4.5 Development - 5 m/day	Detail	144.00	Meter	2,034.81	293,012.17	135,179.57	45,068.87	0.00	90,842.22	21,921.51	0.00	0.00	0.00	0.00

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1.4.5.1.1.1.1	Labour	Detail	144.00	Meter	996.07	143,434.37	135,179.57	0.00	0.00	8,254.79	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	604.80 Each	67.82	41,017.54	38,743.49	0.00	0.00	2,274.05	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,209.60 Each	64.09	77,523.26	72,975.17	0.00	0.00	4,548.10	0.00	0.00	0.00	0.00	0.00
1.4.5.1.1.1.2	Materials	Detail	144.00	Meter	725.76	104,508.93	0.00	0.00	0.00	82,587.42	21,921.51	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		144.00	Meter	50.00	7,200.00	0.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		230.40	Cubic Meter	10.00	2,304.00	0.00	0.00	0.00	2,304.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,029.41	2,029.41	0.00	0.00	0.00	461.10	1,568.30	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,594.70	5,594.70	0.00	0.00	0.00	5,594.70	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,115.52	823.10	0.00	0.00	0.00	823.10	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	10,268.70	2,567.17	0.00	0.00	0.00	0.00	2,567.17	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,779.09	23,779.09	0.00	0.00	0.00	23,779.09	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,732.88	5,049.66	0.00	0.00	0.00	5,049.66	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,786.03	17,786.03	0.00	0.00	0.00	0.00	17,786.03	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	449.10	33,682.26	0.00	0.00	0.00	33,682.26	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	256.49	3,693.50	0.00	0.00	0.00	3,693.50	0.00	0.00	0.00	0.00	0.00
1.4.5.1.1.1.3	Equipment Operating	Detail	144.00	Meter	312.98	45,068.87	0.00	45,068.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	107.14 Each	120.67	12,928.10	0.00	12,928.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	199.58 Each	33.57	6,700.03	0.00	6,700.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	137.81 Each	184.61	25,440.73	0.00	25,440.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.1.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	8,048.16	Tonne	7.93	63,853.68	21,008.65	41,291.28	0.00	1,553.75	0.00	0.00	0.00	0.00	0.00
1.4.5.1.1.2.1	Truck Haulage Labour	Detail	8,048.16	Tonne	2.80	22,562.40	21,008.65	0.00	0.00	1,553.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	413.23 Each	54.60	22,562.40	21,008.65	0.00	0.00	1,553.75	0.00	0.00	0.00	0.00	0.00
1.4.5.1.1.2.2	Truck Haulage Equipment	Detail	8,048.16	Tonne	5.13	41,291.28	0.00	41,291.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	275.72 Each	149.76	41,291.28	0.00	41,291.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2	Operating	Detail	26.00	Meter	2,478.24	64,434.11	28,200.65	15,592.80	0.00	16,682.60	3,958.05	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.1.2.1	4 x 4.5 Development - 5 m/day	Detail	26.00	Meter	2,034.81	52,904.98	24,407.42	8,137.44	0.00	16,402.07	3,958.05	0.00	0.00	0.00	0.00
1.4.5.1.2.1.1	Labour	Detail	26.00	Meter	996.07	25,897.87	24,407.42	0.00	0.00	1,490.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	109.20 Each	67.82	7,405.94	6,995.35	0.00	0.00	410.59	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	218.40 Each	64.09	13,997.26	13,176.07	0.00	0.00	821.18	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2.1.2	Materials	Detail	26.00	Meter	725.76	18,869.67	0.00	0.00	0.00	14,911.62	3,958.05	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		26.00	Meter	50.00	1,300.00	0.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		41.60	Cubic Meter	10.00	416.00	0.00	0.00	0.00	416.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	366.42	366.42	0.00	0.00	0.00	83.25	283.17	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,010.15	1,010.15	0.00	0.00	0.00	1,010.15	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	743.08	148.62	0.00	0.00	0.00	148.62	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,854.07	463.52	0.00	0.00	0.00	0.00	463.52	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,293.45	4,293.45	0.00	0.00	0.00	4,293.45	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,215.66	911.74	0.00	0.00	0.00	911.74	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,211.37	3,211.37	0.00	0.00	0.00	0.00	3,211.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	81.09	6,081.52	0.00	0.00	0.00	6,081.52	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	46.31	666.88	0.00	0.00	0.00	666.88	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2.1.3	Equipment Operating	Detail	26.00	Meter	312.98	8,137.44	0.00	8,137.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	19.34 Each	120.67	2,334.24	0.00	2,334.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	36.04 Each	33.57	1,209.73	0.00	1,209.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	24.88 Each	184.61	4,593.47	0.00	4,593.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2.2	Haulage - Mining Block 5 (445L to 550L)	Detail	1,453.14	Tonne	7.93	11,529.14	3,793.23	7,455.37	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2.2.1	Truck Haulage Labour	Detail	1,453.14	Tonne	2.80	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	74.61 Each	54.60	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.1.2.2.2	Truck Haulage Equipment	Detail	1,453.14	Tonne	5.13	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	49.78 Each	149.76	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.4.5.2	445 Sub Level Sill Pillar Access	Detail	1.00	LS	230,475.86	230,475.86	100,871.56	55,774.26	0.00	59,672.39	14,157.64	0.00	0.00	0.00	0.00
1.4.5.2.1	Capital	Detail	93.00	Meter	2,478.24	230,475.86	100,871.56	55,774.26	0.00	59,672.39	14,157.64	0.00	0.00	0.00	0.00
1.4.5.2.1.1	4 x 4.5 Development - 5 m/day	Detail	93.00	Meter	2,034.81	189,237.03	87,303.47	29,106.98	0.00	58,668.93	14,157.64	0.00	0.00	0.00	0.00
1.4.5.2.1.1.1	Labour	Detail	93.00	Meter	996.07	92,634.70	87,303.47	0.00	0.00	5,331.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	390.60 Each	67.82	26,490.49	25,021.84	0.00	0.00	1,468.66	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	781.20 Each	64.09	50,067.11	47,129.80	0.00	0.00	2,937.31	0.00	0.00	0.00	0.00	0.00
1.4.5.2.1.1.2	Materials	Detail	93.00	Meter	725.76	67,495.35	0.00	0.00	0.00	53,337.71	14,157.64	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		93.00	Meter	50.00	4,650.00	0.00	0.00	0.00	4,650.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		148.80	Cubic Meter	10.00	1,488.00	0.00	0.00	0.00	1,488.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,310.66	1,310.66	0.00	0.00	0.00	297.80	1,012.86	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	3,613.24	3,613.24	0.00	0.00	0.00	3,613.24	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	2,657.94	531.59	0.00	0.00	0.00	531.59	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	6,631.87	1,657.97	0.00	0.00	0.00	0.00	1,657.97	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	15,357.33	15,357.33	0.00	0.00	0.00	15,357.33	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	4,348.32	3,261.24	0.00	0.00	0.00	3,261.24	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	11,486.81	11,486.81	0.00	0.00	0.00	0.00	11,486.81	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	290.04	21,753.13	0.00	0.00	0.00	21,753.13	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	165.65	2,385.38	0.00	0.00	0.00	2,385.38	0.00	0.00	0.00	0.00	0.00
1.4.5.2.1.1.3	Equipment Operating	Detail	93.00	Meter	312.98	29,106.98	0.00	29,106.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	69.19 Each	120.67	8,349.40	0.00	8,349.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	128.90 Each	33.57	4,327.11	0.00	4,327.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	89.00 Each	184.61	16,430.47	0.00	16,430.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.2.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	5,197.77	Tonne	7.93	41,238.83	13,568.09	26,667.28	0.00	1,003.46	0.00	0.00	0.00	0.00	0.00
1.4.5.2.1.2.1	Truck Haulage Labour	Detail	5,197.77	Tonne	2.80	14,571.55	13,568.09	0.00	0.00	1,003.46	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	266.88 Each	54.60	14,571.55	13,568.09	0.00	0.00	1,003.46	0.00	0.00	0.00	0.00	0.00

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1.4.5.2.1.2.2	Truck Haulage Equipment	Detail	5,197.77	Tonne	5.13	26,667.28	0.00	26,667.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	178.07 Each	149.76	26,667.28	0.00	26,667.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.3	480 Sub Level Lateral Development	Detail	1.00	LS	527,864.06	527,864.06	231,028.41	127,741.06	0.00	136,669.03	32,425.57	0.00	0.00	0.00	0.00
1.4.5.3.1	Capital	Detail	182.00	Meter	2,478.24	451,038.78	197,404.56	109,149.63	0.00	116,778.23	27,706.35	0.00	0.00	0.00	0.00
1.4.5.3.1.1	4 x 4.5 Development - 5 m/day	Detail	182.00	Meter	2,034.81	370,334.83	170,851.96	56,962.05	0.00	114,814.47	27,706.35	0.00	0.00	0.00	0.00
1.4.5.3.1.1.1	Labour	Detail	182.00	Meter	996.07	181,285.10	170,851.96	0.00	0.00	10,433.14	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	764.40 Each	67.82	51,841.61	48,967.46	0.00	0.00	2,874.14	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,528.80 Each	64.09	97,980.79	92,232.50	0.00	0.00	5,748.29	0.00	0.00	0.00	0.00	0.00
1.4.5.3.1.1.2	Materials	Detail	182.00	Meter	725.76	132,087.68	0.00	0.00	0.00	104,381.33	27,706.35	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		182.00	Meter	50.00	9,100.00	0.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		291.20	Cubic Meter	10.00	2,912.00	0.00	0.00	0.00	2,912.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,564.95	2,564.95	0.00	0.00	0.00	582.78	1,982.16	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	7,071.08	7,071.08	0.00	0.00	0.00	7,071.08	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	5,201.56	1,040.31	0.00	0.00	0.00	1,040.31	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	12,978.49	3,244.62	0.00	0.00	0.00	0.00	3,244.62	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	30,054.13	30,054.13	0.00	0.00	0.00	30,054.13	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	8,509.62	6,382.21	0.00	0.00	0.00	6,382.21	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	22,479.57	22,479.57	0.00	0.00	0.00	0.00	22,479.57	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	567.61	42,570.63	0.00	0.00	0.00	42,570.63	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	324.18	4,668.17	0.00	0.00	0.00	4,668.17	0.00	0.00	0.00	0.00	0.00
1.4.5.3.1.1.3	Equipment Operating	Detail	182.00	Meter	312.98	56,962.05	0.00	56,962.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	135.41 Each	120.67	16,339.68	0.00	16,339.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	252.25 Each	33.57	8,468.10	0.00	8,468.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	174.17 Each	184.61	32,154.26	0.00	32,154.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.3.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	10,171.98	Tonne	7.93	80,703.95	26,552.60	52,187.59	0.00	1,963.76	0.00	0.00	0.00	0.00	0.00

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1.4.5.3.1.2.1	Truck Haulage Labour	Detail	10,171.98	Tonne	2.80	28,516.36	26,552.60	0.00	0.00	1,963.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	522.28 Each	54.60	28,516.36	26,552.60	0.00	0.00	1,963.76	0.00	0.00	0.00	0.00	0.00
1.4.5.3.1.2.2	Truck Haulage Equipment	Detail	10,171.98	Tonne	5.13	52,187.59	0.00	52,187.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	348.47 Each	149.76	52,187.59	0.00	52,187.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.3.2	Operating	Detail	31.00	Meter	2,478.24	76,825.29	33,623.85	18,591.42	0.00	19,890.80	4,719.21	0.00	0.00	0.00	0.00
1.4.5.3.2.1	4 x 4.5 Development - 5 m/day	Detail	31.00	Meter	2,034.81	63,079.01	29,101.16	9,702.33	0.00	19,556.31	4,719.21	0.00	0.00	0.00	0.00
1.4.5.3.2.1.1	Labour	Detail	31.00	Meter	996.07	30,878.23	29,101.16	0.00	0.00	1,777.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	130.20 Each	67.82	8,830.16	8,340.61	0.00	0.00	489.55	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	260.40 Each	64.09	16,689.04	15,709.93	0.00	0.00	979.10	0.00	0.00	0.00	0.00	0.00
1.4.5.3.2.1.2	Materials	Detail	31.00	Meter	725.76	22,498.45	0.00	0.00	0.00	17,779.24	4,719.21	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		31.00	Meter	50.00	1,550.00	0.00	0.00	0.00	1,550.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		49.60	Cubic Meter	10.00	496.00	0.00	0.00	0.00	496.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	436.89	436.89	0.00	0.00	0.00	99.27	337.62	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,204.41	1,204.41	0.00	0.00	0.00	1,204.41	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	885.98	177.20	0.00	0.00	0.00	177.20	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	2,210.62	552.66	0.00	0.00	0.00	0.00	552.66	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	5,119.11	5,119.11	0.00	0.00	0.00	5,119.11	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,449.44	1,087.08	0.00	0.00	0.00	1,087.08	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,828.94	3,828.94	0.00	0.00	0.00	0.00	3,828.94	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	96.68	7,251.04	0.00	0.00	0.00	7,251.04	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	55.22	795.13	0.00	0.00	0.00	795.13	0.00	0.00	0.00	0.00	0.00
1.4.5.3.2.1.3	Equipment Operating	Detail	31.00	Meter	312.98	9,702.33	0.00	9,702.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	23.06 Each	120.67	2,783.13	0.00	2,783.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	42.97 Each	33.57	1,442.37	0.00	1,442.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	29.67 Each	184.61	5,476.82	0.00	5,476.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.3.2.2	Haulage - Mining Block 5 (445L to 550L)	Detail	1,732.59	Tonne	7.93	13,746.28	4,522.70	8,889.09	0.00	334.49	0.00	0.00	0.00	0.00	0.00
1.4.5.3.2.2.1	Truck Haulage Labour	Detail	1,732.59	Tonne	2.80	4,857.18	4,522.70	0.00	0.00	334.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	88.96	Each	54.60	4,857.18	4,522.70	0.00	0.00	334.49	0.00	0.00	0.00	0.00	0.00
1.4.5.3.2.2.2	Truck Haulage Equipment	Detail	1,732.59	Tonne	5.13	8,889.09	0.00	8,889.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	59.36	Each	149.76	8,889.09	0.00	8,889.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.4	515 Sub Level Lateral Development	Detail	1.00	LS	463,429.95	463,429.95	202,827.76	112,148.25	0.00	119,986.43	28,467.51	0.00	0.00	0.00	0.00
1.4.5.4.1	Capital	Detail	161.00	Meter	2,478.24	398,995.84	174,627.11	96,555.45	0.00	103,303.82	24,509.46	0.00	0.00	0.00	0.00
1.4.5.4.1.1	4 x 4.5 Development - 5 m/day	Detail	161.00	Meter	2,034.81	327,603.88	151,138.27	50,389.50	0.00	101,566.64	24,509.46	0.00	0.00	0.00	0.00
1.4.5.4.1.1.1	Labour	Detail	161.00	Meter	996.07	160,367.59	151,138.27	0.00	0.00	9,229.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	676.20	Each	67.82	45,859.88	43,317.37	0.00	0.00	2,542.51	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	1,352.40	Each	64.09	86,675.32	81,590.29	0.00	0.00	5,085.02	0.00	0.00	0.00	0.00	0.00
1.4.5.4.1.1.2	Materials	Detail	161.00	Meter	725.76	116,846.79	0.00	0.00	0.00	92,337.33	24,509.46	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)	161.00		Meter	50.00	8,050.00	0.00	0.00	0.00	8,050.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	257.60		Cubic Meter	10.00	2,576.00	0.00	0.00	0.00	2,576.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40	1.00		Meter	2,268.99	2,268.99	0.00	0.00	0.00	515.54	1,753.45	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40	1.00		Meter	6,255.19	6,255.19	0.00	0.00	0.00	6,255.19	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m	0.20		Each	4,601.38	920.28	0.00	0.00	0.00	920.28	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40	0.25		Meter	11,480.97	2,870.24	0.00	0.00	0.00	0.00	2,870.24	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5	1.00		Meter	26,586.35	26,586.35	0.00	0.00	0.00	26,586.35	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables	0.75		Meter	7,527.74	5,645.80	0.00	0.00	0.00	5,645.80	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5	1.00		Meter	19,885.77	19,885.77	0.00	0.00	0.00	0.00	19,885.77	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling	75.00		Meter	502.12	37,658.64	0.00	0.00	0.00	37,658.64	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	14.40		Meter	286.77	4,129.53	0.00	0.00	0.00	4,129.53	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.4.1.1.3	Equipment Operating	Detail	161.00	Meter	312.98	50,389.50	0.00	50,389.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	119.78 Each	120.67	14,454.34	0.00	14,454.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	223.15 Each	33.57	7,491.01	0.00	7,491.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	154.08 Each	184.61	28,444.15	0.00	28,444.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.4.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	8,998.29	Tonne	7.93	71,391.96	23,488.84	46,165.94	0.00	1,737.18	0.00	0.00	0.00	0.00	0.00
1.4.5.4.1.2.1	Truck Haulage Labour	Detail	8,998.29	Tonne	2.80	25,226.01	23,488.84	0.00	0.00	1,737.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	462.01 Each	54.60	25,226.01	23,488.84	0.00	0.00	1,737.18	0.00	0.00	0.00	0.00	0.00
1.4.5.4.1.2.2	Truck Haulage Equipment	Detail	8,998.29	Tonne	5.13	46,165.94	0.00	46,165.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	308.27 Each	149.76	46,165.94	0.00	46,165.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.4.2	Operating	Detail	26.00	Meter	2,478.24	64,434.11	28,200.65	15,592.80	0.00	16,682.60	3,958.05	0.00	0.00	0.00	0.00
1.4.5.4.2.1	4 x 4.5 Development - 5 m/day	Detail	26.00	Meter	2,034.81	52,904.98	24,407.42	8,137.44	0.00	16,402.07	3,958.05	0.00	0.00	0.00	0.00
1.4.5.4.2.1.1	Labour	Detail	26.00	Meter	996.07	25,897.87	24,407.42	0.00	0.00	1,490.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	109.20 Each	67.82	7,405.94	6,995.35	0.00	0.00	410.59	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	218.40 Each	64.09	13,997.26	13,176.07	0.00	0.00	821.18	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.4.2.1.2	Materials	Detail	26.00	Meter	725.76	18,869.67	0.00	0.00	0.00	14,911.62	3,958.05	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		26.00	Meter	50.00	1,300.00	0.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		41.60	Cubic Meter	10.00	416.00	0.00	0.00	0.00	416.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	366.42	366.42	0.00	0.00	0.00	83.25	283.17	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,010.15	1,010.15	0.00	0.00	0.00	1,010.15	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	743.08	148.62	0.00	0.00	0.00	148.62	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,854.07	463.52	0.00	0.00	0.00	0.00	463.52	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,293.45	4,293.45	0.00	0.00	0.00	4,293.45	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,215.66	911.74	0.00	0.00	0.00	911.74	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,211.37	3,211.37	0.00	0.00	0.00	0.00	3,211.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	81.09	6,081.52	0.00	0.00	0.00	6,081.52	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	46.31	666.88	0.00	0.00	0.00	666.88	0.00	0.00	0.00	0.00	0.00
1.4.5.4.2.1.3	Equipment Operating	Detail	26.00	Meter	312.98	8,137.44	0.00	8,137.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	19.34 Each	120.67	2,334.24	0.00	2,334.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	36.04 Each	33.57	1,209.73	0.00	1,209.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	24.88 Each	184.61	4,593.47	0.00	4,593.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.4.2.2	Haulage - Mining Block 5 (445L to 550L)	Detail	1,453.14	Tonne	7.93	11,529.14	3,793.23	7,455.37	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.4.2.2.1	Truck Haulage Labour	Detail	1,453.14	Tonne	2.80	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	74.61 Each	54.60	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.4.2.2.2	Truck Haulage Equipment	Detail	1,453.14	Tonne	5.13	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	49.78 Each	149.76	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.5	550 Level Lateral Development	Detail	1.00	LS	411,387.02	411,387.02	180,050.31	99,554.06	0.00	106,512.01	25,270.63	0.00	0.00	0.00	0.00
1.4.5.5.1	Capital	Detail	140.00	Meter	2,478.24	346,952.91	151,849.66	83,961.26	0.00	89,829.41	21,312.58	0.00	0.00	0.00	0.00
1.4.5.5.1.1	4 x 4.5 Development - 5 m/day	Detail	140.00	Meter	2,034.81	284,872.94	131,424.59	43,816.96	0.00	88,318.82	21,312.58	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.5.1.1.1	Labour	Detail	140.00	Meter	996.07	139,450.08	131,424.59	0.00	0.00	8,025.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	588.00 Each	67.82	39,878.16	37,667.28	0.00	0.00	2,210.88	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,176.00 Each	64.09	75,369.84	70,948.08	0.00	0.00	4,421.76	0.00	0.00	0.00	0.00	0.00
1.4.5.5.1.1.2	Materials	Detail	140.00	Meter	725.76	101,605.91	0.00	0.00	0.00	80,293.33	21,312.58	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		140.00	Meter	50.00	7,000.00	0.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		224.00	Cubic Meter	10.00	2,240.00	0.00	0.00	0.00	2,240.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,973.04	1,973.04	0.00	0.00	0.00	448.30	1,524.74	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	5,439.29	5,439.29	0.00	0.00	0.00	5,439.29	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	4,001.20	800.24	0.00	0.00	0.00	800.24	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	9,983.46	2,495.86	0.00	0.00	0.00	0.00	2,495.86	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	23,118.56	23,118.56	0.00	0.00	0.00	23,118.56	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	6,545.86	4,909.39	0.00	0.00	0.00	4,909.39	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	17,291.97	17,291.97	0.00	0.00	0.00	0.00	17,291.97	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	436.62	32,746.64	0.00	0.00	0.00	32,746.64	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	249.37	3,590.90	0.00	0.00	0.00	3,590.90	0.00	0.00	0.00	0.00	0.00
1.4.5.5.1.1.3	Equipment Operating	Detail	140.00	Meter	312.98	43,816.96	0.00	43,816.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	104.16 Each	120.67	12,568.99	0.00	12,568.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	194.04 Each	33.57	6,513.92	0.00	6,513.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	133.98 Each	184.61	24,734.05	0.00	24,734.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.5.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	7,824.60	Tonne	7.93	62,079.96	20,425.08	40,144.30	0.00	1,510.59	0.00	0.00	0.00	0.00	0.00
1.4.5.5.1.2.1	Truck Haulage Labour	Detail	7,824.60	Tonne	2.80	21,935.66	20,425.08	0.00	0.00	1,510.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	401.75 Each	54.60	21,935.66	20,425.08	0.00	0.00	1,510.59	0.00	0.00	0.00	0.00	0.00
1.4.5.5.1.2.2	Truck Haulage Equipment	Detail	7,824.60	Tonne	5.13	40,144.30	0.00	40,144.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	268.06 Each	149.76	40,144.30	0.00	40,144.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2	Operating	Detail	26.00	Meter	2,478.24	64,434.11	28,200.65	15,592.80	0.00	16,682.60	3,958.05	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.5.2.1	4 x 4.5 Development - 5 m/day	Detail	26.00	Meter	2,034.81	52,904.98	24,407.42	8,137.44	0.00	16,402.07	3,958.05	0.00	0.00	0.00	0.00
1.4.5.5.2.1.1	Labour	Detail	26.00	Meter	996.07	25,897.87	24,407.42	0.00	0.00	1,490.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	109.20 Each	67.82	7,405.94	6,995.35	0.00	0.00	410.59	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	218.40 Each	64.09	13,997.26	13,176.07	0.00	0.00	821.18	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2.1.2	Materials	Detail	26.00	Meter	725.76	18,869.67	0.00	0.00	0.00	14,911.62	3,958.05	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		26.00	Meter	50.00	1,300.00	0.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		41.60	Cubic Meter	10.00	416.00	0.00	0.00	0.00	416.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	366.42	366.42	0.00	0.00	0.00	83.25	283.17	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	1,010.15	1,010.15	0.00	0.00	0.00	1,010.15	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	743.08	148.62	0.00	0.00	0.00	148.62	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,854.07	463.52	0.00	0.00	0.00	0.00	463.52	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	4,293.45	4,293.45	0.00	0.00	0.00	4,293.45	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	1,215.66	911.74	0.00	0.00	0.00	911.74	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	3,211.37	3,211.37	0.00	0.00	0.00	0.00	3,211.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	81.09	6,081.52	0.00	0.00	0.00	6,081.52	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	46.31	666.88	0.00	0.00	0.00	666.88	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2.1.3	Equipment Operating	Detail	26.00	Meter	312.98	8,137.44	0.00	8,137.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	19.34 Each	120.67	2,334.24	0.00	2,334.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	36.04 Each	33.57	1,209.73	0.00	1,209.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	24.88 Each	184.61	4,593.47	0.00	4,593.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2.2	Haulage - Mining Block 5 (445L to 550L)	Detail	1,453.14	Tonne	7.93	11,529.14	3,793.23	7,455.37	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2.2.1	Truck Haulage Labour	Detail	1,453.14	Tonne	2.80	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	74.61 Each	54.60	4,073.77	3,793.23	0.00	0.00	280.54	0.00	0.00	0.00	0.00	0.00
1.4.5.5.2.2.2	Truck Haulage Equipment	Detail	1,453.14	Tonne	5.13	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	49.78 Each	149.76	7,455.37	0.00	7,455.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.4.5.6	580 Level Lateral Development	Detail	1.00	LS	66,912.35	66,912.35	29,285.29	16,192.53	0.00	17,324.24	4,110.28	0.00	0.00	0.00	0.00
1.4.5.6.1	Capital	Detail	10.00	Meter	2,478.24	24,782.35	10,846.40	5,997.23	0.00	6,416.39	1,522.33	0.00	0.00	0.00	0.00
1.4.5.6.1.1	4 x 4.5 Development - 5 m/day	Detail	10.00	Meter	2,034.81	20,348.07	9,387.47	3,129.78	0.00	6,308.49	1,522.33	0.00	0.00	0.00	0.00
1.4.5.6.1.1.1	Labour	Detail	10.00	Meter	996.07	9,960.72	9,387.47	0.00	0.00	573.25	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	42.00	Each	67.82	2,848.44	2,690.52	0.00	0.00	157.92	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	84.00	Each	64.09	5,383.56	5,067.72	0.00	0.00	315.84	0.00	0.00	0.00	0.00	0.00
1.4.5.6.1.1.2	Materials	Detail	10.00	Meter	725.76	7,257.56	0.00	0.00	0.00	5,735.24	1,522.33	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)	10.00		Meter	50.00	500.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast	16.00		Cubic Meter	10.00	160.00	0.00	0.00	0.00	160.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40	1.00		Meter	140.93	140.93	0.00	0.00	0.00	32.02	108.91	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40	1.00		Meter	388.52	388.52	0.00	0.00	0.00	388.52	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m	0.20		Each	285.80	57.16	0.00	0.00	0.00	57.16	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40	0.25		Meter	713.10	178.28	0.00	0.00	0.00	0.00	178.28	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5	1.00		Meter	1,651.33	1,651.33	0.00	0.00	0.00	1,651.33	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables	0.75		Meter	467.56	350.67	0.00	0.00	0.00	350.67	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5	1.00		Meter	1,235.14	1,235.14	0.00	0.00	0.00	0.00	1,235.14	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling	75.00		Meter	31.19	2,339.05	0.00	0.00	0.00	2,339.05	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	14.40		Meter	17.81	256.49	0.00	0.00	0.00	256.49	0.00	0.00	0.00	0.00	0.00
1.4.5.6.1.1.3	Equipment Operating	Detail	10.00	Meter	312.98	3,129.78	0.00	3,129.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD	0.18	7.44	Each	120.67	897.78	0.00	897.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift	0.33	13.86	Each	33.57	465.28	0.00	465.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo	0.23	9.57	Each	184.61	1,766.72	0.00	1,766.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.6.1.2	Haulage - Mining Block 5 (445L to 550L)	Detail	558.90	Tonne	7.93	4,434.28	1,458.93	2,867.45	0.00	107.90	0.00	0.00	0.00	0.00	0.00
1.4.5.6.1.2.1	Truck Haulage Labour	Detail	558.90	Tonne	2.80	1,566.83	1,458.93	0.00	0.00	107.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	28.70	Each	54.60	1,566.83	1,458.93	0.00	0.00	107.90	0.00	0.00	0.00	0.00	0.00

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1.4.5.6.1.2.2	Truck Haulage Equipment	Detail	558.90	Tonne	5.13	2,867.45	0.00	2,867.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	19.15 Each	149.76	2,867.45	0.00	2,867.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.6.2	Operating	Detail	17.00	Meter	2,478.24	42,130.00	18,438.89	10,195.30	0.00	10,907.86	2,587.96	0.00	0.00	0.00	0.00
1.4.5.6.2.1	4 x 4.5 Development - 5 m/day	Detail	17.00	Meter	2,034.81	34,591.71	15,958.70	5,320.63	0.00	10,724.43	2,587.96	0.00	0.00	0.00	0.00
1.4.5.6.2.1.1	Labour	Detail	17.00	Meter	996.07	16,933.22	15,958.70	0.00	0.00	974.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	71.40 Each	67.82	4,842.35	4,573.88	0.00	0.00	268.46	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	142.80 Each	64.09	9,152.05	8,615.12	0.00	0.00	536.93	0.00	0.00	0.00	0.00	0.00
1.4.5.6.2.1.2	Materials	Detail	17.00	Meter	725.76	12,337.86	0.00	0.00	0.00	9,749.90	2,587.96	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		17.00	Meter	50.00	850.00	0.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00
IMFI1000	Ballast		27.20	Cubic Meter	10.00	272.00	0.00	0.00	0.00	272.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	239.58	239.58	0.00	0.00	0.00	54.44	185.15	0.00	0.00	0.00	0.00
ASUPI1004	Air - 100 mm (4") Steel Pipe SCHD 40		1.00	Meter	660.49	660.49	0.00	0.00	0.00	660.49	0.00	0.00	0.00	0.00	0.00
AIMGS1001	Cable Bolt - 3.6 m		0.20	Each	485.86	97.17	0.00	0.00	0.00	97.17	0.00	0.00	0.00	0.00	0.00
ASUPI1003	Dewatering - 150 mm (6") Steel Pipe SCHD40		0.25	Meter	1,212.28	303.07	0.00	0.00	0.00	0.00	303.07	0.00	0.00	0.00	0.00
AIMGS1002	Ground Support - 4 x 4.5		1.00	Meter	2,807.25	2,807.25	0.00	0.00	0.00	2,807.25	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.75	Meter	794.85	596.14	0.00	0.00	0.00	596.14	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	2,099.74	2,099.74	0.00	0.00	0.00	0.00	2,099.74	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	53.02	3,976.38	0.00	0.00	0.00	3,976.38	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		14.40	Meter	30.28	436.04	0.00	0.00	0.00	436.04	0.00	0.00	0.00	0.00	0.00
1.4.5.6.2.1.3	Equipment Operating	Detail	17.00	Meter	312.98	5,320.63	0.00	5,320.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	12.65 Each	120.67	1,526.23	0.00	1,526.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.33	23.56 Each	33.57	790.98	0.00	790.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	16.27 Each	184.61	3,003.42	0.00	3,003.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4.5.6.2.2	Haulage - Mining Block 5 (445L to 550L)	Detail	950.13	Tonne	7.93	7,538.28	2,480.19	4,874.66	0.00	183.43	0.00	0.00	0.00	0.00	0.00

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1.4.5.6.2.2.1	Truck Haulage Labour	Detail	950.13	Tonne	2.80	2,663.62	2,480.19	0.00	0.00	183.43	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	48.78 Each	54.60	2,663.62	2,480.19	0.00	0.00	183.43	0.00	0.00	0.00	0.00	0.00
1.4.5.6.2.2.2	Truck Haulage Equipment	Detail	950.13	Tonne	5.13	4,874.66	0.00	4,874.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	32.55 Each	149.76	4,874.66	0.00	4,874.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	Raises	Detail	1.00	LS	4,092,421.11	4,092,421.11	3,568,273.36	72,684.02	0.00	2,963.73	0.00	448,500.00	0.00	0.00	0.00
1.5.1	FA near Portal	Detail	25.00	Meter	6,650.00	166,250.00	147,500.00	0.00	0.00	0.00	0.00	18,750.00	0.00	0.00	0.00
1.5.1.1	Raisebore - 4.3 m	Plug	25.00	Meter	5,900.00	147,500.00	147,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.1.2	Manway - Hoop Ladder	Plug	25.00	Meter	750.00	18,750.00	0.00	0.00	0.00	0.00	0.00	18,750.00	0.00	0.00	0.00
1.5.2	FA 80 L to Surface	Detail	83.00	Meter	6,743.23	559,687.84	492,681.45	4,535.89	0.00	220.50	0.00	62,250.00	0.00	0.00	0.00
1.5.2.1	Raisebore - 4.3 m	Plug	83.00	Meter	5,900.00	489,700.00	489,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	3,252.77	Tonne	2.38	7,737.84	2,981.45	4,535.89	0.00	220.50	0.00	0.00	0.00	0.00	0.00
1.5.2.2.1	Truck Haulage Labour	Detail	3,252.77	Tonne	0.98	3,201.95	2,981.45	0.00	0.00	220.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	58.64 Each	54.60	3,201.95	2,981.45	0.00	0.00	220.50	0.00	0.00	0.00	0.00	0.00
1.5.2.2.2	Truck Haulage Equipment	Detail	3,252.77	Tonne	1.39	4,535.89	0.00	4,535.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	39.10 Each	116.02	4,535.89	0.00	4,535.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.2.3	Manway - Hoop Ladder	Plug	83.00	Meter	750.00	62,250.00	0.00	0.00	0.00	0.00	0.00	62,250.00	0.00	0.00	0.00
1.5.3	FA 170 L TO 80 L	Detail	91.00	Meter	6,768.49	615,933.01	541,054.91	6,320.82	0.00	307.29	0.00	68,250.00	0.00	0.00	0.00
1.5.3.1	Haulage - Mining Block 2 (110L to 170L)	Detail	3,566.29	Tonne	3.02	10,783.01	4,154.91	6,320.82	0.00	307.29	0.00	0.00	0.00	0.00	0.00

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1.5.3.1.1	Truck Haulage Labour	Detail	3,566.29	Tonne	1.25	4,462.19	4,154.91	0.00	0.00	307.29	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	81.73 Each	54.60	4,462.19	4,154.91	0.00	0.00	307.29	0.00	0.00	0.00	0.00	0.00
1.5.3.1.2	Truck Haulage Equipment	Detail	3,566.29	Tonne	1.77	6,320.82	0.00	6,320.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	54.48 Each	116.02	6,320.82	0.00	6,320.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.3.2	Raisebore - 4.3 m	Plug	91.00	Meter	5,900.00	536,900.00	536,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.3.3	Manway - Hoop Ladder	Plug	91.00	Meter	750.00	68,250.00	0.00	0.00	0.00	0.00	0.00	68,250.00	0.00	0.00	0.00
1.5.4	FA 270 L TO 170 L	Detail	104.00	Meter	6,812.99	708,551.13	620,131.74	9,936.32	0.00	483.07	0.00	78,000.00	0.00	0.00	0.00
1.5.4.1	Haulage - Mining Block 3 (200L to 270L)	Detail	4,075.76	Tonne	4.16	16,951.13	6,531.74	9,936.32	0.00	483.07	0.00	0.00	0.00	0.00	0.00
1.5.4.1.1	Truck Haulage Labour	Detail	4,075.76	Tonne	1.72	7,014.81	6,531.74	0.00	0.00	483.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	128.48 Each	54.60	7,014.81	6,531.74	0.00	0.00	483.07	0.00	0.00	0.00	0.00	0.00
1.5.4.1.2	Truck Haulage Equipment	Detail	4,075.76	Tonne	2.44	9,936.32	0.00	9,936.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	85.64 Each	116.02	9,936.32	0.00	9,936.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.4.2	Raisebore - 4.3 m	Plug	104.00	Meter	5,900.00	613,600.00	613,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.4.3	Manway - Hoop Ladder	Plug	104.00	Meter	750.00	78,000.00	0.00	0.00	0.00	0.00	0.00	78,000.00	0.00	0.00	0.00
1.5.5	FA 410 L TO 270 L	Detail	147.00	Meter	6,882.87	1,011,781.27	878,564.83	22,133.32	0.00	833.12	0.00	110,250.00	0.00	0.00	0.00
1.5.5.1	Haulage - Mining Block 4 (305L to 410L)	Detail	5,760.93	Tonne	5.94	34,231.27	11,264.83	22,133.32	0.00	833.12	0.00	0.00	0.00	0.00	0.00
1.5.5.1.1	Truck Haulage Labour	Detail	5,760.93	Tonne	2.10	12,097.95	11,264.83	0.00	0.00	833.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	221.57 Each	54.60	12,097.95	11,264.83	0.00	0.00	833.12	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.5.5.1.2	Truck Haulage Equipment	Detail	5,760.93	Tonne	3.84	22,133.32	0.00	22,133.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	147.79 Each	149.76	22,133.32	0.00	22,133.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.5.2	Raisebore - 4.3 m	Plug		147.00 Meter	5,900.00	867,300.00	867,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.5.3	Manway - Hoop Ladder	Plug		147.00 Meter	750.00	110,250.00	0.00	0.00	0.00	0.00	0.00	110,250.00	0.00	0.00	0.00
1.5.6	FA 550 L TO 410 L	Detail		148.00 Meter	6,960.93	1,030,217.85	888,340.44	29,757.66	0.00	1,119.75	0.00	111,000.00	0.00	0.00	0.00
1.5.6.1	Haulage - Mining Block 5 (445L to 550L)	Detail		5,800.12 Tonne	7.93	46,017.85	15,140.44	29,757.66	0.00	1,119.75	0.00	0.00	0.00	0.00	0.00
1.5.6.1.1	Truck Haulage Labour	Detail		5,800.12 Tonne	2.80	16,260.19	15,140.44	0.00	0.00	1,119.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	297.81 Each	54.60	16,260.19	15,140.44	0.00	0.00	1,119.75	0.00	0.00	0.00	0.00	0.00
1.5.6.1.2	Truck Haulage Equipment	Detail		5,800.12 Tonne	5.13	29,757.66	0.00	29,757.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	198.70 Each	149.76	29,757.66	0.00	29,757.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.6.2	Raisebore - 4.3 m	Plug		148.00 Meter	5,900.00	873,200.00	873,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5.6.3	Manway - Hoop Ladder	Plug		148.00 Meter	750.00	111,000.00	0.00	0.00	0.00	0.00	0.00	111,000.00	0.00	0.00	0.00
1.6	Boreholes	Detail		1.00 LS	1,035,000.00	1,035,000.00	0.00	0.00	0.00	1,035,000.00	0.00	0.00	0.00	0.00	0.00
1.6.1	Backfill	Detail		1.00 LS	810,000.00	810,000.00	0.00	0.00	0.00	810,000.00	0.00	0.00	0.00	0.00	0.00
1.6.1.1	Surface to 65 Level	Plug		125.00 Meter	1,800.00	225,000.00	0.00	0.00	0.00	225,000.00	0.00	0.00	0.00	0.00	0.00
1.6.1.2	65 Level - 235 Level	Plug		345.00 Meter	600.00	207,000.00	0.00	0.00	0.00	207,000.00	0.00	0.00	0.00	0.00	0.00
1.6.1.3	235 Level - 375 Level	Plug		280.00 Meter	600.00	168,000.00	0.00	0.00	0.00	168,000.00	0.00	0.00	0.00	0.00	0.00
1.6.1.4	375 Level - 550 Level	Plug		350.00 Meter	600.00	210,000.00	0.00	0.00	0.00	210,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2	Dewatering	Detail		1.00 Meter	225,000.00	225,000.00	0.00	0.00	0.00	225,000.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.6.2.1	45 Level - 65 Level	Plug	17.50	Meter	600.00	10,500.00	0.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00
1.6.2.2	65 Level - 80 Level	Plug	17.50	Meter	600.00	10,500.00	0.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00
1.6.2.3	110 Level - 140 Level	Plug	30.00	Meter	600.00	18,000.00	0.00	0.00	0.00	18,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.4	140 Level - 170 Level	Plug	30.00	Meter	600.00	18,000.00	0.00	0.00	0.00	18,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.5	200 Level - 235 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.6	235 Level - 270 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.7	305 Level - 340 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.8	340 Level - 375 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.9	375 Level - 410 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.10	445 Level - 480 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.11	480 Level - 515 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.6.2.12	515 Level - 550 Level	Plug	35.00	Meter	600.00	21,000.00	0.00	0.00	0.00	21,000.00	0.00	0.00	0.00	0.00	0.00
1.7	Production	Detail	1.00	LS	48,989,133.44	48,989,133.44	16,867,600.84	13,712,005.65	0.00	16,420,160.28	1,989,366.67	0.00	0.00	0.00	0.00
1.7.1	Iron Formation	Detail	1.00	LS	1,740,353.18	1,740,353.18	798,715.69	319,200.40	0.00	539,228.84	83,208.26	0.00	0.00	0.00	0.00
1.7.1.1	45 Sub Level - UC IF	Detail	7,389.00	Tonne	35.51	262,415.01	137,023.81	43,423.41	0.00	65,839.92	16,127.87	0.00	0.00	0.00	0.00
1.7.1.1.1	4 x 4.5 Ore Development - 4 m/day	Detail	111.00	Meter	2,088.86	231,863.23	130,251.15	33,119.66	0.00	52,364.55	16,127.87	0.00	0.00	0.00	0.00
1.7.1.1.1.1	Labour	Detail	111.00	Meter	1,245.09	138,204.99	130,251.15	0.00	0.00	7,953.84	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LALD1000	Lead Miner	1.00	582.75	Each	67.82	39,522.11	37,330.97	0.00	0.00	2,191.14	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	1,165.50	Each	64.09	74,696.90	70,314.62	0.00	0.00	4,382.28	0.00	0.00	0.00	0.00	0.00

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1.7.1.1.1.2	Materials	Detail	111.00	Meter	545.39	60,538.58	0.00	0.00	0.00	44,410.71	16,127.87	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		111.00	Meter	50.00	5,550.00	0.00	0.00	0.00	5,550.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,564.34	1,564.34	0.00	0.00	0.00	355.43	1,208.90	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,564.34	1,564.34	0.00	0.00	0.00	355.43	1,208.90	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	8,405.19	8,405.19	0.00	0.00	0.00	8,405.19	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	5,189.93	2,594.97	0.00	0.00	0.00	2,594.97	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	13,710.07	13,710.07	0.00	0.00	0.00	0.00	13,710.07	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	346.18	25,963.41	0.00	0.00	0.00	25,963.41	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	197.71	1,186.28	0.00	0.00	0.00	1,186.28	0.00	0.00	0.00	0.00	0.00
1.7.1.1.1.3	Equipment Operating	Detail	111.00	Meter	298.38	33,119.66	0.00	33,119.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	82.58 Each	120.67	9,965.41	0.00	9,965.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	105.56 Each	33.57	3,543.68	0.00	3,543.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	106.23 Each	184.61	19,610.57	0.00	19,610.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.1.2	Haulage - Mining Block 1 (45L to 80L)	Detail	7,389.00	Tonne	2.38	17,577.29	6,772.66	10,303.75	0.00	500.89	0.00	0.00	0.00	0.00	0.00
1.7.1.1.2.1	Truck Haulage Labour	Detail	7,389.00	Tonne	0.98	7,273.55	6,772.66	0.00	0.00	500.89	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	133.22 Each	54.60	7,273.55	6,772.66	0.00	0.00	500.89	0.00	0.00	0.00	0.00	0.00
1.7.1.1.2.2	Truck Haulage Equipment	Detail	7,389.00	Tonne	1.39	10,303.75	0.00	10,303.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	88.81 Each	116.02	10,303.75	0.00	10,303.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.1.3	Backfill Pipe	Detail	128.00	Meter	101.36	12,974.49	0.00	0.00	0.00	12,974.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	12,974.49	12,974.49	0.00	0.00	0.00	12,974.49	0.00	0.00	0.00	0.00	0.00
1.7.1.2	Stoping 65 L Block - IF	Detail	16,343.00	Tonne	35.83	585,616.14	236,121.48	117,911.49	0.00	210,499.55	21,083.62	0.00	0.00	0.00	0.00
1.7.1.2.1	Blasthole Mining - Iron	Detail	16,343.00	Tonne	33.42	546,262.50	223,167.92	92,469.42	0.00	209,541.54	21,083.62	0.00	0.00	0.00	0.00
1.7.1.2.1.1	Labour	Detail	2.62	Each	90,431.54	236,846.57	223,167.92	0.00	0.00	13,678.65	0.00	0.00	0.00	0.00	0.00

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1.7.1.2.1.1.1	Cable Labour	Detail	2.62	Each	2,063.29	5,403.91	5,092.91	0.00	0.00	311.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.1.1	Drilling	Detail	22.79	Hour	77.55	1,767.02	1,663.36	0.00	0.00	103.67	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	22.79	Each	64.09	1,460.35	1,374.67	0.00	0.00	85.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.1.2	Install & Grout	Detail	22.79	Hour	159.61	3,636.88	3,429.55	0.00	0.00	207.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	22.79	Each	64.09	1,460.35	1,374.67	0.00	0.00	85.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	22.79	Each	67.82	1,545.34	1,459.67	0.00	0.00	85.68	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.2	Drop Raise Labour	Detail	2.62	Each	13,340.46	34,939.59	32,925.84	0.00	0.00	2,013.76	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.2.1	Drill	Detail	170.24	Hour	77.55	13,201.89	12,427.37	0.00	0.00	774.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	170.24	Each	64.09	10,910.65	10,270.55	0.00	0.00	640.10	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.2.2	Blast	Detail	136.19	Hour	159.61	21,737.70	20,498.47	0.00	0.00	1,239.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	136.19	Each	64.09	8,728.52	8,216.44	0.00	0.00	512.08	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	136.19	Each	67.82	9,236.52	8,724.44	0.00	0.00	512.08	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.3	Drilling Labour	Detail	537.96	Hour	98.06	52,754.47	49,695.10	0.00	0.00	3,059.36	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	537.96	Each	64.09	34,477.67	32,454.95	0.00	0.00	2,022.72	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	134.49	Each	67.82	9,121.06	8,615.38	0.00	0.00	505.68	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.4	Mucking Labour	Detail	523.03	Hour	77.55	40,560.28	38,180.71	0.00	0.00	2,379.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	523.03	Each	64.09	33,520.89	31,554.30	0.00	0.00	1,966.59	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.5	Production Loading Labour	Detail	2.62	Each	7,661.33	20,065.57	18,921.66	0.00	0.00	1,143.91	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.1.2.1.1.5.1	Slot Blast	Detail	31.43	Hour	159.61	5,016.39	4,730.42	0.00	0.00	285.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	31.43 Each	64.09	2,014.27	1,896.10	0.00	0.00	118.17	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	31.43 Each	67.82	2,131.50	2,013.33	0.00	0.00	118.17	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.5.2	Void Blast	Detail	31.43	Hour	159.61	5,016.39	4,730.42	0.00	0.00	285.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	31.43 Each	64.09	2,014.27	1,896.10	0.00	0.00	118.17	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	31.43 Each	67.82	2,131.50	2,013.33	0.00	0.00	118.17	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.5.3	Final Blast	Detail	62.86	Hour	159.61	10,032.79	9,460.83	0.00	0.00	571.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	62.86 Each	64.09	4,028.55	3,792.20	0.00	0.00	236.34	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	62.86 Each	67.82	4,263.01	4,026.66	0.00	0.00	236.34	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.6	Filling Labour	Detail	2.62	Each	31,737.50	83,122.76	78,351.70	0.00	0.00	4,771.06	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.6.1	Fill Prep	Detail	251.43	Hour	237.16	59,629.32	56,197.59	0.00	0.00	3,431.73	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	502.86 Each	64.09	32,228.40	30,337.64	0.00	0.00	1,890.76	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	251.43 Each	67.82	17,052.03	16,106.66	0.00	0.00	945.38	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.1.6.2	Pour Time	Detail	147.19	Hour	159.61	23,493.44	22,154.11	0.00	0.00	1,339.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	147.19 Each	64.09	9,433.52	8,880.08	0.00	0.00	553.44	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	147.19 Each	67.82	9,982.55	9,429.10	0.00	0.00	553.44	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.2	Cable Bolting	Detail	995.25	Meter	15.31	15,240.39	0.00	6,421.31	0.00	8,819.08	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.2.1	Materials	Detail	995.25	Meter	8.86	8,819.08	0.00	0.00	0.00	8,819.08	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		995.25	Meter	1.00	995.25	0.00	0.00	0.00	995.25	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		159.24	Each	25.00	3,980.99	0.00	0.00	0.00	3,980.99	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		995.25	Kilogram	0.50	497.62	0.00	0.00	0.00	497.62	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		995.25	Each	1.58	1,572.49	0.00	0.00	0.00	1,572.49	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	1,772.73	1,772.73	0.00	0.00	0.00	1,772.73	0.00	0.00	0.00	0.00	0.00

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1.7.1.2.1.2.2	Equipment Operating	Detail	995.25	Meter	6.45	6,421.31	0.00	6,421.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	135.16 Each	47.51	6,421.31	0.00	6,421.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.3	Drop Raise Drilling	Detail	919.29	Meter	28.18	25,910.17	0.00	7,391.26	0.00	18,518.91	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.3.1	Materials	Detail	919.29	Meter	20.14	18,518.91	0.00	0.00	0.00	18,518.91	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	18,518.91	18,518.91	0.00	0.00	0.00	18,518.91	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.3.2	Equipment Operating	Detail	919.29	Meter	8.04	7,391.26	0.00	7,391.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	155.57 Each	47.51	7,391.26	0.00	7,391.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.4	Drilling	Detail	3,632.65	Meter	26.60	96,616.48	0.00	23,437.77	0.00	73,178.71	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.4.1	Materials	Detail	3,632.65	Meter	20.14	73,178.71	0.00	0.00	0.00	73,178.71	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	73,178.71	73,178.71	0.00	0.00	0.00	73,178.71	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.4.2	Equipment Operating	Detail	3,632.65	Meter	6.45	23,437.77	0.00	23,437.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	493.32 Each	47.51	23,437.77	0.00	23,437.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.5	Blasting	Detail	2.62	Each	8,145.63	21,333.98	0.00	0.00	0.00	250.36	21,083.62	0.00	0.00	0.00	0.00
1.7.1.2.1.5.1	Materials	Detail	2.62	Each	8,145.63	21,333.98	0.00	0.00	0.00	250.36	21,083.62	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		13,629.64	Kilogram	1.01	13,765.94	0.00	0.00	0.00	0.00	13,765.94	0.00	0.00	0.00	0.00
SUEX10016	Booster		206.91	Each	1.21	250.36	0.00	0.00	0.00	250.36	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		261.91	Meter	0.29	75.95	0.00	0.00	0.00	0.00	75.95	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		206.91	Each	35.00	7,241.73	0.00	0.00	0.00	0.00	7,241.73	0.00	0.00	0.00	0.00
1.7.1.2.1.5.2	Equipment Operating	Detail	1.31	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.7.1.2.1.6	Mucking	Detail	16,343.00	Tonne	3.38	55,219.07	0.00	55,219.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD	1.00	457.60	Each	120.67	55,219.07	0.00	55,219.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.2.1.7	Backfill	Detail	7,762.93	Tonne	12.25	95,095.83	0.00	0.00	0.00	95,095.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill	7,762.93		Tonne	12.25	95,095.83	0.00	0.00	0.00	95,095.83	0.00	0.00	0.00	0.00	0.00
1.7.1.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	16,343.00	Tonne	2.41	39,353.64	12,953.56	25,442.08	0.00	958.01	0.00	0.00	0.00	0.00	0.00
1.7.1.2.2.1	Truck Haulage Labour	Detail	16,343.00	Tonne	0.85	13,911.57	12,953.56	0.00	0.00	958.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	254.79	Each	54.60	13,911.57	12,953.56	0.00	0.00	958.01	0.00	0.00	0.00	0.00	0.00
1.7.1.2.2.2	Truck Haulage Equipment	Detail	16,343.00	Tonne	1.56	25,442.08	0.00	25,442.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	169.89	Each	149.76	25,442.08	0.00	25,442.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.3	65 Sub Level - UC IF	Detail	7,718.00	Tonne	33.82	261,007.43	136,151.93	43,583.81	0.00	65,289.11	15,982.57	0.00	0.00	0.00	0.00
1.7.1.3.1	4 x 4.5 Ore Development - 4 m/day	Detail	110.00	Meter	2,088.86	229,774.37	129,077.72	32,821.29	0.00	51,892.79	15,982.57	0.00	0.00	0.00	0.00
1.7.1.3.1.1	Labour	Detail	110.00	Meter	1,245.09	136,959.90	129,077.72	0.00	0.00	7,882.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner	1.00	577.50	Each	67.82	39,166.05	36,994.65	0.00	0.00	2,171.40	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner	2.00	1,155.00	Each	64.09	74,023.95	69,681.15	0.00	0.00	4,342.80	0.00	0.00	0.00	0.00	0.00
1.7.1.3.1.2	Materials	Detail	110.00	Meter	545.39	59,993.18	0.00	0.00	0.00	44,010.61	15,982.57	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)	110.00		Meter	50.00	5,500.00	0.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40	1.00		Meter	1,550.24	1,550.24	0.00	0.00	0.00	352.23	1,198.01	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40	1.00		Meter	1,550.24	1,550.24	0.00	0.00	0.00	352.23	1,198.01	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore	1.00		Meter	8,329.46	8,329.46	0.00	0.00	0.00	8,329.46	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables	0.50		Meter	5,143.17	2,571.59	0.00	0.00	0.00	2,571.59	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5	1.00		Meter	13,586.55	13,586.55	0.00	0.00	0.00	0.00	13,586.55	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling	75.00		Meter	343.06	25,729.50	0.00	0.00	0.00	25,729.50	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling	6.00		Meter	195.93	1,175.59	0.00	0.00	0.00	1,175.59	0.00	0.00	0.00	0.00	0.00

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1.7.1.3.1.3	Equipment Operating	Detail	110.00	Meter	298.38	32,821.29	0.00	32,821.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	81.84 Each	120.67	9,875.63	0.00	9,875.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	104.61 Each	33.57	3,511.76	0.00	3,511.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	105.27 Each	184.61	19,433.89	0.00	19,433.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.3.2	Haulage - Mining Block 1 (45L to 80L)	Detail	7,718.00	Tonne	2.38	18,359.93	7,074.21	10,762.53	0.00	523.19	0.00	0.00	0.00	0.00	0.00
1.7.1.3.2.1	Truck Haulage Labour	Detail	7,718.00	Tonne	0.98	7,597.41	7,074.21	0.00	0.00	523.19	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	139.15 Each	54.60	7,597.41	7,074.21	0.00	0.00	523.19	0.00	0.00	0.00	0.00	0.00
1.7.1.3.2.2	Truck Haulage Equipment	Detail	7,718.00	Tonne	1.39	10,762.53	0.00	10,762.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	92.76 Each	116.02	10,762.53	0.00	10,762.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.3.3	Backfill Pipe	Detail	127.00	Meter	101.36	12,873.13	0.00	0.00	0.00	12,873.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	12,873.13	12,873.13	0.00	0.00	0.00	12,873.13	0.00	0.00	0.00	0.00	0.00
1.7.1.4	80 Level - UC IF	Detail	6,609.00	Tonne	42.09	278,182.64	145,696.34	44,722.72	0.00	70,473.34	17,290.24	0.00	0.00	0.00	0.00
1.7.1.4.1	4 x 4.5 Ore Development - 4 m/day	Detail	119.00	Meter	2,088.86	248,574.09	139,638.62	35,506.66	0.00	56,138.57	17,290.24	0.00	0.00	0.00	0.00
1.7.1.4.1.1	Labour	Detail	119.00	Meter	1,245.09	148,165.71	139,638.62	0.00	0.00	8,527.09	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	624.75 Each	67.82	42,370.55	40,021.49	0.00	0.00	2,349.06	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,249.50 Each	64.09	80,080.46	75,382.34	0.00	0.00	4,698.12	0.00	0.00	0.00	0.00	0.00

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1.7.1.4.1.2	Materials	Detail	119.00	Meter	545.39	64,901.72	0.00	0.00	0.00	47,611.48	17,290.24	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		119.00	Meter	50.00	5,950.00	0.00	0.00	0.00	5,950.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,677.08	1,677.08	0.00	0.00	0.00	381.05	1,296.03	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,677.08	1,677.08	0.00	0.00	0.00	381.05	1,296.03	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	9,010.97	9,010.97	0.00	0.00	0.00	9,010.97	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	5,563.98	2,781.99	0.00	0.00	0.00	2,781.99	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	14,698.18	14,698.18	0.00	0.00	0.00	0.00	14,698.18	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	371.13	27,834.64	0.00	0.00	0.00	27,834.64	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	211.96	1,271.78	0.00	0.00	0.00	1,271.78	0.00	0.00	0.00	0.00	0.00
1.7.1.4.1.3	Equipment Operating	Detail	119.00	Meter	298.38	35,506.66	0.00	35,506.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	88.54 Each	120.67	10,683.64	0.00	10,683.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	113.17 Each	33.57	3,799.08	0.00	3,799.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	113.88 Each	184.61	21,023.94	0.00	21,023.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.4.2	Haulage - Mining Block 1 (45L to 80L)	Detail	6,609.00	Tonne	2.38	15,721.79	6,057.72	9,216.06	0.00	448.01	0.00	0.00	0.00	0.00	0.00
1.7.1.4.2.1	Truck Haulage Labour	Detail	6,609.00	Tonne	0.98	6,505.73	6,057.72	0.00	0.00	448.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	119.15 Each	54.60	6,505.73	6,057.72	0.00	0.00	448.01	0.00	0.00	0.00	0.00	0.00
1.7.1.4.2.2	Truck Haulage Equipment	Detail	6,609.00	Tonne	1.39	9,216.06	0.00	9,216.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	79.44 Each	116.02	9,216.06	0.00	9,216.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.4.3	Backfill Pipe	Detail	137.00	Meter	101.36	13,886.76	0.00	0.00	0.00	13,886.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	13,886.76	13,886.76	0.00	0.00	0.00	13,886.76	0.00	0.00	0.00	0.00	0.00
1.7.1.5	Stoping 80 L Block - IF	Detail	9,863.00	Tonne	35.80	353,131.96	143,722.13	69,558.96	0.00	127,126.91	12,723.97	0.00	0.00	0.00	0.00
1.7.1.5.1	Blasthole Mining - Iron	Detail	9,863.00	Tonne	33.42	329,669.40	134,681.83	55,805.29	0.00	126,458.31	12,723.97	0.00	0.00	0.00	0.00
1.7.1.5.1.1	Labour	Detail	1.58	Each	90,431.54	142,936.90	134,681.83	0.00	0.00	8,255.07	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.1.5.1.1.1	Cable Labour	Detail	1.58	Each	2,063.29	3,261.26	3,073.57	0.00	0.00	187.69	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.1.1	Drilling	Detail	13.75	Hour	77.55	1,066.40	1,003.84	0.00	0.00	62.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	13.75	Each	64.09	881.32	829.62	0.00	0.00	51.70	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.1.2	Install & Grout	Detail	13.75	Hour	159.61	2,194.86	2,069.73	0.00	0.00	125.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	13.75	Each	64.09	881.32	829.62	0.00	0.00	51.70	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	13.75	Each	67.82	932.61	880.91	0.00	0.00	51.70	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.2	Drop Raise Labour	Detail	1.58	Each	13,340.46	21,086.04	19,870.74	0.00	0.00	1,215.30	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.2.1	Drill	Detail	102.74	Hour	77.55	7,967.34	7,499.92	0.00	0.00	467.42	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	102.74	Each	64.09	6,584.58	6,198.28	0.00	0.00	386.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.2.2	Blast	Detail	82.19	Hour	159.61	13,118.70	12,370.82	0.00	0.00	747.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	82.19	Each	64.09	5,267.66	4,958.62	0.00	0.00	309.04	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	82.19	Each	67.82	5,574.24	5,265.20	0.00	0.00	309.04	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.3	Drilling Labour	Detail	324.66	Hour	98.06	31,837.32	29,990.99	0.00	0.00	1,846.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	324.66	Each	64.09	20,807.27	19,586.56	0.00	0.00	1,220.71	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	81.16	Each	67.82	5,504.56	5,199.38	0.00	0.00	305.18	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.4	Mucking Labour	Detail	315.65	Hour	77.55	24,478.13	23,042.05	0.00	0.00	1,436.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	315.65	Each	64.09	20,229.86	19,043.02	0.00	0.00	1,186.84	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.5	Production Loading Labour	Detail	1.58	Each	7,661.33	12,109.57	11,419.22	0.00	0.00	690.35	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.1.5.1.1.5.1	Slot Blast	Detail	18.97	Hour	159.61	3,027.39	2,854.81	0.00	0.00	172.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	18.97 Each	64.09	1,215.61	1,144.30	0.00	0.00	71.32	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	18.97 Each	67.82	1,286.36	1,215.05	0.00	0.00	71.32	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.5.2	Void Blast	Detail	18.97	Hour	159.61	3,027.39	2,854.81	0.00	0.00	172.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	18.97 Each	64.09	1,215.61	1,144.30	0.00	0.00	71.32	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	18.97 Each	67.82	1,286.36	1,215.05	0.00	0.00	71.32	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.5.3	Final Blast	Detail	37.93	Hour	159.61	6,054.79	5,709.61	0.00	0.00	345.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	37.93 Each	64.09	2,431.23	2,288.60	0.00	0.00	142.63	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	37.93 Each	67.82	2,572.73	2,430.09	0.00	0.00	142.63	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.6	Filling Labour	Detail	1.58	Each	31,737.50	50,164.58	47,285.25	0.00	0.00	2,879.33	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.6.1	Fill Prep	Detail	151.74	Hour	237.16	35,986.29	33,915.25	0.00	0.00	2,071.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	303.48 Each	64.09	19,449.84	18,308.76	0.00	0.00	1,141.07	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	151.74 Each	67.82	10,290.90	9,720.37	0.00	0.00	570.54	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.1.6.2	Pour Time	Detail	88.83	Hour	159.61	14,178.29	13,370.01	0.00	0.00	808.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	88.83 Each	64.09	5,693.13	5,359.13	0.00	0.00	334.00	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	88.83 Each	67.82	6,024.47	5,690.46	0.00	0.00	334.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.2	Cable Bolting	Detail	600.63	Meter	15.31	9,197.57	0.00	3,875.26	0.00	5,322.32	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.2.1	Materials	Detail	600.63	Meter	8.86	5,322.32	0.00	0.00	0.00	5,322.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		600.63	Meter	1.00	600.63	0.00	0.00	0.00	600.63	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		96.10	Each	25.00	2,402.53	0.00	0.00	0.00	2,402.53	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		600.63	Kilogram	0.50	300.32	0.00	0.00	0.00	300.32	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		600.63	Each	1.58	949.00	0.00	0.00	0.00	949.00	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	1,069.84	1,069.84	0.00	0.00	0.00	1,069.84	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.1.5.1.2.2	Equipment Operating	Detail	600.63	Meter	6.45	3,875.26	0.00	3,875.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	81.57 Each	47.51	3,875.26	0.00	3,875.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.3	Drop Raise Drilling	Detail	554.79	Meter	28.18	15,636.79	0.00	4,460.63	0.00	11,176.16	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.3.1	Materials	Detail	554.79	Meter	20.14	11,176.16	0.00	0.00	0.00	11,176.16	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	11,176.16	11,176.16	0.00	0.00	0.00	11,176.16	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.3.2	Equipment Operating	Detail	554.79	Meter	8.04	4,460.63	0.00	4,460.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	93.89 Each	47.51	4,460.63	0.00	4,460.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.4	Drilling	Detail	2,192.30	Meter	26.60	58,308.04	0.00	14,144.70	0.00	44,163.35	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.4.1	Materials	Detail	2,192.30	Meter	20.14	44,163.35	0.00	0.00	0.00	44,163.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	44,163.35	44,163.35	0.00	0.00	0.00	44,163.35	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.4.2	Equipment Operating	Detail	2,192.30	Meter	6.45	14,144.70	0.00	14,144.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	297.72 Each	47.51	14,144.70	0.00	14,144.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.5	Blasting	Detail	1.58	Each	8,145.63	12,875.06	0.00	0.00	0.00	151.09	12,723.97	0.00	0.00	0.00	0.00
1.7.1.5.1.5.1	Materials	Detail	1.58	Each	8,145.63	12,875.06	0.00	0.00	0.00	151.09	12,723.97	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		8,225.49	Kilogram	1.01	8,307.74	0.00	0.00	0.00	0.00	8,307.74	0.00	0.00	0.00	0.00
SUEX10016	Booster		124.87	Each	1.21	151.09	0.00	0.00	0.00	151.09	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		158.06	Meter	0.29	45.84	0.00	0.00	0.00	0.00	45.84	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		124.87	Each	35.00	4,370.38	0.00	0.00	0.00	0.00	4,370.38	0.00	0.00	0.00	0.00
1.7.1.5.1.5.2	Equipment Operating	Detail	0.79	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.1.5.1.6	Mucking	Detail	9,863.00	Tonne	3.38	33,324.71	0.00	33,324.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	276.16 Each	120.67	33,324.71	0.00	33,324.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.1.5.1.7	Backfill	Detail	4,684.93	Tonne	12.25	57,390.33	0.00	0.00	0.00	57,390.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		4,684.93	Tonne	12.25	57,390.33	0.00	0.00	0.00	57,390.33	0.00	0.00	0.00	0.00	0.00
1.7.1.5.2	Haulage - Mining Block 1 (45L to 80L)	Detail	9,863.00	Tonne	2.38	23,462.56	9,040.29	13,753.67	0.00	668.60	0.00	0.00	0.00	0.00	0.00
1.7.1.5.2.1	Truck Haulage Labour	Detail	9,863.00	Tonne	0.98	9,708.89	9,040.29	0.00	0.00	668.60	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	177.82 Each	54.60	9,708.89	9,040.29	0.00	0.00	668.60	0.00	0.00	0.00	0.00	0.00
1.7.1.5.2.2	Truck Haulage Equipment	Detail	9,863.00	Tonne	1.39	13,753.67	0.00	13,753.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	118.55 Each	116.02	13,753.67	0.00	13,753.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2	Massive	Detail	1.00	LS	47,248,780.26	47,248,780.26	16,068,885.15	13,392,805.25	0.00	15,880,931.44	1,906,158.41	0.00	0.00	0.00	0.00
1.7.2.1	80 Block	Detail	1.00	LS	1,506,938.72	1,506,938.72	661,725.85	277,986.85	0.00	491,639.58	75,586.44	0.00	0.00	0.00	0.00
1.7.2.1.1	45 Sub Level - UC	Detail	5,936.00	Tonne	37.69	223,712.28	116,917.07	36,623.24	0.00	56,368.85	13,803.13	0.00	0.00	0.00	0.00
1.7.2.1.1.1	Haulage - Mining Block 1 (45L to 80L)	Detail	5,936.00	Tonne	2.38	14,120.83	5,440.86	8,277.58	0.00	402.39	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.1.1	Truck Haulage Labour	Detail	5,936.00	Tonne	0.98	5,843.25	5,440.86	0.00	0.00	402.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	107.02 Each	54.60	5,843.25	5,440.86	0.00	0.00	402.39	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.1.2	Truck Haulage Equipment	Detail	5,936.00	Tonne	1.39	8,277.58	0.00	8,277.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	71.35 Each	116.02	8,277.58	0.00	8,277.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.2	4 x 4.5 Ore Development - 4 m/day	Detail	95.00	Meter	2,088.86	198,441.50	111,476.21	28,345.66	0.00	44,816.50	13,803.13	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.1.1.2.1	Labour	Detail	95.00	Meter	1,245.09	118,283.55	111,476.21	0.00	0.00	6,807.34	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	498.75 Each	67.82	33,825.23	31,949.93	0.00	0.00	1,875.30	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	997.50 Each	64.09	63,929.78	60,179.18	0.00	0.00	3,750.60	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.2.2	Materials	Detail	95.00	Meter	545.39	51,812.29	0.00	0.00	0.00	38,009.16	13,803.13	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		95.00	Meter	50.00	4,750.00	0.00	0.00	0.00	4,750.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,338.85	1,338.85	0.00	0.00	0.00	304.20	1,034.65	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,338.85	1,338.85	0.00	0.00	0.00	304.20	1,034.65	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	7,193.63	7,193.63	0.00	0.00	0.00	7,193.63	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	4,441.83	2,220.92	0.00	0.00	0.00	2,220.92	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	11,733.84	11,733.84	0.00	0.00	0.00	0.00	11,733.84	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	296.28	22,220.93	0.00	0.00	0.00	22,220.93	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	169.21	1,015.28	0.00	0.00	0.00	1,015.28	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.2.3	Equipment Operating	Detail	95.00	Meter	298.38	28,345.66	0.00	28,345.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	70.68 Each	120.67	8,528.96	0.00	8,528.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	90.34 Each	33.57	3,032.88	0.00	3,032.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	90.92 Each	184.61	16,783.82	0.00	16,783.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.1.3	Backfill Pipe	Detail	110.00	Meter	101.36	11,149.95	0.00	0.00	0.00	11,149.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	11,149.95	11,149.95	0.00	0.00	0.00	11,149.95	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2	Stoping 65 L Block - MS	Detail	12,556.00	Tonne	34.06	427,709.31	150,379.72	90,454.41	0.00	170,675.33	16,199.84	0.00	0.00	0.00	0.00
1.7.2.1.2.1	Blasthole Mining - Upper Sulfide	Detail	12,556.00	Tonne	31.66	397,474.69	140,427.77	70,907.77	0.00	169,939.31	16,199.84	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1	Labour	Detail	12,556.00	Tonne	11.87	149,007.19	140,427.77	0.00	0.00	8,579.43	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.1	Cable Labour	Detail	1.99	Each	2,063.29	4,102.41	3,866.31	0.00	0.00	236.10	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.2.1.1.1.1	Drilling	Detail	17.30	Hour	77.55	1,341.44	1,262.75	0.00	0.00	78.70	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	17.30 Each	64.09	1,108.63	1,043.59	0.00	0.00	65.04	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.1.2	Install & Grout	Detail	17.30	Hour	159.61	2,760.96	2,603.56	0.00	0.00	157.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	17.30 Each	64.09	1,108.63	1,043.59	0.00	0.00	65.04	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	17.30 Each	67.82	1,173.15	1,108.11	0.00	0.00	65.04	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.2	Drop Raise Labour	Detail	1.99	Each	13,340.46	26,524.59	24,995.83	0.00	0.00	1,528.75	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.2.1	Drill	Detail	129.24	Hour	77.55	10,022.29	9,434.31	0.00	0.00	587.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	129.24 Each	64.09	8,282.88	7,796.95	0.00	0.00	485.94	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.2.2	Blast	Detail	103.39	Hour	159.61	16,502.30	15,561.52	0.00	0.00	940.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	103.39 Each	64.09	6,626.31	6,237.56	0.00	0.00	388.75	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	103.39 Each	67.82	7,011.95	6,623.21	0.00	0.00	388.75	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.3	Drilling Labour	Detail	413.36	Hour	98.06	40,536.29	38,185.49	0.00	0.00	2,350.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	413.36 Each	64.09	26,492.49	24,938.24	0.00	0.00	1,554.25	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	103.34 Each	67.82	7,008.58	6,620.02	0.00	0.00	388.56	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.4	Mucking Labour	Detail	401.83	Tonne	2.17	872.53	821.34	0.00	0.00	51.19	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	11.25 Each	64.09	721.10	678.79	0.00	0.00	42.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.5	Production Loading Labour	Detail	1.99	Each	7,661.33	15,232.89	14,364.48	0.00	0.00	868.41	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.2.1.1.5.1	Slot Blast	Detail	23.86	Hour	159.61	3,808.22	3,591.12	0.00	0.00	217.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	23.86 Each	64.09	1,529.15	1,439.44	0.00	0.00	89.71	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	23.86 Each	67.82	1,618.14	1,528.43	0.00	0.00	89.71	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.5.2	Void Blast	Detail	23.86	Hour	159.61	3,808.22	3,591.12	0.00	0.00	217.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	23.86 Each	64.09	1,529.15	1,439.44	0.00	0.00	89.71	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	23.86 Each	67.82	1,618.14	1,528.43	0.00	0.00	89.71	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.5.3	Final Blast	Detail	47.72	Hour	159.61	7,616.44	7,182.24	0.00	0.00	434.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	47.72 Each	64.09	3,058.30	2,878.87	0.00	0.00	179.42	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	47.72 Each	67.82	3,236.29	3,056.86	0.00	0.00	179.42	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.6	Filling Labour	Detail	1.99	Each	31,051.18	61,738.49	58,194.31	0.00	0.00	3,544.18	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.6.1	Fill Prep	Detail	190.88	Hour	237.16	45,267.93	42,662.71	0.00	0.00	2,605.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	381.75 Each	64.09	24,466.37	23,030.98	0.00	0.00	1,435.38	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	190.88 Each	67.82	12,945.15	12,227.46	0.00	0.00	717.69	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.1.6.2	Pour Time	Detail	103.19	Hour	159.61	16,470.56	15,531.60	0.00	0.00	938.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	103.19 Each	64.09	6,613.56	6,225.56	0.00	0.00	388.00	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	103.19 Each	67.82	6,998.47	6,610.47	0.00	0.00	388.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.2	Cable Bolting	Detail	755.55	Meter	15.31	11,569.83	0.00	4,874.77	0.00	6,695.05	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.2.1	Materials	Detail	755.55	Meter	8.86	6,695.05	0.00	0.00	0.00	6,695.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		755.55	Meter	1.00	755.55	0.00	0.00	0.00	755.55	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		120.89	Each	25.00	3,022.19	0.00	0.00	0.00	3,022.19	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		755.55	Kilogram	0.50	377.77	0.00	0.00	0.00	377.77	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		755.55	Each	1.58	1,193.76	0.00	0.00	0.00	1,193.76	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	1,345.78	1,345.78	0.00	0.00	0.00	1,345.78	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.2.1.2.2	Equipment Operating	Detail	755.55	Meter	6.45	4,874.77	0.00	4,874.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	102.61 Each	47.51	4,874.77	0.00	4,874.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.3	Drop Raise Drilling	Detail	697.89	Meter	28.18	19,669.85	0.00	5,611.12	0.00	14,058.73	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.3.1	Materials	Detail	697.89	Meter	20.14	14,058.73	0.00	0.00	0.00	14,058.73	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	14,058.73	14,058.73	0.00	0.00	0.00	14,058.73	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.3.2	Equipment Operating	Detail	697.89	Meter	8.04	5,611.12	0.00	5,611.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	118.10 Each	47.51	5,611.12	0.00	5,611.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.4	Drilling	Detail	2,789.56	Meter	26.60	74,193.04	0.00	17,998.17	0.00	56,194.87	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.4.1	Materials	Detail	2,789.56	Meter	20.14	56,194.87	0.00	0.00	0.00	56,194.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	56,194.87	56,194.87	0.00	0.00	0.00	56,194.87	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.4.2	Equipment Operating	Detail	2,789.56	Meter	6.45	17,998.17	0.00	17,998.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	378.83 Each	47.51	17,998.17	0.00	17,998.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.5	Blasting	Detail	12,556.00	Tonne	1.31	16,392.31	0.00	0.00	0.00	192.47	16,199.84	0.00	0.00	0.00	0.00
1.7.2.1.2.1.5.1	Materials	Detail	12,556.00	Tonne	1.31	16,392.31	0.00	0.00	0.00	192.47	16,199.84	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		10,470.29	Kilogram	1.01	10,575.00	0.00	0.00	0.00	0.00	10,575.00	0.00	0.00	0.00	0.00
SUEX10016	Booster		159.06	Each	1.21	192.47	0.00	0.00	0.00	192.47	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		198.83	Meter	0.29	57.66	0.00	0.00	0.00	0.00	57.66	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		159.06	Each	35.00	5,567.19	0.00	0.00	0.00	0.00	5,567.19	0.00	0.00	0.00	0.00
1.7.2.1.2.1.5.2	Equipment Operating	Detail	0.99	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.1.2.1.6	Mucking	Detail	12,556.00	Tonne	3.38	42,423.71	0.00	42,423.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	351.57 Each	120.67	42,423.71	0.00	42,423.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.1.7	Backfill	Detail	6,875.00	Tonne	12.25	84,218.76	0.00	0.00	0.00	84,218.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		6,875.00	Tonne	12.25	84,218.76	0.00	0.00	0.00	84,218.76	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.2	Haulage - Mining Block 1 (45L to 80L)	Detail	12,556.00	Tonne	2.41	30,234.62	9,951.96	19,546.64	0.00	736.02	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.2.1	Truck Haulage Labour	Detail	12,556.00	Tonne	0.85	10,687.98	9,951.96	0.00	0.00	736.02	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	195.75 Each	54.60	10,687.98	9,951.96	0.00	0.00	736.02	0.00	0.00	0.00	0.00	0.00
1.7.2.1.2.2.2	Truck Haulage Equipment	Detail	12,556.00	Tonne	1.56	19,546.64	0.00	19,546.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	130.52 Each	149.76	19,546.64	0.00	19,546.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3	65 Sub Level - UC	Detail	5,695.00	Tonne	45.76	260,575.47	136,644.55	41,359.55	0.00	66,298.21	16,273.16	0.00	0.00	0.00	0.00
1.7.2.1.3.1	Haulage - Mining Block 1 (45L to 80L)	Detail	5,695.00	Tonne	2.38	13,547.53	5,219.96	7,941.51	0.00	386.06	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3.1.1	Truck Haulage Labour	Detail	5,695.00	Tonne	0.98	5,606.02	5,219.96	0.00	0.00	386.06	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	102.67 Each	54.60	5,606.02	5,219.96	0.00	0.00	386.06	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3.1.2	Truck Haulage Equipment	Detail	5,695.00	Tonne	1.39	7,941.51	0.00	7,941.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	68.45 Each	116.02	7,941.51	0.00	7,941.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3.2	4 x 4.5 Ore Development - 4 m/day	Detail	112.00	Meter	2,088.86	233,952.08	131,424.59	33,418.04	0.00	52,836.30	16,273.16	0.00	0.00	0.00	0.00
1.7.2.1.3.2.1	Labour	Detail	112.00	Meter	1,245.09	139,450.08	131,424.59	0.00	0.00	8,025.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	588.00 Each	67.82	39,878.16	37,667.28	0.00	0.00	2,210.88	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,176.00 Each	64.09	75,369.84	70,948.08	0.00	0.00	4,421.76	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.3.2.2	Materials	Detail	112.00	Meter	545.39	61,083.97	0.00	0.00	0.00	44,810.80	16,273.16	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		112.00	Meter	50.00	5,600.00	0.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,578.43	1,578.43	0.00	0.00	0.00	358.64	1,219.79	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,578.43	1,578.43	0.00	0.00	0.00	358.64	1,219.79	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	8,480.91	8,480.91	0.00	0.00	0.00	8,480.91	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	5,236.69	2,618.34	0.00	0.00	0.00	2,618.34	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	13,833.58	13,833.58	0.00	0.00	0.00	0.00	13,833.58	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	349.30	26,197.31	0.00	0.00	0.00	26,197.31	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	199.49	1,196.97	0.00	0.00	0.00	1,196.97	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3.2.3	Equipment Operating	Detail	112.00	Meter	298.38	33,418.04	0.00	33,418.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	83.33 Each	120.67	10,055.19	0.00	10,055.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	106.51 Each	33.57	3,575.61	0.00	3,575.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	107.18 Each	184.61	19,787.24	0.00	19,787.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.3.3	Backfill Pipe	Detail	129.00	Meter	101.36	13,075.85	0.00	0.00	0.00	13,075.85	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	13,075.85	13,075.85	0.00	0.00	0.00	13,075.85	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4	80 Level - UC	Detail	5,697.00	Tonne	48.10	274,025.64	143,686.98	43,152.59	0.00	70,041.13	17,144.94	0.00	0.00	0.00	0.00
1.7.2.1.4.1	Haulage - Mining Block 1 (45L to 80L)	Detail	5,697.00	Tonne	2.38	13,552.29	5,221.79	7,944.30	0.00	386.19	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.1.1	Truck Haulage Labour	Detail	5,697.00	Tonne	0.98	5,607.98	5,221.79	0.00	0.00	386.19	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	102.71 Each	54.60	5,607.98	5,221.79	0.00	0.00	386.19	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.1.2	Truck Haulage Equipment	Detail	5,697.00	Tonne	1.39	7,944.30	0.00	7,944.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	68.47 Each	116.02	7,944.30	0.00	7,944.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.2	4 x 4.5 Ore Development - 4 m/day	Detail	118.00	Meter	2,088.86	246,485.23	138,465.19	35,208.29	0.00	55,666.82	17,144.94	0.00	0.00	0.00	0.00

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1.7.2.1.4.2.1	Labour	Detail	118.00	Meter	1,245.09	146,920.62	138,465.19	0.00	0.00	8,455.43	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	619.50 Each	67.82	42,014.49	39,685.17	0.00	0.00	2,329.32	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,239.00 Each	64.09	79,407.51	74,748.87	0.00	0.00	4,658.64	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.2.2	Materials	Detail	118.00	Meter	545.39	64,356.32	0.00	0.00	0.00	47,211.38	17,144.94	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		118.00	Meter	50.00	5,900.00	0.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,662.99	1,662.99	0.00	0.00	0.00	377.85	1,285.14	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,662.99	1,662.99	0.00	0.00	0.00	377.85	1,285.14	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	8,935.24	8,935.24	0.00	0.00	0.00	8,935.24	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	5,517.22	2,758.61	0.00	0.00	0.00	2,758.61	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	14,574.66	14,574.66	0.00	0.00	0.00	0.00	14,574.66	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	368.01	27,600.74	0.00	0.00	0.00	27,600.74	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	210.18	1,261.09	0.00	0.00	0.00	1,261.09	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.2.3	Equipment Operating	Detail	118.00	Meter	298.38	35,208.29	0.00	35,208.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	87.79 Each	120.67	10,593.86	0.00	10,593.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	112.22 Each	33.57	3,767.16	0.00	3,767.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	112.93 Each	184.61	20,847.27	0.00	20,847.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.4.3	Backfill Pipe	Detail	138.00	Meter	101.36	13,988.12	0.00	0.00	0.00	13,988.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	13,988.12	13,988.12	0.00	0.00	0.00	13,988.12	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5	Stoping 80 L Block - MS	Detail	9,429.00	Tonne	34.04	320,916.03	114,097.53	66,397.06	0.00	128,256.07	12,165.37	0.00	0.00	0.00	0.00
1.7.2.1.5.1	Haulage - Mining Block 1 (45L to 80L)	Detail	9,429.00	Tonne	2.38	22,430.14	8,642.49	13,148.47	0.00	639.18	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.1.1	Truck Haulage Labour	Detail	9,429.00	Tonne	0.98	9,281.67	8,642.49	0.00	0.00	639.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	169.99 Each	54.60	9,281.67	8,642.49	0.00	0.00	639.18	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.5.1.2	Truck Haulage Equipment	Detail	9,429.00	Tonne	1.39	13,148.47	0.00	13,148.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	113.33 Each	116.02	13,148.47	0.00	13,148.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2	Blasthole Mining - Upper Sulfide	Detail	9,429.00	Tonne	31.66	298,485.89	105,455.03	53,248.59	0.00	127,616.90	12,165.37	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1	Labour	Detail	9,429.00	Tonne	11.87	111,897.80	105,455.03	0.00	0.00	6,442.77	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.1	Cable Labour	Detail	1.49	Each	2,063.29	3,080.73	2,903.43	0.00	0.00	177.30	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.1.1	Drilling	Detail	12.99	Hour	77.55	1,007.37	948.27	0.00	0.00	59.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	12.99 Each	64.09	832.53	783.69	0.00	0.00	48.84	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.1.2	Install & Grout	Detail	12.99	Hour	159.61	2,073.36	1,955.16	0.00	0.00	118.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	12.99 Each	64.09	832.53	783.69	0.00	0.00	48.84	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	12.99 Each	67.82	880.99	832.14	0.00	0.00	48.84	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.2	Drop Raise Labour	Detail	1.49	Each	13,340.46	19,918.79	18,770.76	0.00	0.00	1,148.03	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.2.1	Drill	Detail	97.05	Hour	77.55	7,526.30	7,084.75	0.00	0.00	441.55	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	97.05 Each	64.09	6,220.08	5,855.16	0.00	0.00	364.92	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.2.2	Blast	Detail	77.64	Hour	159.61	12,392.49	11,686.02	0.00	0.00	706.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	77.64 Each	64.09	4,976.06	4,684.13	0.00	0.00	291.93	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	77.64 Each	67.82	5,265.67	4,973.73	0.00	0.00	291.93	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.3	Drilling Labour	Detail	310.42	Hour	98.06	30,440.96	28,675.61	0.00	0.00	1,765.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	310.42 Each	64.09	19,894.68	18,727.51	0.00	0.00	1,167.17	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	77.60 Each	67.82	5,263.14	4,971.34	0.00	0.00	291.79	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.1.5.2.1.4	Mucking Labour	Detail	301.76	Tonne	2.17	655.23	616.79	0.00	0.00	38.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	8.45 Each	64.09	541.51	509.74	0.00	0.00	31.77	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.5	Production Loading Labour	Detail	1.49	Each	7,661.33	11,439.23	10,787.09	0.00	0.00	652.13	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.5.1	Slot Blast	Detail	17.92	Hour	159.61	2,859.81	2,696.77	0.00	0.00	163.03	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	17.92 Each	64.09	1,148.32	1,080.95	0.00	0.00	67.37	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	17.92 Each	67.82	1,215.15	1,147.78	0.00	0.00	67.37	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.5.2	Void Blast	Detail	17.92	Hour	159.61	2,859.81	2,696.77	0.00	0.00	163.03	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	17.92 Each	64.09	1,148.32	1,080.95	0.00	0.00	67.37	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	17.92 Each	67.82	1,215.15	1,147.78	0.00	0.00	67.37	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.5.3	Final Blast	Detail	35.83	Hour	159.61	5,719.61	5,393.55	0.00	0.00	326.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	35.83 Each	64.09	2,296.64	2,161.91	0.00	0.00	134.74	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	35.83 Each	67.82	2,430.31	2,295.57	0.00	0.00	134.74	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.6	Filling Labour	Detail	1.49	Each	31,051.18	46,362.87	43,701.35	0.00	0.00	2,661.52	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.6.1	Fill Prep	Detail	143.34	Hour	237.16	33,994.21	32,037.81	0.00	0.00	1,956.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	286.68 Each	64.09	18,373.16	17,295.25	0.00	0.00	1,077.91	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	143.34 Each	67.82	9,721.23	9,182.28	0.00	0.00	538.95	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.1.6.2	Pour Time	Detail	77.49	Hour	159.61	12,368.66	11,663.54	0.00	0.00	705.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	77.49 Each	64.09	4,966.49	4,675.12	0.00	0.00	291.37	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	77.49 Each	67.82	5,255.54	4,964.17	0.00	0.00	291.37	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.2	Cable Bolting	Detail	567.38	Meter	15.31	8,688.43	0.00	3,660.74	0.00	5,027.69	0.00	0.00	0.00	0.00	0.00

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1.7.2.1.5.2.2.1	Materials	Detail	567.38	Meter	8.86	5,027.69	0.00	0.00	0.00	5,027.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		567.38	Meter	1.00	567.38	0.00	0.00	0.00	567.38	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		90.78	Each	25.00	2,269.53	0.00	0.00	0.00	2,269.53	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		567.38	Kilogram	0.50	283.69	0.00	0.00	0.00	283.69	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		567.38	Each	1.58	896.46	0.00	0.00	0.00	896.46	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	1,010.62	1,010.62	0.00	0.00	0.00	1,010.62	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.2.2	Equipment Operating	Detail	567.38	Meter	6.45	3,660.74	0.00	3,660.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	77.05 Each	47.51	3,660.74	0.00	3,660.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.3	Drop Raise Drilling	Detail	524.08	Meter	28.18	14,771.19	0.00	4,213.70	0.00	10,557.48	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.3.1	Materials	Detail	524.08	Meter	20.14	10,557.48	0.00	0.00	0.00	10,557.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	10,557.48	10,557.48	0.00	0.00	0.00	10,557.48	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.3.2	Equipment Operating	Detail	524.08	Meter	8.04	4,213.70	0.00	4,213.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	88.69 Each	47.51	4,213.70	0.00	4,213.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.4	Drilling	Detail	2,094.84	Meter	26.60	55,715.69	0.00	13,515.83	0.00	42,199.86	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.4.1	Materials	Detail	2,094.84	Meter	20.14	42,199.86	0.00	0.00	0.00	42,199.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3001	ITH Drilling Supplies (3")		1.00	Meter	42,199.86	42,199.86	0.00	0.00	0.00	42,199.86	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.4.2	Equipment Operating	Detail	2,094.84	Meter	6.45	13,515.83	0.00	13,515.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	284.48 Each	47.51	13,515.83	0.00	13,515.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.5	Blasting	Detail	9,429.00	Tonne	1.31	12,309.90	0.00	0.00	0.00	144.53	12,165.37	0.00	0.00	0.00	0.00

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1.7.2.1.5.2.5.1	Materials	Detail	9,429.00	Tonne	1.31	12,309.90	0.00	0.00	0.00	144.53	12,165.37	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUEX1015	Emulsion		7,862.73	Kilogram	1.01	7,941.35	0.00	0.00	0.00	0.00	7,941.35	0.00	0.00	0.00	0.00
SUEX10016	Booster		119.45	Each	1.21	144.53	0.00	0.00	0.00	144.53	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		149.31	Meter	0.29	43.30	0.00	0.00	0.00	0.00	43.30	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		119.45	Each	35.00	4,180.71	0.00	0.00	0.00	0.00	4,180.71	0.00	0.00	0.00	0.00
1.7.2.1.5.2.5.2	Equipment Operating	Detail	0.75	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.6	Mucking	Detail	9,429.00	Tonne	3.38	31,858.33	0.00	31,858.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1008	4.5 m3 LHD		1.00	264.01 Each	120.67	31,858.33	0.00	31,858.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.1.5.2.7	Backfill	Detail	5,162.82	Tonne	12.25	63,244.56	0.00	0.00	0.00	63,244.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUFI1000	Backfill		5,162.82	Tonne	12.25	63,244.56	0.00	0.00	0.00	63,244.56	0.00	0.00	0.00	0.00	0.00
1.7.2.2	170 Block	Detail	1.00	LS	5,038,724.88	5,038,724.88	2,032,093.54	1,080,041.97	0.00	1,700,481.44	226,107.92	0.00	0.00	0.00	0.00
1.7.2.2.1	110 Sub Level - OC	Detail	8,619.00	Tonne	42.87	369,512.70	191,753.21	63,624.90	0.00	91,468.41	22,666.19	0.00	0.00	0.00	0.00
1.7.2.2.1.1	Haulage - Mining Block 2 (110L to 170L)	Detail	8,619.00	Tonne	3.07	26,419.13	8,697.53	17,078.35	0.00	643.25	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.1.1	Truck Haulage Labour	Detail	8,619.00	Tonne	1.08	9,340.78	8,697.53	0.00	0.00	643.25	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1012	Haulage Truck Driver		1.00	171.08 Each	54.60	9,340.78	8,697.53	0.00	0.00	643.25	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.1.2	Truck Haulage Equipment	Detail	8,619.00	Tonne	1.98	17,078.35	0.00	17,078.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEMH1000	45 Tonne Truck		1.00	114.04 Each	149.76	17,078.35	0.00	17,078.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.2	4 x 4.5 Ore Development - 4 m/day	Detail	156.00	Meter	2,088.86	325,861.83	183,055.67	46,546.55	0.00	73,593.42	22,666.19	0.00	0.00	0.00	0.00

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1.7.2.2.1.2.1	Labour	Detail	156.00	Meter	1,245.09	194,234.04	183,055.67	0.00	0.00	11,178.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	819.00 Each	67.82	55,544.58	52,465.14	0.00	0.00	3,079.44	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,638.00 Each	64.09	104,979.42	98,820.54	0.00	0.00	6,158.88	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.2.2	Materials	Detail	156.00	Meter	545.39	85,081.24	0.00	0.00	0.00	62,415.05	22,666.19	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		156.00	Meter	50.00	7,800.00	0.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,198.53	2,198.53	0.00	0.00	0.00	499.53	1,699.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,198.53	2,198.53	0.00	0.00	0.00	499.53	1,699.00	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	11,812.69	11,812.69	0.00	0.00	0.00	11,812.69	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,293.96	3,646.98	0.00	0.00	0.00	3,646.98	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	19,268.20	19,268.20	0.00	0.00	0.00	0.00	19,268.20	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	486.52	36,489.11	0.00	0.00	0.00	36,489.11	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	277.87	1,667.20	0.00	0.00	0.00	1,667.20	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.2.3	Equipment Operating	Detail	156.00	Meter	298.38	46,546.55	0.00	46,546.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	116.06 Each	120.67	14,005.44	0.00	14,005.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	148.36 Each	33.57	4,980.31	0.00	4,980.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	149.29 Each	184.61	27,560.80	0.00	27,560.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.1.3	Backfill Pipe	Detail	170.00	Meter	101.36	17,231.74	0.00	0.00	0.00	17,231.74	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.00	Meter	17,231.74	17,231.74	0.00	0.00	0.00	17,231.74	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2	Stoping 110 L Block	Detail	15,929.00	Tonne	27.68	440,852.53	151,859.79	103,412.85	0.00	169,260.01	16,319.88	0.00	0.00	0.00	0.00
1.7.2.2.2.1	Haulage - Mining Block 2 (110L to 170L)	Detail	15,929.00	Tonne	3.07	48,825.88	16,074.14	31,562.94	0.00	1,188.80	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.1.1	Truck Haulage Labour	Detail	15,929.00	Tonne	1.08	17,262.94	16,074.14	0.00	0.00	1,188.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	316.17 Each	54.60	17,262.94	16,074.14	0.00	0.00	1,188.80	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.2.1.2	Truck Haulage Equipment	Detail	15,929.00	Tonne	1.98	31,562.94	0.00	31,562.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	210.76	Each	149.76	31,562.94	0.00	31,562.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2	Blasthole Mining - Middle Sulfide	Detail	15,929.00	Tonne	24.61	392,026.65	135,785.65	71,849.91	0.00	168,071.20	16,319.88	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1	Labour	Detail	15,929.00	Tonne	9.05	144,109.68	135,785.65	0.00	0.00	8,324.03	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.1	Cable Labour	Detail	0.90	Each	3,415.10	3,073.92	2,897.01	0.00	0.00	176.91	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.1.1	Drilling	Detail	12.96	Hour	77.55	1,005.14	946.17	0.00	0.00	58.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	12.96	Each	64.09	830.70	781.96	0.00	0.00	48.73	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.1.2	Install & Grout	Detail	12.96	Hour	159.61	2,068.78	1,950.84	0.00	0.00	117.94	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	12.96	Each	64.09	830.70	781.96	0.00	0.00	48.73	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	12.96	Each	67.82	879.04	830.31	0.00	0.00	48.73	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.2	Drop Raise Labour	Detail	0.90	Each	26,167.82	23,553.55	22,196.03	0.00	0.00	1,357.52	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.2.1	Drill	Detail	114.76	Hour	77.55	8,899.69	8,377.56	0.00	0.00	522.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	114.76	Each	64.09	7,355.11	6,923.61	0.00	0.00	431.51	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.2.2	Blast	Detail	91.81	Hour	159.61	14,653.86	13,818.47	0.00	0.00	835.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	91.81	Each	64.09	5,884.09	5,538.89	0.00	0.00	345.20	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	91.81	Each	67.82	6,226.54	5,881.34	0.00	0.00	345.20	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.3	Drilling Labour	Detail	244.74	Hour	98.06	23,999.91	22,608.10	0.00	0.00	1,391.81	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	244.74	Each	64.09	15,685.14	14,764.93	0.00	0.00	920.21	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	61.18	Each	67.82	4,149.50	3,919.45	0.00	0.00	230.05	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.2.2.1.4	Mucking Labour	Detail	15,929.00	Tonne	2.17	34,587.74	32,558.56	0.00	0.00	2,029.18	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	446.01 Each	64.09	28,584.91	26,907.90	0.00	0.00	1,677.01	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.5	Production Loading Labour	Detail	15,929.00	Tonne	0.97	15,515.85	14,631.32	0.00	0.00	884.54	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.5.1	Slot Blast	Detail	21.60	Hour	159.61	3,447.97	3,251.40	0.00	0.00	196.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	21.60 Each	64.09	1,384.49	1,303.27	0.00	0.00	81.22	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	21.60 Each	67.82	1,465.07	1,383.84	0.00	0.00	81.22	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.5.2	Void Blast	Detail	21.60	Hour	159.61	3,447.97	3,251.40	0.00	0.00	196.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	21.60 Each	64.09	1,384.49	1,303.27	0.00	0.00	81.22	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	21.60 Each	67.82	1,465.07	1,383.84	0.00	0.00	81.22	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.5.3	Final Blast	Detail	54.01	Hour	159.61	8,619.92	8,128.51	0.00	0.00	491.41	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	54.01 Each	64.09	3,461.23	3,258.17	0.00	0.00	203.06	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	54.01 Each	67.82	3,662.67	3,459.61	0.00	0.00	203.06	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.6	Filling Labour	Detail	15,929.00	Tonne	2.72	43,378.70	40,894.62	0.00	0.00	2,484.07	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.6.1	Fill Prep	Detail	86.41	Hour	237.16	20,492.81	19,313.43	0.00	0.00	1,179.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	172.82 Each	64.09	11,075.93	10,426.14	0.00	0.00	649.80	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	86.41 Each	67.82	5,860.27	5,535.37	0.00	0.00	324.90	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.1.6.2	Pour Time	Detail	143.39	Hour	159.61	22,885.89	21,581.19	0.00	0.00	1,304.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	143.39 Each	64.09	9,189.56	8,650.44	0.00	0.00	539.13	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	143.39 Each	67.82	9,724.39	9,185.26	0.00	0.00	539.13	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.2	Cable Bolting	Detail	573.36	Meter	15.31	8,779.98	0.00	3,699.31	0.00	5,080.67	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.2.2.2.1	Materials	Detail	573.36	Meter	8.86	5,080.67	0.00	0.00	0.00	5,080.67	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		573.36	Meter	1.00	573.36	0.00	0.00	0.00	573.36	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		91.74	Each	25.00	2,293.44	0.00	0.00	0.00	2,293.44	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		573.36	Kilogram	0.50	286.68	0.00	0.00	0.00	286.68	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		573.36	Each	1.58	905.91	0.00	0.00	0.00	905.91	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	1,021.27	1,021.27	0.00	0.00	0.00	1,021.27	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.2.2	Equipment Operating	Detail	573.36	Meter	6.45	3,699.31	0.00	3,699.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	77.86 Each	47.51	3,699.31	0.00	3,699.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.3	Drop Raise Drilling	Detail	620.17	Meter	31.11	19,292.67	0.00	4,986.23	0.00	14,306.44	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.3.1	Materials	Detail	620.17	Meter	23.07	14,306.44	0.00	0.00	0.00	14,306.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	14,306.44	14,306.44	0.00	0.00	0.00	14,306.44	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.3.2	Equipment Operating	Detail	620.17	Meter	8.04	4,986.23	0.00	4,986.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	104.95 Each	47.51	4,986.23	0.00	4,986.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.4	Drilling	Detail	1,448.25	Meter	29.52	42,753.47	0.00	9,344.10	0.00	33,409.37	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.4.1	Materials	Detail	1,448.25	Meter	23.07	33,409.37	0.00	0.00	0.00	33,409.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	33,409.37	33,409.37	0.00	0.00	0.00	33,409.37	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.4.2	Equipment Operating	Detail	1,448.25	Meter	6.45	9,344.10	0.00	9,344.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	196.68 Each	47.51	9,344.10	0.00	9,344.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.5	Blasting	Detail	0.90	Each	18,249.85	16,426.62	0.00	0.00	0.00	106.73	16,319.88	0.00	0.00	0.00	0.00

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1.7.2.2.2.2.5.1	Materials	Detail	0.90	Each	18,249.85	16,426.62	0.00	0.00	0.00	106.73	16,319.88	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUEX1015	Emulsion		13,075.70	Kilogram	1.01	13,206.45	0.00	0.00	0.00	0.00	13,206.45	0.00	0.00	0.00	0.00
SUEX10016	Booster		88.21	Each	1.21	106.73	0.00	0.00	0.00	106.73	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		90.01	Meter	0.29	26.10	0.00	0.00	0.00	0.00	26.10	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		88.21	Each	35.00	3,087.33	0.00	0.00	0.00	0.00	3,087.33	0.00	0.00	0.00	0.00
1.7.2.2.2.2.5.2	Equipment Operating	Detail	0.90	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.6	Mucking	Detail	15,929.00	Tonne	3.38	53,820.27	0.00	53,820.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1008	4.5 m3 LHD		1.00	446.01 Each	120.67	53,820.27	0.00	53,820.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.2.2.7	Backfill	Detail	8,721.96	Tonne	12.25	106,843.97	0.00	0.00	0.00	106,843.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUFI1000	Backfill		8,721.96	Tonne	12.25	106,843.97	0.00	0.00	0.00	106,843.97	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3	110 Sub Level - UC	Detail	10,538.00	Tonne	35.67	375,909.02	195,332.97	65,223.89	0.00	92,685.97	22,666.19	0.00	0.00	0.00	0.00
1.7.2.2.3.1	Haulage - Mining Block 2 (110L to 170L)	Detail	10,538.00	Tonne	3.02	31,862.63	12,277.29	18,677.34	0.00	908.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3.1.1	Truck Haulage Labour	Detail	10,538.00	Tonne	1.25	13,185.29	12,277.29	0.00	0.00	908.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1012	Haulage Truck Driver		1.00	241.49 Each	54.60	13,185.29	12,277.29	0.00	0.00	908.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3.1.2	Truck Haulage Equipment	Detail	10,538.00	Tonne	1.77	18,677.34	0.00	18,677.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1006	Haulage Truck 28 t		1.00	160.98 Each	116.02	18,677.34	0.00	18,677.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3.2	4 x 4.5 Ore Development - 4 m/day	Detail	156.00	Meter	2,088.86	325,861.83	183,055.67	46,546.55	0.00	73,593.42	22,666.19	0.00	0.00	0.00	0.00
1.7.2.2.3.2.1	Labour	Detail	156.00	Meter	1,245.09	194,234.04	183,055.67	0.00	0.00	11,178.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1000	Lead Miner		1.00	819.00 Each	67.82	55,544.58	52,465.14	0.00	0.00	3,079.44	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,638.00 Each	64.09	104,979.42	98,820.54	0.00	0.00	6,158.88	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.3.2.2	Materials	Detail	156.00	Meter	545.39	85,081.24	0.00	0.00	0.00	62,415.05	22,666.19	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		156.00	Meter	50.00	7,800.00	0.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,198.53	2,198.53	0.00	0.00	0.00	499.53	1,699.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,198.53	2,198.53	0.00	0.00	0.00	499.53	1,699.00	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	11,812.69	11,812.69	0.00	0.00	0.00	11,812.69	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,293.96	3,646.98	0.00	0.00	0.00	3,646.98	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	19,268.20	19,268.20	0.00	0.00	0.00	0.00	19,268.20	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	486.52	36,489.11	0.00	0.00	0.00	36,489.11	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	277.87	1,667.20	0.00	0.00	0.00	1,667.20	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3.2.3	Equipment Operating	Detail	156.00	Meter	298.38	46,546.55	0.00	46,546.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	116.06 Each	120.67	14,005.44	0.00	14,005.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	148.36 Each	33.57	4,980.31	0.00	4,980.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	149.29 Each	184.61	27,560.80	0.00	27,560.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.3.3	Backfill Pipe	Detail	156.00	Meter	116.57	18,184.56	0.00	0.00	0.00	18,184.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	15,812.66	18,184.56	0.00	0.00	0.00	18,184.56	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4	Stoping 140 L Block	Detail	48,802.00	Tonne	27.68	1,350,648.83	465,255.90	316,828.06	0.00	518,565.31	49,999.56	0.00	0.00	0.00	0.00
1.7.2.2.4.1	Haulage - Mining Block 2 (110L to 170L)	Detail	48,802.00	Tonne	3.07	149,588.84	49,246.66	96,700.02	0.00	3,642.16	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.1.1	Truck Haulage Labour	Detail	48,802.00	Tonne	1.08	52,888.82	49,246.66	0.00	0.00	3,642.16	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	968.66 Each	54.60	52,888.82	49,246.66	0.00	0.00	3,642.16	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.1.2	Truck Haulage Equipment	Detail	48,802.00	Tonne	1.98	96,700.02	0.00	96,700.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	645.70 Each	149.76	96,700.02	0.00	96,700.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2	Blasthole Mining - Middle Sulfide	Detail	48,802.00	Tonne	24.61	1,201,059.99	416,009.24	220,128.04	0.00	514,923.15	49,999.56	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1	Labour	Detail	48,802.00	Tonne	9.05	441,511.73	416,009.24	0.00	0.00	25,502.49	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.4.2.1.1	Cable Labour	Detail	2.76	Each	3,415.10	9,417.64	8,875.64	0.00	0.00	541.99	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.1.1	Drilling	Detail	39.71	Hour	77.55	3,079.47	2,898.81	0.00	0.00	180.66	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	39.71	Each	64.09	2,545.02	2,395.71	0.00	0.00	149.31	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.1.2	Install & Grout	Detail	39.71	Hour	159.61	6,338.17	5,976.84	0.00	0.00	361.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	39.71	Each	64.09	2,545.02	2,395.71	0.00	0.00	149.31	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	39.71	Each	67.82	2,693.14	2,543.83	0.00	0.00	149.31	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.2	Drop Raise Labour	Detail	2.76	Each	26,167.82	72,161.49	68,002.43	0.00	0.00	4,159.06	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.2.1	Drill	Detail	351.60	Hour	77.55	27,266.15	25,666.51	0.00	0.00	1,599.64	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	351.60	Each	64.09	22,534.01	21,211.99	0.00	0.00	1,322.01	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.2.2	Blast	Detail	281.28	Hour	159.61	44,895.34	42,335.92	0.00	0.00	2,559.42	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	281.28	Each	64.09	18,027.21	16,969.59	0.00	0.00	1,057.61	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	281.28	Each	67.82	19,076.38	18,018.77	0.00	0.00	1,057.61	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.3	Drilling Labour	Detail	749.80	Hour	98.06	73,529.02	69,264.89	0.00	0.00	4,264.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	749.80	Each	64.09	48,054.87	45,235.62	0.00	0.00	2,819.26	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	187.45	Each	67.82	12,712.91	12,008.10	0.00	0.00	704.81	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.4	Mucking Labour	Detail	48,802.00	Tonne	2.17	105,967.16	99,750.33	0.00	0.00	6,216.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	1,366.46	Each	64.09	87,576.17	82,438.29	0.00	0.00	5,137.87	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.5	Production Loading Labour	Detail	48,802.00	Tonne	0.97	47,536.24	44,826.27	0.00	0.00	2,709.97	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.4.2.1.5.1	Slot Blast	Detail	66.18	Hour	159.61	10,563.61	9,961.39	0.00	0.00	602.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	66.18 Each	64.09	4,241.70	3,992.85	0.00	0.00	248.85	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	66.18 Each	67.82	4,488.56	4,239.71	0.00	0.00	248.85	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.5.2	Void Blast	Detail	66.18	Hour	159.61	10,563.61	9,961.39	0.00	0.00	602.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	66.18 Each	64.09	4,241.70	3,992.85	0.00	0.00	248.85	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	66.18 Each	67.82	4,488.56	4,239.71	0.00	0.00	248.85	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.5.3	Final Blast	Detail	165.46	Hour	159.61	26,409.02	24,903.48	0.00	0.00	1,505.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	165.46 Each	64.09	10,604.24	9,982.11	0.00	0.00	622.12	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	165.46 Each	67.82	11,221.40	10,599.27	0.00	0.00	622.12	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.6	Filling Labour	Detail	48,802.00	Tonne	2.72	132,900.19	125,289.69	0.00	0.00	7,610.51	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.6.1	Fill Prep	Detail	264.73	Hour	237.16	62,784.24	59,170.94	0.00	0.00	3,613.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		2.00	529.47 Each	64.09	33,933.56	31,942.77	0.00	0.00	1,990.80	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	264.73 Each	67.82	17,954.24	16,958.84	0.00	0.00	995.40	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.1.6.2	Pour Time	Detail	439.29	Hour	159.61	70,115.95	66,118.74	0.00	0.00	3,997.21	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	439.29 Each	64.09	28,154.25	26,502.51	0.00	0.00	1,651.74	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	439.29 Each	67.82	29,792.81	28,141.07	0.00	0.00	1,651.74	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.2	Cable Bolting	Detail	1,756.62	Meter	15.31	26,899.40	0.00	11,333.66	0.00	15,565.75	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.2.1	Materials	Detail	1,756.62	Meter	8.86	15,565.75	0.00	0.00	0.00	15,565.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMGS1014	Breather Tube		1,756.62	Meter	1.00	1,756.62	0.00	0.00	0.00	1,756.62	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		281.06	Each	25.00	7,026.47	0.00	0.00	0.00	7,026.47	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,756.62	Kilogram	0.50	878.31	0.00	0.00	0.00	878.31	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,756.62	Each	1.58	2,775.46	0.00	0.00	0.00	2,775.46	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	3,128.89	3,128.89	0.00	0.00	0.00	3,128.89	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.4.2.2.2	Equipment Operating	Detail	1,756.62	Meter	6.45	11,333.66	0.00	11,333.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	238.55 Each	47.51	11,333.66	0.00	11,333.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.3	Drop Raise Drilling	Detail	1,900.02	Meter	31.11	59,107.33	0.00	15,276.42	0.00	43,830.92	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.3.1	Materials	Detail	1,900.02	Meter	23.07	43,830.92	0.00	0.00	0.00	43,830.92	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	43,830.92	43,830.92	0.00	0.00	0.00	43,830.92	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.3.2	Equipment Operating	Detail	1,900.02	Meter	8.04	15,276.42	0.00	15,276.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	321.54 Each	47.51	15,276.42	0.00	15,276.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.4	Drilling	Detail	4,437.05	Meter	29.52	130,984.68	0.00	28,627.72	0.00	102,356.96	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.4.1	Materials	Detail	4,437.05	Meter	23.07	102,356.96	0.00	0.00	0.00	102,356.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	102,356.96	102,356.96	0.00	0.00	0.00	102,356.96	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.4.2	Equipment Operating	Detail	4,437.05	Meter	6.45	28,627.72	0.00	28,627.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	602.56 Each	47.51	28,627.72	0.00	28,627.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.5	Blasting	Detail	2.76	Each	18,249.85	50,326.56	0.00	0.00	0.00	327.00	49,999.56	0.00	0.00	0.00	0.00
1.7.2.2.4.2.5.1	Materials	Detail	2.76	Each	18,249.85	50,326.56	0.00	0.00	0.00	327.00	49,999.56	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		40,060.27	Kilogram	1.01	40,460.88	0.00	0.00	0.00	0.00	40,460.88	0.00	0.00	0.00	0.00
SUEX10016	Booster		270.25	Each	1.21	327.00	0.00	0.00	0.00	327.00	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		275.76	Meter	0.29	79.97	0.00	0.00	0.00	0.00	79.97	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		270.25	Each	35.00	9,458.71	0.00	0.00	0.00	0.00	9,458.71	0.00	0.00	0.00	0.00
1.7.2.2.4.2.5.2	Equipment Operating	Detail	2.76	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.4.2.6	Mucking	Detail	48,802.00	Tonne	3.38	164,890.25	0.00	164,890.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,366.46 Each	120.67	164,890.25	0.00	164,890.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.4.2.7	Backfill	Detail	26,721.63	Tonne	12.25	327,340.04	0.00	0.00	0.00	327,340.04	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		26,721.64	Tonne	12.25	327,340.04	0.00	0.00	0.00	327,340.04	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5	140 Sub Level - UC	Detail	13,626.00	Tonne	32.97	449,203.22	232,960.22	79,349.89	0.00	110,013.34	26,879.78	0.00	0.00	0.00	0.00
1.7.2.2.5.1	Haulage - Mining Block 2 (110L to 170L)	Detail	13,626.00	Tonne	3.02	41,199.49	15,874.97	24,150.45	0.00	1,174.07	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5.1.1	Truck Haulage Labour	Detail	13,626.00	Tonne	1.25	17,049.04	15,874.97	0.00	0.00	1,174.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	312.25 Each	54.60	17,049.04	15,874.97	0.00	0.00	1,174.07	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5.1.2	Truck Haulage Equipment	Detail	13,626.00	Tonne	1.77	24,150.45	0.00	24,150.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	208.16 Each	116.02	24,150.45	0.00	24,150.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5.2	4 x 4.5 Ore Development - 4 m/day	Detail	185.00	Meter	2,088.86	386,438.71	217,085.25	55,199.43	0.00	87,274.24	26,879.78	0.00	0.00	0.00	0.00
1.7.2.2.5.2.1	Labour	Detail	185.00	Meter	1,245.09	230,341.65	217,085.25	0.00	0.00	13,256.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	971.25 Each	67.82	65,870.18	62,218.28	0.00	0.00	3,651.90	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,942.50 Each	64.09	124,494.83	117,191.03	0.00	0.00	7,303.80	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5.2.2	Materials	Detail	185.00	Meter	545.39	100,897.63	0.00	0.00	0.00	74,017.85	26,879.78	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		185.00	Meter	50.00	9,250.00	0.00	0.00	0.00	9,250.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,607.23	2,607.23	0.00	0.00	0.00	592.39	2,014.84	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,607.23	2,607.23	0.00	0.00	0.00	592.39	2,014.84	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	14,008.64	14,008.64	0.00	0.00	0.00	14,008.64	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	8,649.88	4,324.94	0.00	0.00	0.00	4,324.94	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	22,850.11	22,850.11	0.00	0.00	0.00	0.00	22,850.11	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	576.96	43,272.35	0.00	0.00	0.00	43,272.35	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	329.52	1,977.13	0.00	0.00	0.00	1,977.13	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.5.2.3	Equipment Operating	Detail	185.00	Meter	298.38	55,199.43	0.00	55,199.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	137.64 Each	120.67	16,609.02	0.00	16,609.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	175.93 Each	33.57	5,906.14	0.00	5,906.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	177.05 Each	184.61	32,684.28	0.00	32,684.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.5.3	Backfill Pipe	Detail	185.00	Meter	116.57	21,565.02	0.00	0.00	0.00	21,565.02	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	18,752.19	21,565.02	0.00	0.00	0.00	21,565.02	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6	170 Level - UC	Detail	14,729.00	Tonne	34.17	503,263.04	261,234.25	88,167.45	0.00	123,639.74	30,221.59	0.00	0.00	0.00	0.00
1.7.2.2.6.1	Haulage - Mining Block 2 (110L to 170L)	Detail	14,729.00	Tonne	3.02	44,534.52	17,160.02	26,105.39	0.00	1,269.11	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6.1.1	Truck Haulage Labour	Detail	14,729.00	Tonne	1.25	18,429.13	17,160.02	0.00	0.00	1,269.11	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	337.53 Each	54.60	18,429.13	17,160.02	0.00	0.00	1,269.11	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6.1.2	Truck Haulage Equipment	Detail	14,729.00	Tonne	1.77	26,105.39	0.00	26,105.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1006	Haulage Truck 28 t		1.00	225.01 Each	116.02	26,105.39	0.00	26,105.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6.2	4 x 4.5 Ore Development - 4 m/day	Detail	208.00	Meter	2,088.86	434,482.44	244,074.23	62,062.07	0.00	98,124.56	30,221.59	0.00	0.00	0.00	0.00
1.7.2.2.6.2.1	Labour	Detail	208.00	Meter	1,245.09	258,978.72	244,074.23	0.00	0.00	14,904.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,092.00 Each	67.82	74,059.44	69,953.52	0.00	0.00	4,105.92	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,184.00 Each	64.09	139,972.56	131,760.72	0.00	0.00	8,211.84	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.6.2.2	Materials	Detail	208.00	Meter	545.39	113,441.65	0.00	0.00	0.00	83,220.07	30,221.59	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		208.00	Meter	50.00	10,400.00	0.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,931.37	2,931.37	0.00	0.00	0.00	666.04	2,265.33	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,931.37	2,931.37	0.00	0.00	0.00	666.04	2,265.33	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	15,750.26	15,750.26	0.00	0.00	0.00	15,750.26	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	9,725.28	4,862.64	0.00	0.00	0.00	4,862.64	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	25,690.93	25,690.93	0.00	0.00	0.00	0.00	25,690.93	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	648.70	48,652.15	0.00	0.00	0.00	48,652.15	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	370.49	2,222.94	0.00	0.00	0.00	2,222.94	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6.2.3	Equipment Operating	Detail	208.00	Meter	298.38	62,062.07	0.00	62,062.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	154.75 Each	120.67	18,673.92	0.00	18,673.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	197.81 Each	33.57	6,640.41	0.00	6,640.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	199.06 Each	184.61	36,747.73	0.00	36,747.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.6.3	Backfill Pipe	Detail	208.00	Meter	116.57	24,246.08	0.00	0.00	0.00	24,246.08	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	21,083.55	24,246.08	0.00	0.00	0.00	24,246.08	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7	Stoping 170 L Block	Detail	55,981.00	Tonne	27.68	1,549,335.53	533,697.20	363,434.93	0.00	594,848.67	57,354.73	0.00	0.00	0.00	0.00
1.7.2.2.7.1	Haulage - Mining Block 2 (110L to 170L)	Detail	55,981.00	Tonne	3.07	171,594.05	56,491.07	110,925.04	0.00	4,177.94	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.1.1	Truck Haulage Labour	Detail	55,981.00	Tonne	1.08	60,669.01	56,491.07	0.00	0.00	4,177.94	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	1,111.15 Each	54.60	60,669.01	56,491.07	0.00	0.00	4,177.94	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.1.2	Truck Haulage Equipment	Detail	55,981.00	Tonne	1.98	110,925.04	0.00	110,925.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	740.69 Each	149.76	110,925.04	0.00	110,925.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2	Blasthole Mining - Middle Sulfide	Detail	55,981.00	Tonne	24.61	1,377,741.47	477,206.13	252,509.89	0.00	590,670.73	57,354.73	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1	Labour	Detail	55,981.00	Tonne	9.05	506,460.15	477,206.13	0.00	0.00	29,254.02	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.7.2.1.1	Cable Labour	Detail	3.16	Each	3,415.10	10,803.01	10,181.29	0.00	0.00	621.72	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.1.1	Drilling	Detail	45.55	Hour	77.55	3,532.48	3,325.23	0.00	0.00	207.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	45.55 Each	64.09	2,919.40	2,748.13	0.00	0.00	171.27	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.1.2	Install & Grout	Detail	45.55	Hour	159.61	7,270.54	6,856.06	0.00	0.00	414.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	45.55 Each	64.09	2,919.40	2,748.13	0.00	0.00	171.27	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	45.55 Each	67.82	3,089.31	2,918.03	0.00	0.00	171.27	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.2	Drop Raise Labour	Detail	3.16	Each	26,167.82	82,776.77	78,005.90	0.00	0.00	4,770.87	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.2.1	Drill	Detail	403.32	Hour	77.55	31,277.13	29,442.17	0.00	0.00	1,834.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	403.32 Each	64.09	25,848.86	24,332.38	0.00	0.00	1,516.49	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.2.2	Blast	Detail	322.66	Hour	159.61	51,499.65	48,563.73	0.00	0.00	2,935.92	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	322.66 Each	64.09	20,679.09	19,465.90	0.00	0.00	1,213.19	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	322.66 Each	67.82	21,882.60	20,669.41	0.00	0.00	1,213.19	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.3	Drilling Labour	Detail	860.10	Hour	98.06	84,345.48	79,454.08	0.00	0.00	4,891.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	860.10 Each	64.09	55,123.97	51,889.98	0.00	0.00	3,233.99	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	215.03 Each	67.82	14,583.04	13,774.54	0.00	0.00	808.50	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.4	Mucking Labour	Detail	55,981.00	Tonne	2.17	121,555.42	114,424.07	0.00	0.00	7,131.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,567.47 Each	64.09	100,459.02	94,565.34	0.00	0.00	5,893.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.5	Production Loading Labour	Detail	55,981.00	Tonne	0.97	54,529.04	51,420.42	0.00	0.00	3,108.62	0.00	0.00	0.00	0.00	0.00

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1.7.2.2.7.2.1.5.1	Slot Blast	Detail	75.92	Hour	159.61	12,117.56	11,426.76	0.00	0.00	690.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	75.92 Each	64.09	4,865.67	4,580.21	0.00	0.00	285.46	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	75.92 Each	67.82	5,148.85	4,863.39	0.00	0.00	285.46	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.5.2	Void Blast	Detail	75.92	Hour	159.61	12,117.56	11,426.76	0.00	0.00	690.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	75.92 Each	64.09	4,865.67	4,580.21	0.00	0.00	285.46	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	75.92 Each	67.82	5,148.85	4,863.39	0.00	0.00	285.46	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.5.3	Final Blast	Detail	189.80	Hour	159.61	30,293.91	28,566.90	0.00	0.00	1,727.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	189.80 Each	64.09	12,164.17	11,450.53	0.00	0.00	713.64	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	189.80 Each	67.82	12,872.12	12,158.48	0.00	0.00	713.64	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.6	Filling Labour	Detail	55,981.00	Tonne	2.72	152,450.43	143,720.38	0.00	0.00	8,730.05	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.6.1	Fill Prep	Detail	303.68	Hour	237.16	72,020.09	67,875.26	0.00	0.00	4,144.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	607.35 Each	64.09	38,925.35	36,641.69	0.00	0.00	2,283.65	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	303.68 Each	67.82	20,595.39	19,453.56	0.00	0.00	1,141.83	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.1.6.2	Pour Time	Detail	503.91	Hour	159.61	80,430.33	75,845.12	0.00	0.00	4,585.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	503.91 Each	64.09	32,295.87	30,401.16	0.00	0.00	1,894.72	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	503.91 Each	67.82	34,175.48	32,280.76	0.00	0.00	1,894.72	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.2	Cable Bolting	Detail	2,015.02	Meter	15.31	30,856.43	0.00	13,000.89	0.00	17,855.54	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.2.1	Materials	Detail	2,015.02	Meter	8.86	17,855.54	0.00	0.00	0.00	17,855.54	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		2,015.02	Meter	1.00	2,015.02	0.00	0.00	0.00	2,015.02	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		322.40	Each	25.00	8,060.10	0.00	0.00	0.00	8,060.10	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,015.02	Kilogram	0.50	1,007.51	0.00	0.00	0.00	1,007.51	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,015.02	Each	1.58	3,183.74	0.00	0.00	0.00	3,183.74	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	3,589.16	3,589.16	0.00	0.00	0.00	3,589.16	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.7.2.2.2	Equipment Operating	Detail	2,015.02	Meter	6.45	13,000.89	0.00	13,000.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	273.65 Each	47.51	13,000.89	0.00	13,000.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.3	Drop Raise Drilling	Detail	2,179.52	Meter	31.11	67,802.30	0.00	17,523.65	0.00	50,278.65	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.3.1	Materials	Detail	2,179.52	Meter	23.07	50,278.65	0.00	0.00	0.00	50,278.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	50,278.65	50,278.65	0.00	0.00	0.00	50,278.65	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.3.2	Equipment Operating	Detail	2,179.52	Meter	8.04	17,523.65	0.00	17,523.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	368.84 Each	47.51	17,523.65	0.00	17,523.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.4	Drilling	Detail	5,089.76	Meter	29.52	150,253.13	0.00	32,838.99	0.00	117,414.14	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.4.1	Materials	Detail	5,089.76	Meter	23.07	117,414.14	0.00	0.00	0.00	117,414.14	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	117,414.14	117,414.14	0.00	0.00	0.00	117,414.14	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.4.2	Equipment Operating	Detail	5,089.76	Meter	6.45	32,838.99	0.00	32,838.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	691.20 Each	47.51	32,838.99	0.00	32,838.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.5	Blasting	Detail	3.16	Each	18,249.85	57,729.83	0.00	0.00	0.00	375.10	57,354.73	0.00	0.00	0.00	0.00
1.7.2.2.7.2.5.1	Materials	Detail	3.16	Each	18,249.85	57,729.83	0.00	0.00	0.00	375.10	57,354.73	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		45,953.32	Kilogram	1.01	46,412.86	0.00	0.00	0.00	0.00	46,412.86	0.00	0.00	0.00	0.00
SUEX10016	Booster		310.00	Each	1.21	375.10	0.00	0.00	0.00	375.10	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		316.33	Meter	0.29	91.74	0.00	0.00	0.00	0.00	91.74	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		310.00	Each	35.00	10,850.13	0.00	0.00	0.00	0.00	10,850.13	0.00	0.00	0.00	0.00
1.7.2.2.7.2.5.2	Equipment Operating	Detail	3.16	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.2.7.2.6	Mucking	Detail	55,981.00	Tonne	3.38	189,146.36	0.00	189,146.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,567.47 Each	120.67	189,146.36	0.00	189,146.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.2.7.2.7	Backfill	Detail	30,652.51	Tonne	12.25	375,493.27	0.00	0.00	0.00	375,493.27	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		30,652.51	Tonne	12.25	375,493.27	0.00	0.00	0.00	375,493.27	0.00	0.00	0.00	0.00	0.00
1.7.2.3	270 Block	Detail	1.00	LS	7,522,502.28	7,522,502.28	2,865,346.72	1,799,632.13	0.00	2,552,336.67	305,186.76	0.00	0.00	0.00	0.00
1.7.2.3.1	Stoping 200 L Block	Detail	46,507.00	Tonne	28.83	1,340,925.10	461,078.32	336,710.49	0.00	495,488.05	47,648.24	0.00	0.00	0.00	0.00
1.7.2.3.1.1	Haulage - Mining Block 3 (200L to 270L)	Detail	46,507.00	Tonne	4.22	196,347.07	64,632.64	126,934.36	0.00	4,780.07	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.1.1	Truck Haulage Labour	Detail	46,507.00	Tonne	1.49	69,412.71	64,632.64	0.00	0.00	4,780.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	1,271.30 Each	54.60	69,412.71	64,632.64	0.00	0.00	4,780.07	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.1.2	Truck Haulage Equipment	Detail	46,507.00	Tonne	2.73	126,934.36	0.00	126,934.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	847.59 Each	149.76	126,934.36	0.00	126,934.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2	Blasthole Mining - Middle Sulfide	Detail	46,507.00	Tonne	24.61	1,144,578.03	396,445.68	209,776.13	0.00	490,707.98	47,648.24	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1	Labour	Detail	46,507.00	Tonne	9.05	420,748.86	396,445.68	0.00	0.00	24,303.19	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.1	Cable Labour	Detail	2.63	Each	3,415.10	8,974.76	8,458.25	0.00	0.00	516.51	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.1.1	Drilling	Detail	37.84	Hour	77.55	2,934.65	2,762.48	0.00	0.00	172.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	37.84 Each	64.09	2,425.33	2,283.05	0.00	0.00	142.29	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.1.2	Install & Grout	Detail	37.84	Hour	159.61	6,040.10	5,695.76	0.00	0.00	344.34	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	37.84 Each	64.09	2,425.33	2,283.05	0.00	0.00	142.29	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	37.84 Each	67.82	2,566.49	2,424.20	0.00	0.00	142.29	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.1.2.1.2	Drop Raise Labour	Detail	2.63	Each	26,167.82	68,767.96	64,804.50	0.00	0.00	3,963.47	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.2.1	Drill	Detail	335.06	Hour	77.55	25,983.91	24,459.50	0.00	0.00	1,524.41	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	335.06	Each	64.09	21,474.31	20,214.46	0.00	0.00	1,259.84	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.2.2	Blast	Detail	268.05	Hour	159.61	42,784.05	40,345.00	0.00	0.00	2,439.06	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	268.05	Each	64.09	17,179.44	16,171.57	0.00	0.00	1,007.88	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	268.05	Each	67.82	18,179.28	17,171.40	0.00	0.00	1,007.88	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.3	Drilling Labour	Detail	714.54	Hour	98.06	70,071.19	66,007.59	0.00	0.00	4,063.60	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	714.54	Each	64.09	45,795.01	43,108.33	0.00	0.00	2,686.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	178.64	Each	67.82	12,115.06	11,443.39	0.00	0.00	671.67	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.4	Mucking Labour	Detail	46,507.00	Tonne	2.17	100,983.87	95,059.40	0.00	0.00	5,924.47	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	1,302.20	Each	64.09	83,457.74	78,561.48	0.00	0.00	4,896.26	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.5	Production Loading Labour	Detail	46,507.00	Tonne	0.97	45,300.76	42,718.23	0.00	0.00	2,582.53	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.5.1	Slot Blast	Detail	63.07	Hour	159.61	10,066.84	9,492.94	0.00	0.00	573.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	63.07	Each	64.09	4,042.22	3,805.08	0.00	0.00	237.15	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	63.07	Each	67.82	4,277.48	4,040.33	0.00	0.00	237.15	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.5.2	Void Blast	Detail	63.07	Hour	159.61	10,066.84	9,492.94	0.00	0.00	573.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	63.07	Each	64.09	4,042.22	3,805.08	0.00	0.00	237.15	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	63.07	Each	67.82	4,277.48	4,040.33	0.00	0.00	237.15	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.1.2.1.5.3	Final Blast	Detail	157.68	Hour	159.61	25,167.09	23,732.35	0.00	0.00	1,434.74	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	157.68 Each	64.09	10,105.56	9,512.69	0.00	0.00	592.87	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	157.68 Each	67.82	10,693.69	10,100.83	0.00	0.00	592.87	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.6	Filling Labour	Detail	46,507.00	Tonne	2.72	126,650.33	119,397.72	0.00	0.00	7,252.61	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.6.1	Fill Prep	Detail	252.28	Hour	237.16	59,831.70	56,388.33	0.00	0.00	3,443.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		2.00	504.57 Each	64.09	32,337.78	30,440.60	0.00	0.00	1,897.18	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	252.28 Each	67.82	17,109.91	16,161.32	0.00	0.00	948.59	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.1.6.2	Pour Time	Detail	418.63	Hour	159.61	66,818.63	63,009.39	0.00	0.00	3,809.23	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	418.63 Each	64.09	26,830.25	25,256.19	0.00	0.00	1,574.06	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	418.63 Each	67.82	28,391.75	26,817.69	0.00	0.00	1,574.06	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.2	Cable Bolting	Detail	1,674.01	Meter	15.31	25,634.41	0.00	10,800.67	0.00	14,833.74	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.2.1	Materials	Detail	1,674.01	Meter	8.86	14,833.74	0.00	0.00	0.00	14,833.74	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMGS1014	Breather Tube		1,674.01	Meter	1.00	1,674.01	0.00	0.00	0.00	1,674.01	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		267.84	Each	25.00	6,696.04	0.00	0.00	0.00	6,696.04	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,674.01	Kilogram	0.50	837.01	0.00	0.00	0.00	837.01	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,674.01	Each	1.58	2,644.94	0.00	0.00	0.00	2,644.94	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	2,981.75	2,981.75	0.00	0.00	0.00	2,981.75	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.2.2	Equipment Operating	Detail	1,674.01	Meter	6.45	10,800.67	0.00	10,800.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1007	ITH		1.00	227.33 Each	47.51	10,800.67	0.00	10,800.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.3	Drop Raise Drilling	Detail	1,810.66	Meter	31.11	56,327.71	0.00	14,558.02	0.00	41,769.69	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.3.1	Materials	Detail	1,810.66	Meter	23.07	41,769.69	0.00	0.00	0.00	41,769.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	41,769.69	41,769.69	0.00	0.00	0.00	41,769.69	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.1.2.3.2	Equipment Operating	Detail	1,810.66	Meter	8.04	14,558.02	0.00	14,558.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	306.42 Each	47.51	14,558.02	0.00	14,558.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.4	Drilling	Detail	4,228.39	Meter	29.52	124,824.89	0.00	27,281.45	0.00	97,543.44	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.4.1	Materials	Detail	4,228.39	Meter	23.07	97,543.44	0.00	0.00	0.00	97,543.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	97,543.44	97,543.44	0.00	0.00	0.00	97,543.44	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.4.2	Equipment Operating	Detail	4,228.39	Meter	6.45	27,281.45	0.00	27,281.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	574.23 Each	47.51	27,281.45	0.00	27,281.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.5	Blasting	Detail	2.63	Each	18,249.85	47,959.87	0.00	0.00	0.00	311.62	47,648.24	0.00	0.00	0.00	0.00
1.7.2.3.1.2.5.1	Materials	Detail	2.63	Each	18,249.85	47,959.87	0.00	0.00	0.00	311.62	47,648.24	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		38,176.37	Kilogram	1.01	38,558.13	0.00	0.00	0.00	0.00	38,558.13	0.00	0.00	0.00	0.00
SUEX10016	Booster		257.54	Each	1.21	311.62	0.00	0.00	0.00	311.62	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		262.80	Meter	0.29	76.21	0.00	0.00	0.00	0.00	76.21	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		257.54	Each	35.00	9,013.90	0.00	0.00	0.00	0.00	9,013.90	0.00	0.00	0.00	0.00
1.7.2.3.1.2.5.2	Equipment Operating	Detail	2.63	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.6	Mucking	Detail	46,507.00	Tonne	3.38	157,135.99	0.00	157,135.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,302.20 Each	120.67	157,135.99	0.00	157,135.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.1.2.7	Backfill	Detail	25,465.00	Tonne	12.25	311,946.30	0.00	0.00	0.00	311,946.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		25,465.00	Tonne	12.25	311,946.30	0.00	0.00	0.00	311,946.30	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2	200 Sub Level - UC	Detail	15,114.00	Tonne	38.22	577,673.68	294,414.61	110,773.00	0.00	138,632.08	33,853.99	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.3.2.1	Haulage - Mining Block 3 (200L to 270L)	Detail	15,114.00	Tonne	4.22	63,809.53	21,004.53	41,251.55	0.00	1,553.44	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2.1.1	Truck Haulage Labour	Detail	15,114.00	Tonne	1.49	22,557.97	21,004.53	0.00	0.00	1,553.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	413.15 Each	54.60	22,557.97	21,004.53	0.00	0.00	1,553.44	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2.1.2	Truck Haulage Equipment	Detail	15,114.00	Tonne	2.73	41,251.55	0.00	41,251.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	275.45 Each	149.76	41,251.55	0.00	41,251.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2.2	4 x 4.5 Ore Development - 4 m/day	Detail	233.00	Meter	2,088.86	486,703.89	273,410.08	69,521.45	0.00	109,918.37	33,853.99	0.00	0.00	0.00	0.00
1.7.2.3.2.2.1	Labour	Detail	233.00	Meter	1,245.09	290,105.97	273,410.08	0.00	0.00	16,695.89	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,223.25 Each	67.82	82,960.82	78,361.40	0.00	0.00	4,599.42	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,446.50 Each	64.09	156,796.19	147,597.35	0.00	0.00	9,198.84	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2.2.2	Materials	Detail	233.00	Meter	545.39	127,076.47	0.00	0.00	0.00	93,222.48	33,853.99	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		233.00	Meter	50.00	11,650.00	0.00	0.00	0.00	11,650.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,283.70	3,283.70	0.00	0.00	0.00	746.09	2,537.60	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,283.70	3,283.70	0.00	0.00	0.00	746.09	2,537.60	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	17,643.32	17,643.32	0.00	0.00	0.00	17,643.32	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	10,894.18	5,447.09	0.00	0.00	0.00	5,447.09	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	28,778.79	28,778.79	0.00	0.00	0.00	0.00	28,778.79	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	726.66	54,499.77	0.00	0.00	0.00	54,499.77	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	415.02	2,490.12	0.00	0.00	0.00	2,490.12	0.00	0.00	0.00	0.00	0.00
1.7.2.3.2.2.3	Equipment Operating	Detail	233.00	Meter	298.38	69,521.45	0.00	69,521.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	173.35 Each	120.67	20,918.39	0.00	20,918.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	221.58 Each	33.57	7,438.54	0.00	7,438.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	222.98 Each	184.61	41,164.52	0.00	41,164.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.2.3	Backfill Pipe	Detail	233.00	Meter	116.57	27,160.27	0.00	0.00	0.00	27,160.27	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	23,617.63	27,160.27	0.00	0.00	0.00	27,160.27	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3	Stoping 235 L Block	Detail	65,140.00	Tonne	28.83	1,878,165.89	645,809.05	471,613.33	0.00	694,005.02	66,738.48	0.00	0.00	0.00	0.00
1.7.2.3.3.1	Haulage - Mining Block 3 (200L to 270L)	Detail	65,140.00	Tonne	4.22	275,013.40	90,527.67	177,790.53	0.00	6,695.20	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.1.1	Truck Haulage Labour	Detail	65,140.00	Tonne	1.49	97,222.87	90,527.67	0.00	0.00	6,695.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	1,780.64 Each	54.60	97,222.87	90,527.67	0.00	0.00	6,695.20	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.1.2	Truck Haulage Equipment	Detail	65,140.00	Tonne	2.73	177,790.53	0.00	177,790.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	1,187.17 Each	149.76	177,790.53	0.00	177,790.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2	Blasthole Mining - Middle Sulfide	Detail	65,140.00	Tonne	24.61	1,603,152.49	555,281.38	293,822.80	0.00	687,309.82	66,738.48	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1	Labour	Detail	65,140.00	Tonne	9.05	589,321.63	555,281.38	0.00	0.00	34,040.25	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.1	Cable Labour	Detail	3.68	Each	3,415.10	12,570.49	11,847.04	0.00	0.00	723.44	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.1.1	Drilling	Detail	53.00	Hour	77.55	4,110.42	3,869.27	0.00	0.00	241.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	53.00 Each	64.09	3,397.04	3,197.75	0.00	0.00	199.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.1.2	Install & Grout	Detail	53.00	Hour	159.61	8,460.06	7,977.77	0.00	0.00	482.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	53.00 Each	64.09	3,397.04	3,197.75	0.00	0.00	199.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	53.00 Each	67.82	3,594.75	3,395.45	0.00	0.00	199.30	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.2	Drop Raise Labour	Detail	3.68	Each	26,167.82	96,319.81	90,768.38	0.00	0.00	5,551.43	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.3.2.1.2.1	Drill	Detail	469.31	Hour	77.55	36,394.35	34,259.18	0.00	0.00	2,135.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	469.31 Each	64.09	30,077.97	28,313.37	0.00	0.00	1,764.60	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.2.2	Blast	Detail	375.45	Hour	159.61	59,925.46	56,509.19	0.00	0.00	3,416.26	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	375.45 Each	64.09	24,062.38	22,650.70	0.00	0.00	1,411.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	375.45 Each	67.82	25,462.79	24,051.11	0.00	0.00	1,411.68	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.3	Drilling Labour	Detail	1,000.82	Hour	98.06	98,145.16	92,453.48	0.00	0.00	5,691.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,000.82 Each	64.09	64,142.75	60,379.66	0.00	0.00	3,763.09	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	250.21 Each	67.82	16,968.96	16,028.18	0.00	0.00	940.77	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.4	Mucking Labour	Detail	65,140.00	Tonne	2.17	141,442.99	133,144.88	0.00	0.00	8,298.11	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,823.92 Each	64.09	116,895.03	110,037.09	0.00	0.00	6,857.94	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.5	Production Loading Labour	Detail	65,140.00	Tonne	0.97	63,450.49	59,833.26	0.00	0.00	3,617.22	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.5.1	Slot Blast	Detail	88.34	Hour	159.61	14,100.11	13,296.28	0.00	0.00	803.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	88.34 Each	64.09	5,661.74	5,329.58	0.00	0.00	332.16	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	88.34 Each	67.82	5,991.25	5,659.09	0.00	0.00	332.16	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.5.2	Void Blast	Detail	88.34	Hour	159.61	14,100.11	13,296.28	0.00	0.00	803.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	88.34 Each	64.09	5,661.74	5,329.58	0.00	0.00	332.16	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	88.34 Each	67.82	5,991.25	5,659.09	0.00	0.00	332.16	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.5.3	Final Blast	Detail	220.85	Hour	159.61	35,250.27	33,240.70	0.00	0.00	2,009.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	220.85 Each	64.09	14,154.34	13,323.94	0.00	0.00	830.40	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	220.85 Each	67.82	14,978.11	14,147.71	0.00	0.00	830.40	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.3.2.1.6	Filling Labour	Detail	65,140.00	Tonne	2.72	177,392.70	167,234.34	0.00	0.00	10,158.36	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.6.1	Fill Prep	Detail	353.36	Hour	237.16	83,803.23	78,980.27	0.00	0.00	4,822.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	706.72 Each	64.09	45,293.89	42,636.61	0.00	0.00	2,657.28	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	353.36 Each	67.82	23,964.98	22,636.34	0.00	0.00	1,328.64	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.1.6.2	Pour Time	Detail	586.36	Hour	159.61	93,589.47	88,254.06	0.00	0.00	5,335.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	586.36 Each	64.09	37,579.77	35,375.06	0.00	0.00	2,204.71	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	586.36 Each	67.82	39,766.89	37,562.18	0.00	0.00	2,204.71	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.2	Cable Bolting	Detail	2,344.70	Meter	15.31	35,904.82	0.00	15,127.96	0.00	20,776.87	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.2.1	Materials	Detail	2,344.70	Meter	8.86	20,776.87	0.00	0.00	0.00	20,776.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		2,344.70	Meter	1.00	2,344.70	0.00	0.00	0.00	2,344.70	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		375.15	Each	25.00	9,378.81	0.00	0.00	0.00	9,378.81	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,344.70	Kilogram	0.50	1,172.35	0.00	0.00	0.00	1,172.35	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,344.70	Each	1.58	3,704.63	0.00	0.00	0.00	3,704.63	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	4,176.38	4,176.38	0.00	0.00	0.00	4,176.38	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.2.2	Equipment Operating	Detail	2,344.70	Meter	6.45	15,127.96	0.00	15,127.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	318.42 Each	47.51	15,127.96	0.00	15,127.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.3	Drop Raise Drilling	Detail	2,536.11	Meter	31.11	78,895.37	0.00	20,390.68	0.00	58,504.69	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.3.1	Materials	Detail	2,536.11	Meter	23.07	58,504.69	0.00	0.00	0.00	58,504.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	58,504.69	58,504.69	0.00	0.00	0.00	58,504.69	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.3.2	Equipment Operating	Detail	2,536.11	Meter	8.04	20,390.68	0.00	20,390.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	429.19 Each	47.51	20,390.68	0.00	20,390.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.4	Drilling	Detail	5,922.49	Meter	29.52	174,835.90	0.00	38,211.74	0.00	136,624.16	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.3.3.2.4.1	Materials	Detail	5,922.49	Meter	23.07	136,624.16	0.00	0.00	0.00	136,624.16	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	136,624.16	136,624.16	0.00	0.00	0.00	136,624.16	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.4.2	Equipment Operating	Detail	5,922.49	Meter	6.45	38,211.74	0.00	38,211.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	804.29 Each	47.51	38,211.74	0.00	38,211.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.5	Blasting	Detail	3.68	Each	18,249.85	67,174.96	0.00	0.00	0.00	436.48	66,738.48	0.00	0.00	0.00	0.00
1.7.2.3.3.2.5.1	Materials	Detail	3.68	Each	18,249.85	67,174.96	0.00	0.00	0.00	436.48	66,738.48	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		53,471.71	Kilogram	1.01	54,006.42	0.00	0.00	0.00	0.00	54,006.42	0.00	0.00	0.00	0.00
SUEX10016	Booster		360.72	Each	1.21	436.48	0.00	0.00	0.00	436.48	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		368.08	Meter	0.29	106.74	0.00	0.00	0.00	0.00	106.74	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		360.72	Each	35.00	12,625.32	0.00	0.00	0.00	0.00	12,625.32	0.00	0.00	0.00	0.00
1.7.2.3.3.2.5.2	Equipment Operating	Detail	3.68	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.6	Mucking	Detail	65,140.00	Tonne	3.38	220,092.43	0.00	220,092.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,823.92 Each	120.67	220,092.43	0.00	220,092.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.3.2.7	Backfill	Detail	35,667.54	Tonne	12.25	436,927.38	0.00	0.00	0.00	436,927.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		35,667.54	Tonne	12.25	436,927.38	0.00	0.00	0.00	436,927.38	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4	235 Sub Level - UC	Detail	17,692.00	Tonne	31.52	557,681.74	281,569.28	113,632.04	0.00	130,660.57	31,819.85	0.00	0.00	0.00	0.00
1.7.2.3.4.1	Haulage - Mining Block 3 (200L to 270L)	Detail	17,692.00	Tonne	4.22	74,693.54	24,587.28	48,287.84	0.00	1,818.41	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4.1.1	Truck Haulage Labour	Detail	17,692.00	Tonne	1.49	26,405.70	24,587.28	0.00	0.00	1,818.41	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	483.62 Each	54.60	26,405.70	24,587.28	0.00	0.00	1,818.41	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.4.1.2	Truck Haulage Equipment	Detail	17,692.00	Tonne	2.73	48,287.84	0.00	48,287.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	322.43 Each	149.76	48,287.84	0.00	48,287.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4.2	4 x 4.5 Ore Development - 4 m/day	Detail	219.00	Meter	2,088.86	457,459.88	256,982.00	65,344.20	0.00	103,313.84	31,819.85	0.00	0.00	0.00	0.00
1.7.2.3.4.2.1	Labour	Detail	219.00	Meter	1,245.09	272,674.71	256,982.00	0.00	0.00	15,692.71	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,149.75 Each	67.82	77,976.05	73,652.99	0.00	0.00	4,323.06	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,299.50 Each	64.09	147,374.96	138,728.84	0.00	0.00	8,646.12	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4.2.2	Materials	Detail	219.00	Meter	545.39	119,440.97	0.00	0.00	0.00	87,621.13	31,819.85	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		219.00	Meter	50.00	10,950.00	0.00	0.00	0.00	10,950.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,086.39	3,086.39	0.00	0.00	0.00	701.26	2,385.13	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,086.39	3,086.39	0.00	0.00	0.00	701.26	2,385.13	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	16,583.21	16,583.21	0.00	0.00	0.00	16,583.21	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	10,239.59	5,119.80	0.00	0.00	0.00	5,119.80	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	27,049.59	27,049.59	0.00	0.00	0.00	0.00	27,049.59	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	683.00	51,225.10	0.00	0.00	0.00	51,225.10	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	390.08	2,340.50	0.00	0.00	0.00	2,340.50	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4.2.3	Equipment Operating	Detail	219.00	Meter	298.38	65,344.20	0.00	65,344.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	162.94 Each	120.67	19,661.49	0.00	19,661.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	208.27 Each	33.57	6,991.59	0.00	6,991.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	209.58 Each	184.61	38,691.12	0.00	38,691.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.4.3	Backfill Pipe	Detail	219.00	Meter	116.57	25,528.32	0.00	0.00	0.00	25,528.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	22,198.54	25,528.32	0.00	0.00	0.00	25,528.32	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5	270 Level - UC	Detail	17,597.00	Tonne	32.67	574,924.06	290,824.73	115,759.75	0.00	135,357.37	32,982.21	0.00	0.00	0.00	0.00
1.7.2.3.5.1	Haulage - Mining Block 3 (200L to 270L)	Detail	17,597.00	Tonne	4.22	74,292.46	24,455.26	48,028.55	0.00	1,808.65	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.5.1.1	Truck Haulage Labour	Detail	17,597.00	Tonne	1.49	26,263.91	24,455.26	0.00	0.00	1,808.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	481.02 Each	54.60	26,263.91	24,455.26	0.00	0.00	1,808.65	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5.1.2	Truck Haulage Equipment	Detail	17,597.00	Tonne	2.73	48,028.55	0.00	48,028.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	320.70 Each	149.76	48,028.55	0.00	48,028.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5.2	4 x 4.5 Ore Development - 4 m/day	Detail	227.00	Meter	2,088.86	474,170.74	266,369.47	67,731.20	0.00	107,087.86	32,982.21	0.00	0.00	0.00	0.00
1.7.2.3.5.2.1	Labour	Detail	227.00	Meter	1,245.09	282,635.43	266,369.47	0.00	0.00	16,265.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,191.75 Each	67.82	80,824.49	76,343.51	0.00	0.00	4,480.98	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,383.50 Each	64.09	152,758.52	143,796.56	0.00	0.00	8,961.96	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5.2.2	Materials	Detail	227.00	Meter	545.39	123,804.11	0.00	0.00	0.00	90,821.90	32,982.21	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		227.00	Meter	50.00	11,350.00	0.00	0.00	0.00	11,350.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,199.14	3,199.14	0.00	0.00	0.00	726.88	2,472.26	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	3,199.14	3,199.14	0.00	0.00	0.00	726.88	2,472.26	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	17,188.98	17,188.98	0.00	0.00	0.00	17,188.98	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	10,613.64	5,306.82	0.00	0.00	0.00	5,306.82	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	28,037.70	28,037.70	0.00	0.00	0.00	0.00	28,037.70	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	707.95	53,096.34	0.00	0.00	0.00	53,096.34	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	404.33	2,425.99	0.00	0.00	0.00	2,425.99	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5.2.3	Equipment Operating	Detail	227.00	Meter	298.38	67,731.20	0.00	67,731.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	168.89 Each	120.67	20,379.71	0.00	20,379.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	215.88 Each	33.57	7,246.99	0.00	7,246.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	217.24 Each	184.61	40,104.49	0.00	40,104.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.5.3	Backfill Pipe	Detail	227.00	Meter	116.57	26,460.86	0.00	0.00	0.00	26,460.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	23,009.45	26,460.86	0.00	0.00	0.00	26,460.86	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.6	Stoping 270 L Block	Detail	89,937.00	Tonne	28.83	2,593,131.80	891,650.73	651,143.51	0.00	958,193.58	92,143.98	0.00	0.00	0.00	0.00
1.7.2.3.6.1	Haulage - Mining Block 3 (200L to 270L)	Detail	89,937.00	Tonne	4.22	379,703.41	124,989.05	245,470.48	0.00	9,243.88	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.1.1	Truck Haulage Labour	Detail	89,937.00	Tonne	1.49	134,232.93	124,989.05	0.00	0.00	9,243.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	2,458.48	Each	54.60	134,232.93	124,989.05	0.00	0.00	9,243.88	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.1.2	Truck Haulage Equipment	Detail	89,937.00	Tonne	2.73	245,470.48	0.00	245,470.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	1,639.09	Each	149.76	245,470.48	0.00	245,470.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2	Blasthole Mining - Middle Sulfide	Detail	89,937.00	Tonne	24.61	2,213,428.40	766,661.68	405,673.03	0.00	948,949.70	92,143.98	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1	Labour	Detail	89,937.00	Tonne	9.05	813,660.11	766,661.68	0.00	0.00	46,998.43	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.1	Cable Labour	Detail	5.08	Each	3,415.10	17,355.72	16,356.88	0.00	0.00	998.84	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.1.1	Drilling	Detail	73.18	Hour	77.55	5,675.14	5,342.20	0.00	0.00	332.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	73.18	Each	64.09	4,690.20	4,415.04	0.00	0.00	275.16	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.1.2	Install & Grout	Detail	73.18	Hour	159.61	11,680.58	11,014.68	0.00	0.00	665.89	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	73.18	Each	64.09	4,690.20	4,415.04	0.00	0.00	275.16	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	73.18	Each	67.82	4,963.17	4,688.01	0.00	0.00	275.16	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.2	Drop Raise Labour	Detail	5.08	Each	26,167.82	132,986.10	125,321.39	0.00	0.00	7,664.71	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.2.1	Drill	Detail	647.96	Hour	77.55	50,248.67	47,300.71	0.00	0.00	2,947.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	647.96	Each	64.09	41,527.83	39,091.49	0.00	0.00	2,436.33	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.3.6.2.1.2.2	Blast	Detail	518.37	Hour	159.61	82,737.43	78,020.68	0.00	0.00	4,716.74	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	518.37 Each	64.09	33,222.26	31,273.19	0.00	0.00	1,949.07	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	518.37 Each	67.82	35,155.78	33,206.71	0.00	0.00	1,949.07	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.3	Drilling Labour	Detail	1,381.81	Hour	98.06	135,506.32	127,647.97	0.00	0.00	7,858.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,381.81 Each	64.09	88,560.13	83,364.52	0.00	0.00	5,195.60	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	345.45 Each	67.82	23,428.57	22,129.67	0.00	0.00	1,298.90	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.4	Mucking Labour	Detail	89,937.00	Tonne	2.17	195,286.43	183,829.47	0.00	0.00	11,456.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	2,518.24 Each	64.09	161,393.75	151,925.18	0.00	0.00	9,468.57	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.5	Production Loading Labour	Detail	89,937.00	Tonne	0.97	87,604.33	82,610.14	0.00	0.00	4,994.20	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.5.1	Slot Blast	Detail	121.97	Hour	159.61	19,467.63	18,357.81	0.00	0.00	1,109.82	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	121.97 Each	64.09	7,817.00	7,358.40	0.00	0.00	458.60	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	121.97 Each	67.82	8,271.95	7,813.34	0.00	0.00	458.60	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.5.2	Void Blast	Detail	121.97	Hour	159.61	19,467.63	18,357.81	0.00	0.00	1,109.82	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	121.97 Each	64.09	7,817.00	7,358.40	0.00	0.00	458.60	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	121.97 Each	67.82	8,271.95	7,813.34	0.00	0.00	458.60	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.5.3	Final Blast	Detail	304.92	Hour	159.61	48,669.07	45,894.52	0.00	0.00	2,774.55	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	304.92 Each	64.09	19,542.51	18,396.00	0.00	0.00	1,146.51	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	304.92 Each	67.82	20,679.87	19,533.36	0.00	0.00	1,146.51	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.6	Filling Labour	Detail	89,937.00	Tonne	2.72	244,921.20	230,895.83	0.00	0.00	14,025.37	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.6.2.1.6.1	Fill Prep	Detail	487.88	Hour	237.16	115,704.81	109,045.88	0.00	0.00	6,658.93	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		2.00	975.75 Each	64.09	62,536.02	58,867.19	0.00	0.00	3,668.83	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	487.88 Each	67.82	33,087.79	31,253.37	0.00	0.00	1,834.42	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.1.6.2	Pour Time	Detail	809.57	Hour	159.61	129,216.39	121,849.95	0.00	0.00	7,366.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	809.57 Each	64.09	51,885.36	48,841.37	0.00	0.00	3,043.98	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	809.57 Each	67.82	54,905.05	51,861.07	0.00	0.00	3,043.98	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.2	Cable Bolting	Detail	3,237.26	Meter	15.31	49,572.80	0.00	20,886.75	0.00	28,686.05	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.2.1	Materials	Detail	3,237.26	Meter	8.86	28,686.05	0.00	0.00	0.00	28,686.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMGS1014	Breather Tube		3,237.26	Meter	1.00	3,237.26	0.00	0.00	0.00	3,237.26	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		517.96	Each	25.00	12,949.06	0.00	0.00	0.00	12,949.06	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		3,237.26	Kilogram	0.50	1,618.63	0.00	0.00	0.00	1,618.63	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		3,237.26	Each	1.58	5,114.88	0.00	0.00	0.00	5,114.88	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	5,766.22	5,766.22	0.00	0.00	0.00	5,766.22	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.2.2	Equipment Operating	Detail	3,237.26	Meter	6.45	20,886.75	0.00	20,886.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1007	ITH		1.00	439.63 Each	47.51	20,886.75	0.00	20,886.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.3	Drop Raise Drilling	Detail	3,501.53	Meter	31.11	108,928.66	0.00	28,152.85	0.00	80,775.81	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.3.1	Materials	Detail	3,501.53	Meter	23.07	80,775.81	0.00	0.00	0.00	80,775.81	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	80,775.81	80,775.81	0.00	0.00	0.00	80,775.81	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.3.2	Equipment Operating	Detail	3,501.53	Meter	8.04	28,152.85	0.00	28,152.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1007	ITH		1.00	592.57 Each	47.51	28,152.85	0.00	28,152.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.4	Drilling	Detail	8,177.01	Meter	29.52	241,391.11	0.00	52,757.90	0.00	188,633.21	0.00	0.00	0.00	0.00	0.00

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1.7.2.3.6.2.4.1	Materials	Detail	8,177.01	Meter	23.07	188,633.21	0.00	0.00	0.00	188,633.21	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	188,633.21	188,633.21	0.00	0.00	0.00	188,633.21	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.4.2	Equipment Operating	Detail	8,177.01	Meter	6.45	52,757.90	0.00	52,757.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,110.46 Each	47.51	52,757.90	0.00	52,757.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.5	Blasting	Detail	5.08	Each	18,249.85	92,746.61	0.00	0.00	0.00	602.63	92,143.98	0.00	0.00	0.00	0.00
1.7.2.3.6.2.5.1	Materials	Detail	5.08	Each	18,249.85	92,746.61	0.00	0.00	0.00	602.63	92,143.98	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		73,826.91	Kilogram	1.01	74,565.18	0.00	0.00	0.00	0.00	74,565.18	0.00	0.00	0.00	0.00
SUEX10016	Booster		498.04	Each	1.21	602.63	0.00	0.00	0.00	602.63	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		508.20	Meter	0.29	147.38	0.00	0.00	0.00	0.00	147.38	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		498.04	Each	35.00	17,431.42	0.00	0.00	0.00	0.00	17,431.42	0.00	0.00	0.00	0.00
1.7.2.3.6.2.5.2	Equipment Operating	Detail	5.08	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.6	Mucking	Detail	89,937.00	Tonne	3.38	303,875.54	0.00	303,875.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	2,518.24 Each	120.67	303,875.54	0.00	303,875.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.3.6.2.7	Backfill	Detail	49,245.18	Tonne	12.25	603,253.58	0.00	0.00	0.00	603,253.58	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		49,245.19	Tonne	12.25	603,253.58	0.00	0.00	0.00	603,253.58	0.00	0.00	0.00	0.00	0.00
1.7.2.4	410 Block	Detail	1.00	LS	14,723,720.83	14,723,720.83	4,734,916.03	4,297,777.36	0.00	5,083,832.54	607,194.90	0.00	0.00	0.00	0.00
1.7.2.4.1	305 Sub Level - OC	Detail	17,816.00	Tonne	32.06	571,206.94	282,431.66	131,405.73	0.00	126,712.06	30,657.48	0.00	0.00	0.00	0.00
1.7.2.4.1.1	Haulage - Mining Block 4 (305L to 410L)	Detail	17,816.00	Tonne	5.94	105,862.14	34,837.13	68,448.54	0.00	2,576.47	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.1.1.1	Truck Haulage Labour	Detail	17,816.00	Tonne	2.10	37,413.60	34,837.13	0.00	0.00	2,576.47	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	685.23 Each	54.60	37,413.60	34,837.13	0.00	0.00	2,576.47	0.00	0.00	0.00	0.00	0.00
1.7.2.4.1.1.2	Truck Haulage Equipment	Detail	17,816.00	Tonne	3.84	68,448.54	0.00	68,448.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	457.05 Each	149.76	68,448.54	0.00	68,448.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.1.2	4 x 4.5 Ore Development - 4 m/day	Detail	211.00	Meter	2,088.86	440,749.02	247,594.53	62,957.19	0.00	99,539.81	30,657.48	0.00	0.00	0.00	0.00
1.7.2.4.1.2.1	Labour	Detail	211.00	Meter	1,245.09	262,713.99	247,594.53	0.00	0.00	15,119.46	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,107.75 Each	67.82	75,127.61	70,962.47	0.00	0.00	4,165.14	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,215.50 Each	64.09	141,991.40	133,661.12	0.00	0.00	8,330.28	0.00	0.00	0.00	0.00	0.00
1.7.2.4.1.2.2	Materials	Detail	211.00	Meter	545.39	115,077.83	0.00	0.00	0.00	84,420.36	30,657.48	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		211.00	Meter	50.00	10,550.00	0.00	0.00	0.00	10,550.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,973.65	2,973.65	0.00	0.00	0.00	675.65	2,298.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,973.65	2,973.65	0.00	0.00	0.00	675.65	2,298.00	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	15,977.43	15,977.43	0.00	0.00	0.00	15,977.43	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	9,865.54	4,932.77	0.00	0.00	0.00	4,932.77	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	26,061.48	26,061.48	0.00	0.00	0.00	0.00	26,061.48	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	658.05	49,353.87	0.00	0.00	0.00	49,353.87	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	375.83	2,255.00	0.00	0.00	0.00	2,255.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.1.2.3	Equipment Operating	Detail	211.00	Meter	298.38	62,957.19	0.00	62,957.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	156.98 Each	120.67	18,943.26	0.00	18,943.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	200.66 Each	33.57	6,736.19	0.00	6,736.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	201.93 Each	184.61	37,277.74	0.00	37,277.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.1.3	Backfill Pipe	Detail	211.00	Meter	116.57	24,595.78	0.00	0.00	0.00	24,595.78	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	21,387.63	24,595.78	0.00	0.00	0.00	24,595.78	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.2	Stoping 305 L Block	Detail	65,955.00	Tonne	26.62	1,755,418.62	495,925.90	533,892.78	0.00	657,784.84	67,815.10	0.00	0.00	0.00	0.00
1.7.2.4.2.1	Haulage - Mining Block 4 (305L to 410L)	Detail	65,955.00	Tonne	5.94	391,902.65	128,967.39	253,397.15	0.00	9,538.11	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.1.1	Truck Haulage Labour	Detail	65,955.00	Tonne	2.10	138,505.50	128,967.39	0.00	0.00	9,538.11	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver	1.00	2,536.73	Each	54.60	138,505.50	128,967.39	0.00	0.00	9,538.11	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.1.2	Truck Haulage Equipment	Detail	65,955.00	Tonne	3.84	253,397.15	0.00	253,397.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck	1.00	1,692.02	Each	149.76	253,397.15	0.00	253,397.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2	Blasthole Mining - Lower Sulfide	Detail	65,955.00	Tonne	20.67	1,363,515.97	366,958.50	280,495.64	0.00	648,246.73	67,815.10	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1	Labour	Detail	65,955.00	Tonne	5.91	389,470.46	366,958.50	0.00	0.00	22,511.96	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.1	Cable Labour	Detail	65,955.00	Tonne	0.09	6,205.73	5,848.58	0.00	0.00	357.15	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.1.1	Drilling	Detail	26.17	Hour	77.55	2,029.21	1,910.16	0.00	0.00	119.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	26.17	Each	64.09	1,677.03	1,578.65	0.00	0.00	98.39	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.1.2	Install & Grout	Detail	26.17	Hour	159.61	4,176.52	3,938.42	0.00	0.00	238.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	26.17	Each	64.09	1,677.03	1,578.65	0.00	0.00	98.39	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	26.17	Each	67.82	1,774.64	1,676.25	0.00	0.00	98.39	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.2	Drop Raise Labour	Detail	65,955.00	Tonne	0.42	27,870.70	26,246.18	0.00	0.00	1,624.52	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.2.1	Drill	Detail	277.11	Hour	77.55	21,489.90	20,229.14	0.00	0.00	1,260.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	277.11	Each	64.09	17,760.25	16,718.30	0.00	0.00	1,041.95	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.2.2.1.2.2	Blast	Detail	39.98	Hour	159.61	6,380.79	6,017.03	0.00	0.00	363.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	39.98 Each	64.09	2,562.13	2,411.82	0.00	0.00	150.31	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	39.98 Each	67.82	2,711.25	2,560.94	0.00	0.00	150.31	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.3	Drilling Labour	Detail	5,996.57	Meter	1.66	9,926.82	9,351.14	0.00	0.00	575.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	101.23 Each	64.09	6,487.67	6,107.06	0.00	0.00	380.62	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	25.31 Each	67.82	1,716.31	1,621.16	0.00	0.00	95.15	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.4	Mucking Labour	Detail	65,955.00	Tonne	2.17	143,212.66	134,810.73	0.00	0.00	8,401.93	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,846.74 Each	64.09	118,357.57	111,413.82	0.00	0.00	6,943.74	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.5	Production Loading Labour	Detail	65,955.00	Tonne	1.00	66,128.23	62,358.35	0.00	0.00	3,769.88	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.5.1	Slot Blast	Detail	65.42	Hour	159.61	10,441.30	9,846.06	0.00	0.00	595.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	65.42 Each	64.09	4,192.58	3,946.62	0.00	0.00	245.97	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	65.42 Each	67.82	4,436.59	4,190.62	0.00	0.00	245.97	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.5.2	Void Blast	Detail	109.03	Hour	159.61	17,402.17	16,410.09	0.00	0.00	992.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	109.03 Each	64.09	6,987.64	6,577.69	0.00	0.00	409.95	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	109.03 Each	67.82	7,394.32	6,984.37	0.00	0.00	409.95	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.5.3	Final Blast	Detail	239.86	Hour	159.61	38,284.76	36,102.20	0.00	0.00	2,182.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	239.86 Each	64.09	15,372.81	14,470.92	0.00	0.00	901.88	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	239.86 Each	67.82	16,267.49	15,365.61	0.00	0.00	901.88	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.6	Filling Labour	Detail	65,955.00	Tonne	2.06	136,126.33	128,343.52	0.00	0.00	7,782.81	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.2.2.1.6.1	Fill Prep	Detail	174.45	Hour	237.16	41,371.53	38,990.56	0.00	0.00	2,380.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	348.89 Each	64.09	22,360.45	21,048.61	0.00	0.00	1,311.83	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	174.45 Each	67.82	11,830.91	11,174.99	0.00	0.00	655.92	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.1.6.2	Pour Time	Detail	593.66	Hour	159.61	94,754.79	89,352.96	0.00	0.00	5,401.83	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	593.66 Each	64.09	38,047.70	35,815.53	0.00	0.00	2,232.16	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	593.66 Each	67.82	40,262.05	38,029.89	0.00	0.00	2,232.16	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.2	Cable Bolting	Detail	65,955.00	Tonne	0.27	17,725.30	0.00	7,468.29	0.00	10,257.01	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.2.1	Materials	Detail	1,157.52	Meter	8.86	10,257.01	0.00	0.00	0.00	10,257.01	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		1,157.52	Meter	1.00	1,157.52	0.00	0.00	0.00	1,157.52	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		185.20	Each	25.00	4,630.08	0.00	0.00	0.00	4,630.08	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,157.52	Kilogram	0.50	578.76	0.00	0.00	0.00	578.76	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,157.52	Each	1.58	1,828.88	0.00	0.00	0.00	1,828.88	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	2,061.77	2,061.77	0.00	0.00	0.00	2,061.77	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.2.2	Equipment Operating	Detail	1,157.52	Meter	6.45	7,468.29	0.00	7,468.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	157.19 Each	47.51	7,468.29	0.00	7,468.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.3	Drop Raise Drilling	Detail	65,955.00	Tonne	0.70	46,032.88	0.00	11,491.51	0.00	34,541.37	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.3.1	Materials	Detail	1,497.33	Meter	23.07	34,541.37	0.00	0.00	0.00	34,541.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	34,541.37	34,541.37	0.00	0.00	0.00	34,541.37	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.3.2	Equipment Operating	Detail	1,497.33	Meter	7.67	11,491.51	0.00	11,491.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	241.88 Each	47.51	11,491.51	0.00	11,491.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.4	Drilling	Detail	65,955.00	Tonne	2.68	177,022.87	0.00	38,689.72	0.00	138,333.15	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.2.2.4.1	Materials	Detail	5,996.57	Meter	23.07	138,333.15	0.00	0.00	0.00	138,333.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	138,333.15	138,333.15	0.00	0.00	0.00	138,333.15	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.4.2	Equipment Operating	Detail	5,996.57	Meter	6.45	38,689.72	0.00	38,689.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	814.35 Each	47.51	38,689.72	0.00	38,689.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.5	Blasting	Detail	65,955.00	Tonne	1.03	68,021.78	0.00	0.00	0.00	206.68	67,815.10	0.00	0.00	0.00	0.00
1.7.2.4.2.2.5.1	Materials	Detail	65,955.00	Tonne	1.03	68,021.78	0.00	0.00	0.00	206.68	67,815.10	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		61,172.28	Kilogram	1.01	61,784.00	0.00	0.00	0.00	0.00	61,784.00	0.00	0.00	0.00	0.00
SUEX10016	Booster		170.81	Each	1.21	206.68	0.00	0.00	0.00	206.68	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		181.71	Meter	0.29	52.70	0.00	0.00	0.00	0.00	52.70	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		170.81	Each	35.00	5,978.40	0.00	0.00	0.00	0.00	5,978.40	0.00	0.00	0.00	0.00
1.7.2.4.2.2.5.2	Equipment Operating	Detail	1.00	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.6	Mucking	Detail	65,955.00	Tonne	3.38	222,846.12	0.00	222,846.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	1,846.74 Each	120.67	222,846.12	0.00	222,846.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.2.2.7	Backfill	Detail	36,114.00	Tonne	12.25	442,396.56	0.00	0.00	0.00	442,396.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		36,114.00	Tonne	12.25	442,396.56	0.00	0.00	0.00	442,396.56	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3	305 Sub Level - UC	Detail	17,446.00	Tonne	32.62	569,008.41	281,708.17	129,984.21	0.00	126,658.55	30,657.48	0.00	0.00	0.00	0.00
1.7.2.4.3.1	Haulage - Mining Block 4 (305L to 410L)	Detail	17,446.00	Tonne	5.94	103,663.61	34,113.64	67,027.01	0.00	2,522.96	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3.1.1	Truck Haulage Labour	Detail	17,446.00	Tonne	2.10	36,636.60	34,113.64	0.00	0.00	2,522.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	671.00 Each	54.60	36,636.60	34,113.64	0.00	0.00	2,522.96	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.3.1.2	Truck Haulage Equipment	Detail	17,446.00	Tonne	3.84	67,027.01	0.00	67,027.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	447.56 Each	149.76	67,027.01	0.00	67,027.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3.2	4 x 4.5 Ore Development - 4 m/day	Detail	211.00	Meter	2,088.86	440,749.02	247,594.53	62,957.19	0.00	99,539.81	30,657.48	0.00	0.00	0.00	0.00
1.7.2.4.3.2.1	Labour	Detail	211.00	Meter	1,245.09	262,713.99	247,594.53	0.00	0.00	15,119.46	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,107.75 Each	67.82	75,127.61	70,962.47	0.00	0.00	4,165.14	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,215.50 Each	64.09	141,991.40	133,661.12	0.00	0.00	8,330.28	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3.2.2	Materials	Detail	211.00	Meter	545.39	115,077.83	0.00	0.00	0.00	84,420.36	30,657.48	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		211.00	Meter	50.00	10,550.00	0.00	0.00	0.00	10,550.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,973.65	2,973.65	0.00	0.00	0.00	675.65	2,298.00	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,973.65	2,973.65	0.00	0.00	0.00	675.65	2,298.00	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	15,977.43	15,977.43	0.00	0.00	0.00	15,977.43	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	9,865.54	4,932.77	0.00	0.00	0.00	4,932.77	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	26,061.48	26,061.48	0.00	0.00	0.00	0.00	26,061.48	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	658.05	49,353.87	0.00	0.00	0.00	49,353.87	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	375.83	2,255.00	0.00	0.00	0.00	2,255.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3.2.3	Equipment Operating	Detail	211.00	Meter	298.38	62,957.19	0.00	62,957.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	156.98 Each	120.67	18,943.26	0.00	18,943.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	200.66 Each	33.57	6,736.19	0.00	6,736.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	201.93 Each	184.61	37,277.74	0.00	37,277.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.3.3	Backfill Pipe	Detail	211.00	Meter	116.57	24,595.78	0.00	0.00	0.00	24,595.78	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	21,387.63	24,595.78	0.00	0.00	0.00	24,595.78	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4	Stoping 340 L Block	Detail	113,860.00	Tonne	26.62	3,030,429.29	856,131.04	921,674.36	0.00	1,135,552.75	117,071.14	0.00	0.00	0.00	0.00
1.7.2.4.4.1	Haulage - Mining Block 4 (305L to 410L)	Detail	113,860.00	Tonne	5.94	676,552.73	222,640.09	437,446.73	0.00	16,465.91	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.4.1.1	Truck Haulage Labour	Detail	113,860.00	Tonne	2.10	239,106.00	222,640.09	0.00	0.00	16,465.91	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	4,379.23 Each	54.60	239,106.00	222,640.09	0.00	0.00	16,465.91	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.1.2	Truck Haulage Equipment	Detail	113,860.00	Tonne	3.84	437,446.73	0.00	437,446.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	2,920.99 Each	149.76	437,446.73	0.00	437,446.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2	Blasthole Mining - Lower Sulfide	Detail	113,860.00	Tonne	20.67	2,353,876.55	633,490.95	484,227.63	0.00	1,119,086.84	117,071.14	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1	Labour	Detail	113,860.00	Tonne	5.91	672,353.98	633,490.95	0.00	0.00	38,863.04	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.1	Cable Labour	Detail	113,860.00	Tonne	0.09	10,713.13	10,096.58	0.00	0.00	616.55	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.1.1	Drilling	Detail	45.17	Hour	77.55	3,503.08	3,297.57	0.00	0.00	205.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	45.17 Each	64.09	2,895.11	2,725.26	0.00	0.00	169.85	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.1.2	Install & Grout	Detail	45.17	Hour	159.61	7,210.05	6,799.01	0.00	0.00	411.03	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	45.17 Each	64.09	2,895.11	2,725.26	0.00	0.00	169.85	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	45.17 Each	67.82	3,063.60	2,893.76	0.00	0.00	169.85	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.2	Drop Raise Labour	Detail	113,860.00	Tonne	0.42	48,113.98	45,309.53	0.00	0.00	2,804.45	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.2.1	Drill	Detail	478.39	Hour	77.55	37,098.63	34,922.15	0.00	0.00	2,176.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	478.39 Each	64.09	30,660.03	28,861.28	0.00	0.00	1,798.75	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.2.2	Blast	Detail	69.01	Hour	159.61	11,015.35	10,387.38	0.00	0.00	627.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	69.01 Each	64.09	4,423.09	4,163.59	0.00	0.00	259.49	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	69.01 Each	67.82	4,680.51	4,421.02	0.00	0.00	259.49	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.4.2.1.3	Drilling Labour	Detail	10,352.05	Meter	1.66	17,136.96	16,143.15	0.00	0.00	993.81	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	174.75 Each	64.09	11,199.86	10,542.79	0.00	0.00	657.07	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	43.69 Each	67.82	2,962.92	2,798.65	0.00	0.00	164.27	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.4	Mucking Labour	Detail	113,860.00	Tonne	2.17	247,232.10	232,727.61	0.00	0.00	14,504.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	3,188.08 Each	64.09	204,324.05	192,336.87	0.00	0.00	11,987.18	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.5	Production Loading Labour	Detail	113,860.00	Tonne	1.00	114,159.05	107,651.01	0.00	0.00	6,508.04	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.5.1	Slot Blast	Detail	112.93	Hour	159.61	18,025.11	16,997.53	0.00	0.00	1,027.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	112.93 Each	64.09	7,237.78	6,813.15	0.00	0.00	424.62	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	112.93 Each	67.82	7,659.01	7,234.39	0.00	0.00	424.62	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.5.2	Void Blast	Detail	188.22	Hour	159.61	30,041.86	28,329.21	0.00	0.00	1,712.64	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	188.22 Each	64.09	12,062.96	11,355.26	0.00	0.00	707.70	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	188.22 Each	67.82	12,765.02	12,057.31	0.00	0.00	707.70	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.5.3	Final Blast	Detail	414.08	Hour	159.61	66,092.08	62,324.27	0.00	0.00	3,767.81	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	414.08 Each	64.09	26,538.51	24,981.57	0.00	0.00	1,556.95	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	414.08 Each	67.82	28,083.04	26,526.09	0.00	0.00	1,556.95	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.6	Filling Labour	Detail	113,860.00	Tonne	2.06	234,998.77	221,563.08	0.00	0.00	13,435.69	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.1.6.1	Fill Prep	Detail	301.15	Hour	237.16	71,420.86	67,310.52	0.00	0.00	4,110.34	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	602.30 Each	64.09	38,601.48	36,336.82	0.00	0.00	2,264.65	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	301.15 Each	67.82	20,424.03	19,291.70	0.00	0.00	1,132.33	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.4.2.1.6.2	Pour Time	Detail	1,024.85	Hour	159.61	163,577.90	154,252.56	0.00	0.00	9,325.34	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,024.85 Each	64.09	65,682.82	61,829.38	0.00	0.00	3,853.45	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,024.85 Each	67.82	69,505.53	65,652.08	0.00	0.00	3,853.45	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.2	Cable Bolting	Detail	113,860.00	Tonne	0.27	30,599.70	0.00	12,892.72	0.00	17,706.98	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.2.1	Materials	Detail	1,998.26	Meter	8.86	17,706.98	0.00	0.00	0.00	17,706.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		1,998.26	Meter	1.00	1,998.26	0.00	0.00	0.00	1,998.26	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		319.72	Each	25.00	7,993.04	0.00	0.00	0.00	7,993.04	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,998.26	Kilogram	0.50	999.13	0.00	0.00	0.00	999.13	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,998.26	Each	1.58	3,157.25	0.00	0.00	0.00	3,157.25	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	3,559.30	3,559.30	0.00	0.00	0.00	3,559.30	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.2.2	Equipment Operating	Detail	1,998.26	Meter	6.45	12,892.72	0.00	12,892.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	271.37 Each	47.51	12,892.72	0.00	12,892.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.3	Drop Raise Drilling	Detail	113,860.00	Tonne	0.70	79,467.87	0.00	19,838.12	0.00	59,629.75	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.3.1	Materials	Detail	2,584.88	Meter	23.07	59,629.75	0.00	0.00	0.00	59,629.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	59,629.75	59,629.75	0.00	0.00	0.00	59,629.75	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.3.2	Equipment Operating	Detail	2,584.88	Meter	7.67	19,838.12	0.00	19,838.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	417.56 Each	47.51	19,838.12	0.00	19,838.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.4	Drilling	Detail	113,860.00	Tonne	2.68	305,599.63	0.00	66,791.17	0.00	238,808.46	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.4.1	Materials	Detail	10,352.05	Meter	23.07	238,808.46	0.00	0.00	0.00	238,808.46	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	238,808.46	238,808.46	0.00	0.00	0.00	238,808.46	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.4.2.4.2	Equipment Operating	Detail	10,352.05	Meter	6.45	66,791.17	0.00	66,791.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,405.83 Each	47.51	66,791.17	0.00	66,791.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.5	Blasting	Detail	113,860.00	Tonne	1.03	117,427.94	0.00	0.00	0.00	356.80	117,071.14	0.00	0.00	0.00	0.00
1.7.2.4.4.2.5.1	Materials	Detail	113,860.00	Tonne	1.03	117,427.94	0.00	0.00	0.00	356.80	117,071.14	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		105,603.46	Kilogram	1.01	106,659.49	0.00	0.00	0.00	0.00	106,659.49	0.00	0.00	0.00	0.00
SUEX10016	Booster		294.88	Each	1.21	356.80	0.00	0.00	0.00	356.80	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		313.70	Meter	0.29	90.97	0.00	0.00	0.00	0.00	90.97	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		294.88	Each	35.00	10,320.68	0.00	0.00	0.00	0.00	10,320.68	0.00	0.00	0.00	0.00
1.7.2.4.4.2.5.2	Equipment Operating	Detail	1.73	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.6	Mucking	Detail	113,860.00	Tonne	3.38	384,705.61	0.00	384,705.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	3,188.08 Each	120.67	384,705.61	0.00	384,705.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.4.2.7	Backfill	Detail	62,344.63	Tonne	12.25	763,721.81	0.00	0.00	0.00	763,721.81	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		62,344.64	Tonne	12.25	763,721.81	0.00	0.00	0.00	763,721.81	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5	340 Sub Level - UC	Detail	20,007.00	Tonne	28.54	570,993.24	279,675.31	138,033.24	0.00	123,498.99	29,785.70	0.00	0.00	0.00	0.00
1.7.2.4.5.1	Haulage - Mining Block 4 (305L to 410L)	Detail	20,007.00	Tonne	5.94	118,881.00	39,121.38	76,866.30	0.00	2,893.32	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5.1.1	Truck Haulage Labour	Detail	20,007.00	Tonne	2.10	42,014.70	39,121.38	0.00	0.00	2,893.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	769.50 Each	54.60	42,014.70	39,121.38	0.00	0.00	2,893.32	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5.1.2	Truck Haulage Equipment	Detail	20,007.00	Tonne	3.84	76,866.30	0.00	76,866.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	513.26 Each	149.76	76,866.30	0.00	76,866.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.5.2	4 x 4.5 Ore Development - 4 m/day	Detail	205.00	Meter	2,088.86	428,215.87	240,553.93	61,166.94	0.00	96,709.30	29,785.70	0.00	0.00	0.00	0.00
1.7.2.4.5.2.1	Labour	Detail	205.00	Meter	1,245.09	255,243.45	240,553.93	0.00	0.00	14,689.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,076.25 Each	67.82	72,991.28	68,944.58	0.00	0.00	4,046.70	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,152.50 Each	64.09	137,953.73	129,860.33	0.00	0.00	8,093.40	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5.2.2	Materials	Detail	205.00	Meter	545.39	111,805.48	0.00	0.00	0.00	82,019.78	29,785.70	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		205.00	Meter	50.00	10,250.00	0.00	0.00	0.00	10,250.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,889.09	2,889.09	0.00	0.00	0.00	656.43	2,232.66	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,889.09	2,889.09	0.00	0.00	0.00	656.43	2,232.66	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	15,523.09	15,523.09	0.00	0.00	0.00	15,523.09	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	9,585.01	4,792.50	0.00	0.00	0.00	4,792.50	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	25,320.39	25,320.39	0.00	0.00	0.00	0.00	25,320.39	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	639.34	47,950.44	0.00	0.00	0.00	47,950.44	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	365.15	2,190.88	0.00	0.00	0.00	2,190.88	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5.2.3	Equipment Operating	Detail	205.00	Meter	298.38	61,166.94	0.00	61,166.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	152.52 Each	120.67	18,404.59	0.00	18,404.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	194.95 Each	33.57	6,544.64	0.00	6,544.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	196.19 Each	184.61	36,217.71	0.00	36,217.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.5.3	Backfill Pipe	Detail	205.00	Meter	116.57	23,896.37	0.00	0.00	0.00	23,896.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	20,779.46	23,896.37	0.00	0.00	0.00	23,896.37	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6	Stoping 375 L Block	Detail	139,381.00	Tonne	26.62	3,709,680.87	1,048,027.40	1,128,261.85	0.00	1,390,079.72	143,311.90	0.00	0.00	0.00	0.00
1.7.2.4.6.1	Haulage - Mining Block 4 (305L to 410L)	Detail	139,381.00	Tonne	5.94	828,197.75	272,543.46	535,497.65	0.00	20,156.64	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.1.1	Truck Haulage Labour	Detail	139,381.00	Tonne	2.10	292,700.10	272,543.46	0.00	0.00	20,156.64	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	5,360.81 Each	54.60	292,700.10	272,543.46	0.00	0.00	20,156.64	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.6.1.2	Truck Haulage Equipment	Detail	139,381.00	Tonne	3.84	535,497.65	0.00	535,497.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEMH1000	45 Tonne Truck		1.00	3,575.71 Each	149.76	535,497.65	0.00	535,497.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2	Blasthole Mining - Lower Sulfide	Detail	139,381.00	Tonne	20.67	2,881,483.12	775,483.94	592,764.19	0.00	1,369,923.09	143,311.90	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1	Labour	Detail	139,381.00	Tonne	5.91	823,057.88	775,483.94	0.00	0.00	47,573.94	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.1	Cable Labour	Detail	139,381.00	Tonne	0.09	13,114.41	12,359.66	0.00	0.00	754.75	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.1.1	Drilling	Detail	55.30	Hour	77.55	4,288.28	4,036.70	0.00	0.00	251.58	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	55.30 Each	64.09	3,544.03	3,336.11	0.00	0.00	207.92	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.1.2	Install & Grout	Detail	55.30	Hour	159.61	8,826.13	8,322.97	0.00	0.00	503.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	55.30 Each	64.09	3,544.03	3,336.11	0.00	0.00	207.92	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	55.30 Each	67.82	3,750.29	3,542.37	0.00	0.00	207.92	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.2	Drop Raise Labour	Detail	139,381.00	Tonne	0.42	58,898.42	55,465.37	0.00	0.00	3,433.05	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.2.1	Drill	Detail	585.62	Hour	77.55	45,414.06	42,749.73	0.00	0.00	2,664.33	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	585.62 Each	64.09	37,532.28	35,330.35	0.00	0.00	2,201.92	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.2.2	Blast	Detail	84.48	Hour	159.61	13,484.37	12,715.64	0.00	0.00	768.72	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	84.48 Each	64.09	5,414.49	5,096.84	0.00	0.00	317.65	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	84.48 Each	67.82	5,729.61	5,411.96	0.00	0.00	317.65	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.3	Drilling Labour	Detail	12,672.40	Meter	1.66	20,978.10	19,761.53	0.00	0.00	1,216.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	213.92 Each	64.09	13,710.23	12,905.89	0.00	0.00	804.35	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	53.48 Each	67.82	3,627.04	3,425.95	0.00	0.00	201.09	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.6.2.1.4	Mucking Labour	Detail	139,381.00	Tonne	2.17	302,647.61	284,892.03	0.00	0.00	17,755.58	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	3,902.67 Each	64.09	250,121.99	235,447.96	0.00	0.00	14,674.03	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.5	Production Loading Labour	Detail	139,381.00	Tonne	1.00	139,747.08	131,780.30	0.00	0.00	7,966.78	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.5.1	Slot Blast	Detail	138.24	Hour	159.61	22,065.33	20,807.42	0.00	0.00	1,257.91	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	138.24 Each	64.09	8,860.08	8,340.28	0.00	0.00	519.80	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	138.24 Each	67.82	9,375.73	8,855.93	0.00	0.00	519.80	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.5.2	Void Blast	Detail	230.41	Hour	159.61	36,775.55	34,679.03	0.00	0.00	2,096.52	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	230.41 Each	64.09	14,766.80	13,900.47	0.00	0.00	866.33	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	230.41 Each	67.82	15,626.22	14,759.89	0.00	0.00	866.33	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.5.3	Final Blast	Detail	506.90	Hour	159.61	80,906.21	76,293.86	0.00	0.00	4,612.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	506.90 Each	64.09	32,486.96	30,581.03	0.00	0.00	1,905.93	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	506.90 Each	67.82	34,377.68	32,471.75	0.00	0.00	1,905.93	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.6	Filling Labour	Detail	139,381.00	Tonne	2.06	287,672.26	271,225.05	0.00	0.00	16,447.21	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.6.1	Fill Prep	Detail	368.65	Hour	237.16	87,429.40	82,397.75	0.00	0.00	5,031.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	737.30 Each	64.09	47,253.75	44,481.49	0.00	0.00	2,772.26	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	368.65 Each	67.82	25,001.95	23,615.82	0.00	0.00	1,386.13	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.1.6.2	Pour Time	Detail	1,254.57	Hour	159.61	200,242.86	188,827.30	0.00	0.00	11,415.56	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,254.57 Each	64.09	80,405.21	75,688.04	0.00	0.00	4,717.17	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,254.57 Each	67.82	85,084.75	80,367.58	0.00	0.00	4,717.17	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.2	Cable Bolting	Detail	139,381.00	Tonne	0.27	37,458.42	0.00	15,782.54	0.00	21,675.88	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.6.2.2.1	Materials	Detail	2,446.16	Meter	8.86	21,675.88	0.00	0.00	0.00	21,675.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		2,446.16	Meter	1.00	2,446.16	0.00	0.00	0.00	2,446.16	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		391.39	Each	25.00	9,784.63	0.00	0.00	0.00	9,784.63	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,446.16	Kilogram	0.50	1,223.08	0.00	0.00	0.00	1,223.08	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,446.16	Each	1.58	3,864.93	0.00	0.00	0.00	3,864.93	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	4,357.09	4,357.09	0.00	0.00	0.00	4,357.09	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.2.2	Equipment Operating	Detail	2,446.16	Meter	6.45	15,782.54	0.00	15,782.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	332.19 Each	47.51	15,782.54	0.00	15,782.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.3	Drop Raise Drilling	Detail	139,381.00	Tonne	0.70	97,280.10	0.00	24,284.71	0.00	72,995.38	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.3.1	Materials	Detail	3,164.26	Meter	23.07	72,995.38	0.00	0.00	0.00	72,995.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	72,995.38	72,995.38	0.00	0.00	0.00	72,995.38	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.3.2	Equipment Operating	Detail	3,164.26	Meter	7.67	24,284.71	0.00	24,284.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	511.15 Each	47.51	24,284.71	0.00	24,284.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.4	Drilling	Detail	139,381.00	Tonne	2.68	374,097.86	0.00	81,761.99	0.00	292,335.87	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.4.1	Materials	Detail	12,672.40	Meter	23.07	292,335.87	0.00	0.00	0.00	292,335.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	292,335.87	292,335.87	0.00	0.00	0.00	292,335.87	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.4.2	Equipment Operating	Detail	12,672.40	Meter	6.45	81,761.99	0.00	81,761.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,720.94 Each	47.51	81,761.99	0.00	81,761.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.5	Blasting	Detail	139,381.00	Tonne	1.03	143,748.68	0.00	0.00	0.00	436.78	143,311.90	0.00	0.00	0.00	0.00

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1.7.2.4.6.2.5.1	Materials	Detail	139,381.00	Tonne	1.03	143,748.68	0.00	0.00	0.00	436.78	143,311.90	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		129,273.80	Kilogram	1.01	130,566.54	0.00	0.00	0.00	0.00	130,566.54	0.00	0.00	0.00	0.00
SUEX10016	Booster		360.97	Each	1.21	436.78	0.00	0.00	0.00	436.78	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		384.01	Meter	0.29	111.36	0.00	0.00	0.00	0.00	111.36	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		360.97	Each	35.00	12,634.00	0.00	0.00	0.00	0.00	12,634.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.5.2	Equipment Operating	Detail	2.11	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.6	Mucking	Detail	139,381.00	Tonne	3.38	470,934.95	0.00	470,934.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	3,902.67 Each	120.67	470,934.95	0.00	470,934.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.6.2.7	Backfill	Detail	76,318.78	Tonne	12.25	934,905.24	0.00	0.00	0.00	934,905.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		76,318.79	Tonne	12.25	934,905.24	0.00	0.00	0.00	934,905.24	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7	375 Sub Level - UC	Detail	20,919.00	Tonne	27.87	583,028.59	284,978.92	142,432.24	0.00	125,395.84	30,221.59	0.00	0.00	0.00	0.00
1.7.2.4.7.1	Haulage - Mining Block 4 (305L to 410L)	Detail	20,919.00	Tonne	5.94	124,300.08	40,904.69	80,370.18	0.00	3,025.21	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7.1.1	Truck Haulage Labour	Detail	20,919.00	Tonne	2.10	43,929.90	40,904.69	0.00	0.00	3,025.21	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	804.58 Each	54.60	43,929.90	40,904.69	0.00	0.00	3,025.21	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7.1.2	Truck Haulage Equipment	Detail	20,919.00	Tonne	3.84	80,370.18	0.00	80,370.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	536.66 Each	149.76	80,370.18	0.00	80,370.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7.2	4 x 4.5 Ore Development - 4 m/day	Detail	208.00	Meter	2,088.86	434,482.44	244,074.23	62,062.07	0.00	98,124.56	30,221.59	0.00	0.00	0.00	0.00
1.7.2.4.7.2.1	Labour	Detail	208.00	Meter	1,245.09	258,978.72	244,074.23	0.00	0.00	14,904.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	1,092.00 Each	67.82	74,059.44	69,953.52	0.00	0.00	4,105.92	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	2,184.00 Each	64.09	139,972.56	131,760.72	0.00	0.00	8,211.84	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.7.2.2	Materials	Detail	208.00	Meter	545.39	113,441.65	0.00	0.00	0.00	83,220.07	30,221.59	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		208.00	Meter	50.00	10,400.00	0.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,931.37	2,931.37	0.00	0.00	0.00	666.04	2,265.33	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,931.37	2,931.37	0.00	0.00	0.00	666.04	2,265.33	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	15,750.26	15,750.26	0.00	0.00	0.00	15,750.26	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	9,725.28	4,862.64	0.00	0.00	0.00	4,862.64	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	25,690.93	25,690.93	0.00	0.00	0.00	0.00	25,690.93	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	648.70	48,652.15	0.00	0.00	0.00	48,652.15	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	370.49	2,222.94	0.00	0.00	0.00	2,222.94	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7.2.3	Equipment Operating	Detail	208.00	Meter	298.38	62,062.07	0.00	62,062.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	154.75 Each	120.67	18,673.92	0.00	18,673.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	197.81 Each	33.57	6,640.41	0.00	6,640.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	199.06 Each	184.61	36,747.73	0.00	36,747.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.7.3	Backfill Pipe	Detail	208.00	Meter	116.57	24,246.08	0.00	0.00	0.00	24,246.08	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	21,083.55	24,246.08	0.00	0.00	0.00	24,246.08	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8	410 Level - UC	Detail	17,849.00	Tonne	26.08	465,542.59	226,171.37	117,210.50	0.00	98,477.46	23,683.26	0.00	0.00	0.00	0.00
1.7.2.4.8.1	Haulage - Mining Block 4 (305L to 410L)	Detail	17,849.00	Tonne	5.94	106,058.23	34,901.66	68,575.33	0.00	2,581.24	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.1.1	Truck Haulage Labour	Detail	17,849.00	Tonne	2.10	37,482.90	34,901.66	0.00	0.00	2,581.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	686.50 Each	54.60	37,482.90	34,901.66	0.00	0.00	2,581.24	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.1.2	Truck Haulage Equipment	Detail	17,849.00	Tonne	3.84	68,575.33	0.00	68,575.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	457.90 Each	149.76	68,575.33	0.00	68,575.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.2	4 x 4.5 Ore Development - 4 m/day	Detail	163.00	Meter	2,088.86	340,483.84	191,269.71	48,635.18	0.00	76,895.69	23,683.26	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.8.2.1	Labour	Detail	163.00	Meter	1,245.09	202,949.67	191,269.71	0.00	0.00	11,679.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	855.75 Each	67.82	58,036.97	54,819.35	0.00	0.00	3,217.62	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,711.50 Each	64.09	109,690.04	103,254.80	0.00	0.00	6,435.24	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.2.2	Materials	Detail	163.00	Meter	545.39	88,898.99	0.00	0.00	0.00	65,215.72	23,683.26	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		163.00	Meter	50.00	8,150.00	0.00	0.00	0.00	8,150.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,297.18	2,297.18	0.00	0.00	0.00	521.94	1,775.23	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,297.18	2,297.18	0.00	0.00	0.00	521.94	1,775.23	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	12,342.75	12,342.75	0.00	0.00	0.00	12,342.75	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,621.25	3,810.62	0.00	0.00	0.00	3,810.62	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	20,132.80	20,132.80	0.00	0.00	0.00	0.00	20,132.80	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	508.35	38,126.45	0.00	0.00	0.00	38,126.45	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	290.34	1,742.01	0.00	0.00	0.00	1,742.01	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.2.3	Equipment Operating	Detail	163.00	Meter	298.38	48,635.18	0.00	48,635.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	121.27 Each	120.67	14,633.89	0.00	14,633.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	155.01 Each	33.57	5,203.79	0.00	5,203.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	155.99 Each	184.61	28,797.50	0.00	28,797.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.8.3	Backfill Pipe	Detail	163.00	Meter	116.57	19,000.53	0.00	0.00	0.00	19,000.53	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	16,522.20	19,000.53	0.00	0.00	0.00	19,000.53	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9	Stoping 410 L Block	Detail	130,316.00	Tonne	26.62	3,468,412.29	979,866.26	1,054,882.45	0.00	1,299,672.33	133,991.24	0.00	0.00	0.00	0.00
1.7.2.4.9.1	Haulage - Mining Block 4 (305L to 410L)	Detail	130,316.00	Tonne	5.94	774,333.79	254,817.90	500,670.19	0.00	18,845.70	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.1.1	Truck Haulage Labour	Detail	130,316.00	Tonne	2.10	273,663.60	254,817.90	0.00	0.00	18,845.70	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	5,012.15 Each	54.60	273,663.60	254,817.90	0.00	0.00	18,845.70	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.9.1.2	Truck Haulage Equipment	Detail	130,316.00	Tonne	3.84	500,670.19	0.00	500,670.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	3,343.15 Each	149.76	500,670.19	0.00	500,670.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2	Blasthole Mining - Lower Sulfide	Detail	130,316.00	Tonne	20.67	2,694,078.49	725,048.36	554,212.26	0.00	1,280,826.63	133,991.24	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1	Labour	Detail	130,316.00	Tonne	5.91	769,528.21	725,048.36	0.00	0.00	44,479.85	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.1	Cable Labour	Detail	130,316.00	Tonne	0.09	12,261.48	11,555.82	0.00	0.00	705.66	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.1.1	Drilling	Detail	51.70	Hour	77.55	4,009.38	3,774.16	0.00	0.00	235.22	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	51.70 Each	64.09	3,313.54	3,119.14	0.00	0.00	194.40	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.1.2	Install & Grout	Detail	51.70	Hour	159.61	8,252.10	7,781.66	0.00	0.00	470.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	51.70 Each	64.09	3,313.54	3,119.14	0.00	0.00	194.40	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	51.70 Each	67.82	3,506.38	3,311.99	0.00	0.00	194.40	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.2	Drop Raise Labour	Detail	130,316.00	Tonne	0.42	55,067.81	51,858.04	0.00	0.00	3,209.78	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.2.1	Drill	Detail	547.53	Hour	77.55	42,460.44	39,969.39	0.00	0.00	2,491.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	547.53 Each	64.09	35,091.27	33,032.55	0.00	0.00	2,058.72	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.2.2	Blast	Detail	78.99	Hour	159.61	12,607.38	11,888.65	0.00	0.00	718.73	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	78.99 Each	64.09	5,062.35	4,765.35	0.00	0.00	297.00	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	78.99 Each	67.82	5,356.97	5,059.98	0.00	0.00	297.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.3	Drilling Labour	Detail	11,848.21	Meter	1.66	19,613.74	18,476.29	0.00	0.00	1,137.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	200.01 Each	64.09	12,818.55	12,066.52	0.00	0.00	752.03	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	50.00 Each	67.82	3,391.15	3,203.14	0.00	0.00	188.01	0.00	0.00	0.00	0.00	0.00

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1.7.2.4.9.2.1.4	Mucking Labour	Detail	130,316.00	Tonne	2.17	282,964.15	266,363.35	0.00	0.00	16,600.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	3,648.85 Each	64.09	233,854.67	220,135.00	0.00	0.00	13,719.67	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.5	Production Loading Labour	Detail	130,316.00	Tonne	1.00	130,658.27	123,209.63	0.00	0.00	7,448.64	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.5.1	Slot Blast	Detail	129.25	Hour	159.61	20,630.25	19,454.15	0.00	0.00	1,176.10	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	129.25 Each	64.09	8,283.84	7,797.85	0.00	0.00	485.99	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	129.25 Each	67.82	8,765.96	8,279.96	0.00	0.00	485.99	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.5.2	Void Blast	Detail	215.42	Hour	159.61	34,383.76	32,423.59	0.00	0.00	1,960.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	215.42 Each	64.09	13,806.40	12,996.41	0.00	0.00	809.99	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	215.42 Each	67.82	14,609.93	13,799.94	0.00	0.00	809.99	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.5.3	Final Blast	Detail	473.93	Hour	159.61	75,644.26	71,331.89	0.00	0.00	4,312.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	473.93 Each	64.09	30,374.08	28,592.11	0.00	0.00	1,781.97	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	473.93 Each	67.82	32,141.84	30,359.87	0.00	0.00	1,781.97	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.6	Filling Labour	Detail	130,316.00	Tonne	2.06	268,962.75	253,585.23	0.00	0.00	15,377.52	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.6.1	Fill Prep	Detail	344.68	Hour	237.16	81,743.20	77,038.80	0.00	0.00	4,704.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	689.35 Each	64.09	44,180.48	41,588.53	0.00	0.00	2,591.96	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	344.68 Each	67.82	23,375.88	22,079.90	0.00	0.00	1,295.98	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.1.6.2	Pour Time	Detail	1,172.97	Hour	159.61	187,219.55	176,546.43	0.00	0.00	10,673.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,172.97 Each	64.09	75,175.86	70,765.48	0.00	0.00	4,410.38	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,172.97 Each	67.82	79,551.05	75,140.67	0.00	0.00	4,410.38	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.2	Cable Bolting	Detail	130,316.00	Tonne	0.27	35,022.22	0.00	14,756.08	0.00	20,266.14	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.4.9.2.2.1	Materials	Detail	2,287.06	Meter	8.86	20,266.14	0.00	0.00	0.00	20,266.14	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		2,287.06	Meter	1.00	2,287.06	0.00	0.00	0.00	2,287.06	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		365.93	Each	25.00	9,148.26	0.00	0.00	0.00	9,148.26	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,287.06	Kilogram	0.50	1,143.53	0.00	0.00	0.00	1,143.53	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,287.06	Each	1.58	3,613.56	0.00	0.00	0.00	3,613.56	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	4,073.72	4,073.72	0.00	0.00	0.00	4,073.72	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.2.2	Equipment Operating	Detail	2,287.06	Meter	6.45	14,756.08	0.00	14,756.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	310.59 Each	47.51	14,756.08	0.00	14,756.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.3	Drop Raise Drilling	Detail	130,316.00	Tonne	0.70	90,953.24	0.00	22,705.30	0.00	68,247.94	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.3.1	Materials	Detail	2,958.46	Meter	23.07	68,247.94	0.00	0.00	0.00	68,247.94	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	68,247.94	68,247.94	0.00	0.00	0.00	68,247.94	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.3.2	Equipment Operating	Detail	2,958.46	Meter	7.67	22,705.30	0.00	22,705.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	477.91 Each	47.51	22,705.30	0.00	22,705.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.4	Drilling	Detail	130,316.00	Tonne	2.68	349,767.45	0.00	76,444.39	0.00	273,323.06	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.4.1	Materials	Detail	11,848.21	Meter	23.07	273,323.06	0.00	0.00	0.00	273,323.06	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	273,323.06	273,323.06	0.00	0.00	0.00	273,323.06	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.4.2	Equipment Operating	Detail	11,848.21	Meter	6.45	76,444.39	0.00	76,444.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,609.02 Each	47.51	76,444.39	0.00	76,444.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.5	Blasting	Detail	130,316.00	Tonne	1.03	134,399.61	0.00	0.00	0.00	408.37	133,991.24	0.00	0.00	0.00	0.00

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1.7.2.4.9.2.5.1	Materials	Detail	130,316.00	Tonne	1.03	134,399.61	0.00	0.00	0.00	408.37	133,991.24	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		120,866.15	Kilogram	1.01	122,074.81	0.00	0.00	0.00	0.00	122,074.81	0.00	0.00	0.00	0.00
SUEX10016	Booster		337.49	Each	1.21	408.37	0.00	0.00	0.00	408.37	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		359.04	Meter	0.29	104.12	0.00	0.00	0.00	0.00	104.12	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		337.49	Each	35.00	11,812.31	0.00	0.00	0.00	0.00	11,812.31	0.00	0.00	0.00	0.00
1.7.2.4.9.2.5.2	Equipment Operating	Detail	1.98	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.6	Mucking	Detail	130,316.00	Tonne	3.38	440,306.49	0.00	440,306.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	3,648.85 Each	120.67	440,306.49	0.00	440,306.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.4.9.2.7	Backfill	Detail	71,355.20	Tonne	12.25	874,101.28	0.00	0.00	0.00	874,101.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		71,355.21	Tonne	12.25	874,101.28	0.00	0.00	0.00	874,101.28	0.00	0.00	0.00	0.00	0.00
1.7.2.5	550 Block	Detail	1.00	LS	18,456,893.55	18,456,893.55	5,774,803.02	5,937,366.94	0.00	6,052,641.20	692,082.39	0.00	0.00	0.00	0.00
1.7.2.5.1	445 Sub Level - OC	Detail	18,052.00	Tonne	28.46	513,735.11	244,259.22	142,743.28	0.00	102,322.87	24,409.74	0.00	0.00	0.00	0.00
1.7.2.5.1.1	Haulage - Mining Block 5 (445L to 550L)	Detail	18,052.00	Tonne	7.93	143,223.61	47,122.34	92,616.22	0.00	3,485.05	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.1.1	Truck Haulage Labour	Detail	18,052.00	Tonne	2.80	50,607.39	47,122.34	0.00	0.00	3,485.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	926.88 Each	54.60	50,607.39	47,122.34	0.00	0.00	3,485.05	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.1.2	Truck Haulage Equipment	Detail	18,052.00	Tonne	5.13	92,616.22	0.00	92,616.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	618.43 Each	149.76	92,616.22	0.00	92,616.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.2	4 x 4.5 Ore Development - 4 m/day	Detail	168.00	Meter	2,088.86	350,928.13	197,136.88	50,127.05	0.00	79,254.45	24,409.74	0.00	0.00	0.00	0.00

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1.7.2.5.1.2.1	Labour	Detail	168.00	Meter	1,245.09	209,175.12	197,136.88	0.00	0.00	12,038.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	882.00 Each	67.82	59,817.24	56,500.92	0.00	0.00	3,316.32	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,764.00 Each	64.09	113,054.76	106,422.12	0.00	0.00	6,632.64	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.2.2	Materials	Detail	168.00	Meter	545.39	91,625.95	0.00	0.00	0.00	67,216.21	24,409.74	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		168.00	Meter	50.00	8,400.00	0.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,367.64	2,367.64	0.00	0.00	0.00	537.96	1,829.69	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,367.64	2,367.64	0.00	0.00	0.00	537.96	1,829.69	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	12,721.36	12,721.36	0.00	0.00	0.00	12,721.36	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,855.03	3,927.51	0.00	0.00	0.00	3,927.51	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	20,750.37	20,750.37	0.00	0.00	0.00	0.00	20,750.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	523.95	39,295.97	0.00	0.00	0.00	39,295.97	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	299.24	1,795.45	0.00	0.00	0.00	1,795.45	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.2.3	Equipment Operating	Detail	168.00	Meter	298.38	50,127.05	0.00	50,127.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	124.99 Each	120.67	15,082.78	0.00	15,082.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	159.77 Each	33.57	5,363.41	0.00	5,363.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	160.78 Each	184.61	29,680.86	0.00	29,680.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.1.3	Backfill Pipe	Detail	168.00	Meter	116.57	19,583.37	0.00	0.00	0.00	19,583.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	17,029.02	19,583.37	0.00	0.00	0.00	19,583.37	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2	Stoping 445 L Block	Detail	85,423.00	Tonne	28.61	2,443,727.84	698,259.35	801,554.56	0.00	856,081.77	87,832.15	0.00	0.00	0.00	0.00
1.7.2.5.2.1	Haulage - Mining Block 5 (445L to 550L)	Detail	85,423.00	Tonne	7.93	677,741.57	222,985.36	438,264.76	0.00	16,491.44	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.1.1	Truck Haulage Labour	Detail	85,423.00	Tonne	2.80	239,476.80	222,985.36	0.00	0.00	16,491.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	4,386.02 Each	54.60	239,476.80	222,985.36	0.00	0.00	16,491.44	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.2.1.2	Truck Haulage Equipment	Detail	85,423.00	Tonne	5.13	438,264.76	0.00	438,264.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEMH1000	45 Tonne Truck		1.00	2,926.45 Each	149.76	438,264.76	0.00	438,264.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2	Blasthole Mining - Lower Sulfide	Detail	85,423.00	Tonne	20.67	1,765,986.27	475,273.99	363,289.80	0.00	839,590.33	87,832.15	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1	Labour	Detail	85,423.00	Tonne	5.91	504,430.83	475,273.99	0.00	0.00	29,156.83	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.1	Cable Labour	Detail	85,423.00	Tonne	0.09	8,037.48	7,574.92	0.00	0.00	462.57	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.1.1	Drilling	Detail	33.89	Hour	77.55	2,628.17	2,473.99	0.00	0.00	154.19	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	33.89 Each	64.09	2,172.04	2,044.62	0.00	0.00	127.43	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.1.2	Install & Grout	Detail	33.89	Hour	159.61	5,409.31	5,100.93	0.00	0.00	308.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	33.89 Each	64.09	2,172.04	2,044.62	0.00	0.00	127.43	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	33.89 Each	67.82	2,298.46	2,171.03	0.00	0.00	127.43	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.2	Drop Raise Labour	Detail	85,423.00	Tonne	0.42	36,097.32	33,993.29	0.00	0.00	2,104.03	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.2.1	Drill	Detail	358.91	Hour	77.55	27,833.10	26,200.20	0.00	0.00	1,632.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	358.91 Each	64.09	23,002.56	21,653.06	0.00	0.00	1,349.50	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.2.2	Blast	Detail	51.78	Hour	159.61	8,264.22	7,793.09	0.00	0.00	471.13	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	51.78 Each	64.09	3,318.40	3,123.72	0.00	0.00	194.68	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	51.78 Each	67.82	3,511.53	3,316.85	0.00	0.00	194.68	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.3	Drilling Labour	Detail	7,766.58	Meter	1.66	12,856.93	12,111.33	0.00	0.00	745.61	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	131.11 Each	64.09	8,402.65	7,909.68	0.00	0.00	492.96	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	32.78 Each	67.82	2,222.92	2,099.68	0.00	0.00	123.24	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.2.2.1.4	Mucking Labour	Detail	85,423.00	Tonne	2.17	185,484.87	174,602.94	0.00	0.00	10,881.93	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	2,391.84 Each	64.09	153,293.28	144,299.95	0.00	0.00	8,993.33	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.5	Production Loading Labour	Detail	85,423.00	Tonne	1.00	85,647.36	80,764.73	0.00	0.00	4,882.63	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.5.1	Slot Blast	Detail	84.73	Hour	159.61	13,523.27	12,752.33	0.00	0.00	770.94	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	84.73 Each	64.09	5,430.11	5,111.54	0.00	0.00	318.57	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	84.73 Each	67.82	5,746.14	5,427.57	0.00	0.00	318.57	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.5.2	Void Blast	Detail	141.21	Hour	159.61	22,538.78	21,253.88	0.00	0.00	1,284.90	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	141.21 Each	64.09	9,050.19	8,519.24	0.00	0.00	530.95	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	141.21 Each	67.82	9,576.90	9,045.95	0.00	0.00	530.95	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.5.3	Final Blast	Detail	310.66	Hour	159.61	49,585.31	46,758.53	0.00	0.00	2,826.79	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	310.66 Each	64.09	19,910.41	18,742.32	0.00	0.00	1,168.09	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	310.66 Each	67.82	21,069.19	19,901.09	0.00	0.00	1,168.09	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.6	Filling Labour	Detail	85,423.00	Tonne	2.06	176,306.86	166,226.80	0.00	0.00	10,080.07	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.6.1	Fill Prep	Detail	225.94	Hour	237.16	53,583.21	50,499.44	0.00	0.00	3,083.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	451.87 Each	64.09	28,960.60	27,261.55	0.00	0.00	1,699.05	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	225.94 Each	67.82	15,323.04	14,473.52	0.00	0.00	849.52	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.1.6.2	Pour Time	Detail	768.89	Hour	159.61	122,723.65	115,727.35	0.00	0.00	6,996.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	768.89 Each	64.09	49,278.27	46,387.24	0.00	0.00	2,891.03	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	768.89 Each	67.82	52,146.24	49,255.20	0.00	0.00	2,891.03	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.2	Cable Bolting	Detail	85,423.00	Tonne	0.27	22,957.30	0.00	9,672.71	0.00	13,284.59	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.2.2.2.1	Materials	Detail	1,499.19	Meter	8.86	13,284.59	0.00	0.00	0.00	13,284.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		1,499.19	Meter	1.00	1,499.19	0.00	0.00	0.00	1,499.19	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		239.87	Each	25.00	5,996.74	0.00	0.00	0.00	5,996.74	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,499.19	Kilogram	0.50	749.59	0.00	0.00	0.00	749.59	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,499.19	Each	1.58	2,368.71	0.00	0.00	0.00	2,368.71	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	2,670.35	2,670.35	0.00	0.00	0.00	2,670.35	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.2.2	Equipment Operating	Detail	1,499.19	Meter	6.45	9,672.71	0.00	9,672.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	203.59 Each	47.51	9,672.71	0.00	9,672.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.3	Drop Raise Drilling	Detail	85,423.00	Tonne	0.70	59,620.45	0.00	14,883.47	0.00	44,736.98	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.3.1	Materials	Detail	1,939.29	Meter	23.07	44,736.98	0.00	0.00	0.00	44,736.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	44,736.98	44,736.98	0.00	0.00	0.00	44,736.98	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.3.2	Equipment Operating	Detail	1,939.29	Meter	7.67	14,883.47	0.00	14,883.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	313.27 Each	47.51	14,883.47	0.00	14,883.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.4	Drilling	Detail	85,423.00	Tonne	2.68	229,274.88	0.00	50,109.80	0.00	179,165.07	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.4.1	Materials	Detail	7,766.58	Meter	23.07	179,165.07	0.00	0.00	0.00	179,165.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	179,165.07	179,165.07	0.00	0.00	0.00	179,165.07	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.4.2	Equipment Operating	Detail	7,766.58	Meter	6.45	50,109.80	0.00	50,109.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,054.72 Each	47.51	50,109.80	0.00	50,109.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.5	Blasting	Detail	85,423.00	Tonne	1.03	88,099.84	0.00	0.00	0.00	267.69	87,832.15	0.00	0.00	0.00	0.00

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1.7.2.5.2.2.5.1	Materials	Detail	85,423.00	Tonne	1.03	88,099.84	0.00	0.00	0.00	267.69	87,832.15	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUEX1015	Emulsion		79,228.56	Kilogram	1.01	80,020.85	0.00	0.00	0.00	0.00	80,020.85	0.00	0.00	0.00	0.00
SUEX10016	Booster		221.23	Each	1.21	267.69	0.00	0.00	0.00	267.69	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		235.35	Meter	0.29	68.25	0.00	0.00	0.00	0.00	68.25	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		221.23	Each	35.00	7,743.05	0.00	0.00	0.00	0.00	7,743.05	0.00	0.00	0.00	0.00
1.7.2.5.2.2.5.2	Equipment Operating	Detail	1.30	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.6	Mucking	Detail	85,423.00	Tonne	3.38	288,623.82	0.00	288,623.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1008	4.5 m3 LHD		1.00	2,391.84 Each	120.67	288,623.82	0.00	288,623.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.2.2.7	Backfill	Detail	46,773.80	Tonne	12.25	572,979.17	0.00	0.00	0.00	572,979.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
SUFI1000	Backfill		46,773.81	Tonne	12.25	572,979.17	0.00	0.00	0.00	572,979.17	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3	445 Sub Level - UC	Detail	19,628.00	Tonne	26.81	526,239.01	248,373.16	150,828.98	0.00	102,627.13	24,409.74	0.00	0.00	0.00	0.00
1.7.2.5.3.1	Haulage - Mining Block 5 (445L to 550L)	Detail	19,628.00	Tonne	7.93	155,727.51	51,236.28	100,701.93	0.00	3,789.31	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3.1.1	Truck Haulage Labour	Detail	19,628.00	Tonne	2.80	55,025.59	51,236.28	0.00	0.00	3,789.31	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LASC1012	Haulage Truck Driver		1.00	1,007.79 Each	54.60	55,025.59	51,236.28	0.00	0.00	3,789.31	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3.1.2	Truck Haulage Equipment	Detail	19,628.00	Tonne	5.13	100,701.93	0.00	100,701.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEMH1000	45 Tonne Truck		1.00	672.42 Each	149.76	100,701.93	0.00	100,701.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3.2	4 x 4.5 Ore Development - 4 m/day	Detail	168.00	Meter	2,088.86	350,928.13	197,136.88	50,127.05	0.00	79,254.45	24,409.74	0.00	0.00	0.00	0.00
1.7.2.5.3.2.1	Labour	Detail	168.00	Meter	1,245.09	209,175.12	197,136.88	0.00	0.00	12,038.24	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1000	Lead Miner		1.00	882.00 Each	67.82	59,817.24	56,500.92	0.00	0.00	3,316.32	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,764.00 Each	64.09	113,054.76	106,422.12	0.00	0.00	6,632.64	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.3.2.2	Materials	Detail	168.00	Meter	545.39	91,625.95	0.00	0.00	0.00	67,216.21	24,409.74	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		168.00	Meter	50.00	8,400.00	0.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,367.64	2,367.64	0.00	0.00	0.00	537.96	1,829.69	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,367.64	2,367.64	0.00	0.00	0.00	537.96	1,829.69	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	12,721.36	12,721.36	0.00	0.00	0.00	12,721.36	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,855.03	3,927.51	0.00	0.00	0.00	3,927.51	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	20,750.37	20,750.37	0.00	0.00	0.00	0.00	20,750.37	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	523.95	39,295.97	0.00	0.00	0.00	39,295.97	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	299.24	1,795.45	0.00	0.00	0.00	1,795.45	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3.2.3	Equipment Operating	Detail	168.00	Meter	298.38	50,127.05	0.00	50,127.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	124.99 Each	120.67	15,082.78	0.00	15,082.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	159.77 Each	33.57	5,363.41	0.00	5,363.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	160.78 Each	184.61	29,680.86	0.00	29,680.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.3.3	Backfill Pipe	Detail	168.00	Meter	116.57	19,583.37	0.00	0.00	0.00	19,583.37	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	17,029.02	19,583.37	0.00	0.00	0.00	19,583.37	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4	Stoping 480 L Block	Detail	145,672.00	Tonne	28.61	4,167,293.60	1,190,742.97	1,366,892.48	0.00	1,459,877.83	149,780.32	0.00	0.00	0.00	0.00
1.7.2.5.4.1	Haulage - Mining Block 5 (445L to 550L)	Detail	145,672.00	Tonne	7.93	1,155,753.95	380,257.34	747,373.71	0.00	28,122.89	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.1.1	Truck Haulage Labour	Detail	145,672.00	Tonne	2.80	408,380.23	380,257.34	0.00	0.00	28,122.89	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	7,479.49 Each	54.60	408,380.23	380,257.34	0.00	0.00	28,122.89	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.1.2	Truck Haulage Equipment	Detail	145,672.00	Tonne	5.13	747,373.71	0.00	747,373.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	4,990.48 Each	149.76	747,373.71	0.00	747,373.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2	Blasthole Mining - Lower Sulfide	Detail	145,672.00	Tonne	20.67	3,011,539.66	810,485.62	619,518.77	0.00	1,431,754.94	149,780.32	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1	Labour	Detail	145,672.00	Tonne	5.91	860,206.83	810,485.62	0.00	0.00	49,721.20	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.4.2.1.1	Cable Labour	Detail	145,672.00	Tonne	0.09	13,706.33	12,917.52	0.00	0.00	788.81	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.1.1	Drilling	Detail	57.79	Hour	77.55	4,481.83	4,218.89	0.00	0.00	262.94	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	57.79	Each	64.09	3,703.99	3,486.69	0.00	0.00	217.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.1.2	Install & Grout	Detail	57.79	Hour	159.61	9,224.50	8,698.63	0.00	0.00	525.88	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	57.79	Each	64.09	3,703.99	3,486.69	0.00	0.00	217.30	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	57.79	Each	67.82	3,919.56	3,702.26	0.00	0.00	217.30	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.2	Drop Raise Labour	Detail	145,672.00	Tonne	0.42	61,556.82	57,968.82	0.00	0.00	3,588.01	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.2.1	Drill	Detail	612.05	Hour	77.55	47,463.83	44,679.25	0.00	0.00	2,784.58	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	612.05	Each	64.09	39,226.31	36,925.00	0.00	0.00	2,301.31	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.2.2	Blast	Detail	88.30	Hour	159.61	14,092.99	13,289.57	0.00	0.00	803.42	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	88.30	Each	64.09	5,658.88	5,326.89	0.00	0.00	331.99	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	88.30	Each	67.82	5,988.22	5,656.23	0.00	0.00	331.99	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.3	Drilling Labour	Detail	13,244.37	Meter	1.66	21,924.95	20,653.47	0.00	0.00	1,271.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	223.58	Each	64.09	14,329.05	13,488.40	0.00	0.00	840.65	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	55.89	Each	67.82	3,790.75	3,580.59	0.00	0.00	210.16	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.4	Mucking Labour	Detail	145,672.00	Tonne	2.17	316,307.69	297,750.71	0.00	0.00	18,556.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	4,078.82	Each	64.09	261,411.32	246,074.97	0.00	0.00	15,336.35	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.5	Production Loading Labour	Detail	145,672.00	Tonne	1.00	146,054.60	137,728.24	0.00	0.00	8,326.36	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.4.2.1.5.1	Slot Blast	Detail	144.48	Hour	159.61	23,061.25	21,746.56	0.00	0.00	1,314.69	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	144.48 Each	64.09	9,259.98	8,716.72	0.00	0.00	543.26	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	144.48 Each	67.82	9,798.91	9,255.65	0.00	0.00	543.26	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.5.2	Void Blast	Detail	240.81	Hour	159.61	38,435.42	36,244.27	0.00	0.00	2,191.15	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	240.81 Each	64.09	15,433.30	14,527.87	0.00	0.00	905.43	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	240.81 Each	67.82	16,331.51	15,426.08	0.00	0.00	905.43	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.5.3	Final Blast	Detail	529.77	Hour	159.61	84,557.93	79,737.40	0.00	0.00	4,820.53	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	529.77 Each	64.09	33,953.26	31,961.31	0.00	0.00	1,991.95	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	529.77 Each	67.82	35,929.32	33,937.37	0.00	0.00	1,991.95	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.6	Filling Labour	Detail	145,672.00	Tonne	2.06	300,656.42	283,466.86	0.00	0.00	17,189.56	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.6.1	Fill Prep	Detail	385.29	Hour	237.16	91,375.55	86,116.79	0.00	0.00	5,258.76	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	770.58 Each	64.09	49,386.56	46,489.18	0.00	0.00	2,897.39	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	385.29 Each	67.82	26,130.42	24,681.72	0.00	0.00	1,448.69	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.1.6.2	Pour Time	Detail	1,311.19	Hour	159.61	209,280.87	197,350.07	0.00	0.00	11,930.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	1,311.19 Each	64.09	84,034.33	79,104.24	0.00	0.00	4,930.08	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,311.19 Each	67.82	88,925.07	83,994.99	0.00	0.00	4,930.08	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.2	Cable Bolting	Detail	145,672.00	Tonne	0.27	39,149.12	0.00	16,494.89	0.00	22,654.23	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.2.1	Materials	Detail	2,556.56	Meter	8.86	22,654.23	0.00	0.00	0.00	22,654.23	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		2,556.56	Meter	1.00	2,556.56	0.00	0.00	0.00	2,556.56	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		409.05	Each	25.00	10,226.26	0.00	0.00	0.00	10,226.26	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,556.56	Kilogram	0.50	1,278.28	0.00	0.00	0.00	1,278.28	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,556.56	Each	1.58	4,039.37	0.00	0.00	0.00	4,039.37	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	4,553.75	4,553.75	0.00	0.00	0.00	4,553.75	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.4.2.2.2	Equipment Operating	Detail	2,556.56	Meter	6.45	16,494.89	0.00	16,494.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	347.19 Each	47.51	16,494.89	0.00	16,494.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.3	Drop Raise Drilling	Detail	145,672.00	Tonne	0.70	101,670.86	0.00	25,380.81	0.00	76,290.05	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.3.1	Materials	Detail	3,307.08	Meter	23.07	76,290.05	0.00	0.00	0.00	76,290.05	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	76,290.05	76,290.05	0.00	0.00	0.00	76,290.05	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.3.2	Equipment Operating	Detail	3,307.08	Meter	7.67	25,380.81	0.00	25,380.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	534.22 Each	47.51	25,380.81	0.00	25,380.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.4	Drilling	Detail	145,672.00	Tonne	2.68	390,982.87	0.00	85,452.34	0.00	305,530.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.4.1	Materials	Detail	13,244.37	Meter	23.07	305,530.53	0.00	0.00	0.00	305,530.53	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	305,530.53	305,530.53	0.00	0.00	0.00	305,530.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.4.2	Equipment Operating	Detail	13,244.37	Meter	6.45	85,452.34	0.00	85,452.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,798.62 Each	47.51	85,452.34	0.00	85,452.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.5	Blasting	Detail	145,672.00	Tonne	1.03	150,236.81	0.00	0.00	0.00	456.49	149,780.32	0.00	0.00	0.00	0.00
1.7.2.5.4.2.5.1	Materials	Detail	145,672.00	Tonne	1.03	150,236.81	0.00	0.00	0.00	456.49	149,780.32	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		135,108.61	Kilogram	1.01	136,459.70	0.00	0.00	0.00	0.00	136,459.70	0.00	0.00	0.00	0.00
SUEX10016	Booster		377.26	Each	1.21	456.49	0.00	0.00	0.00	456.49	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		401.34	Meter	0.29	116.39	0.00	0.00	0.00	0.00	116.39	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		377.26	Each	35.00	13,204.23	0.00	0.00	0.00	0.00	13,204.23	0.00	0.00	0.00	0.00
1.7.2.5.4.2.5.2	Equipment Operating	Detail	2.21	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.4.2.6	Mucking	Detail	145,672.00	Tonne	3.38	492,190.73	0.00	492,190.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	4,078.82 Each	120.67	492,190.73	0.00	492,190.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.4.2.7	Backfill	Detail	79,763.45	Tonne	12.25	977,102.44	0.00	0.00	0.00	977,102.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		79,763.46	Tonne	12.25	977,102.44	0.00	0.00	0.00	977,102.44	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5	480 Sub Level - UC	Detail	18,844.00	Tonne	27.48	517,813.37	245,153.20	146,508.28	0.00	101,887.45	24,264.45	0.00	0.00	0.00	0.00
1.7.2.5.5.1	Haulage - Mining Block 5 (445L to 550L)	Detail	18,844.00	Tonne	7.93	149,507.30	49,189.75	96,679.60	0.00	3,637.95	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5.1.1	Truck Haulage Labour	Detail	18,844.00	Tonne	2.80	52,827.70	49,189.75	0.00	0.00	3,637.95	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	967.54 Each	54.60	52,827.70	49,189.75	0.00	0.00	3,637.95	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5.1.2	Truck Haulage Equipment	Detail	18,844.00	Tonne	5.13	96,679.60	0.00	96,679.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	645.56 Each	149.76	96,679.60	0.00	96,679.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5.2	4 x 4.5 Ore Development - 4 m/day	Detail	167.00	Meter	2,088.86	348,839.27	195,963.44	49,828.68	0.00	78,782.70	24,264.45	0.00	0.00	0.00	0.00
1.7.2.5.5.2.1	Labour	Detail	167.00	Meter	1,245.09	207,930.03	195,963.44	0.00	0.00	11,966.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	876.75 Each	67.82	59,461.19	56,164.61	0.00	0.00	3,296.58	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,753.50 Each	64.09	112,381.82	105,788.66	0.00	0.00	6,593.16	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5.2.2	Materials	Detail	167.00	Meter	545.39	91,080.56	0.00	0.00	0.00	66,816.11	24,264.45	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		167.00	Meter	50.00	8,350.00	0.00	0.00	0.00	8,350.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,353.55	2,353.55	0.00	0.00	0.00	534.75	1,818.80	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,353.55	2,353.55	0.00	0.00	0.00	534.75	1,818.80	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	12,645.64	12,645.64	0.00	0.00	0.00	12,645.64	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,808.27	3,904.14	0.00	0.00	0.00	3,904.14	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	20,626.85	20,626.85	0.00	0.00	0.00	0.00	20,626.85	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	520.83	39,062.06	0.00	0.00	0.00	39,062.06	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	297.46	1,784.76	0.00	0.00	0.00	1,784.76	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.5.2.3	Equipment Operating	Detail	167.00	Meter	298.38	49,828.68	0.00	49,828.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	124.25 Each	120.67	14,993.01	0.00	14,993.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	158.82 Each	33.57	5,331.49	0.00	5,331.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	159.82 Each	184.61	29,504.19	0.00	29,504.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.5.3	Backfill Pipe	Detail	167.00	Meter	116.57	19,466.80	0.00	0.00	0.00	19,466.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	16,927.65	19,466.80	0.00	0.00	0.00	19,466.80	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6	Stoping 515 L Block	Detail	124,088.00	Tonne	28.61	3,549,832.01	1,014,312.38	1,164,362.09	0.00	1,243,569.94	127,587.60	0.00	0.00	0.00	0.00
1.7.2.5.6.1	Haulage - Mining Block 5 (445L to 550L)	Detail	124,088.00	Tonne	7.93	984,507.63	323,915.19	636,636.48	0.00	23,955.96	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.1.1	Truck Haulage Labour	Detail	124,088.00	Tonne	2.80	347,871.15	323,915.19	0.00	0.00	23,955.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	6,371.27 Each	54.60	347,871.15	323,915.19	0.00	0.00	23,955.96	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.1.2	Truck Haulage Equipment	Detail	124,088.00	Tonne	5.13	636,636.48	0.00	636,636.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	4,251.04 Each	149.76	636,636.48	0.00	636,636.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2	Blasthole Mining - Lower Sulfide	Detail	124,088.00	Tonne	20.67	2,565,324.38	690,397.19	527,725.61	0.00	1,219,613.98	127,587.60	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1	Labour	Detail	124,088.00	Tonne	5.91	732,751.28	690,397.19	0.00	0.00	42,354.09	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.1	Cable Labour	Detail	124,088.00	Tonne	0.09	11,675.49	11,003.55	0.00	0.00	671.94	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.1.1	Drilling	Detail	49.23	Hour	77.55	3,817.76	3,593.79	0.00	0.00	223.98	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	49.23 Each	64.09	3,155.18	2,970.07	0.00	0.00	185.11	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.6.2.1.1.2	Install & Grout	Detail	49.23	Hour	159.61	7,857.72	7,409.76	0.00	0.00	447.96	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	49.23 Each	64.09	3,155.18	2,970.07	0.00	0.00	185.11	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	49.23 Each	67.82	3,338.81	3,153.70	0.00	0.00	185.11	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.2	Drop Raise Labour	Detail	124,088.00	Tonne	0.42	52,436.04	49,379.66	0.00	0.00	3,056.38	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.2.1	Drill	Detail	521.36	Hour	77.55	40,431.19	38,059.19	0.00	0.00	2,372.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	521.36 Each	64.09	33,414.21	31,453.88	0.00	0.00	1,960.33	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.2.2	Blast	Detail	75.21	Hour	159.61	12,004.85	11,320.47	0.00	0.00	684.38	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	75.21 Each	64.09	4,820.41	4,537.61	0.00	0.00	282.80	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	75.21 Each	67.82	5,100.95	4,818.15	0.00	0.00	282.80	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.3	Drilling Labour	Detail	11,281.97	Meter	1.66	18,676.37	17,593.28	0.00	0.00	1,083.09	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	190.45 Each	64.09	12,205.94	11,489.84	0.00	0.00	716.09	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	47.61 Each	67.82	3,229.08	3,050.06	0.00	0.00	179.02	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.4	Mucking Labour	Detail	124,088.00	Tonne	2.17	269,440.86	253,633.44	0.00	0.00	15,807.42	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	3,474.46 Each	64.09	222,678.40	209,614.41	0.00	0.00	13,063.98	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.5	Production Loading Labour	Detail	124,088.00	Tonne	1.00	124,413.91	117,321.26	0.00	0.00	7,092.66	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.5.1	Slot Blast	Detail	123.08	Hour	159.61	19,644.30	18,524.41	0.00	0.00	1,119.89	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	123.08 Each	64.09	7,887.94	7,425.18	0.00	0.00	462.77	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	123.08 Each	67.82	8,347.02	7,884.25	0.00	0.00	462.77	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.6.2.1.5.2	Void Blast	Detail	205.13	Hour	159.61	32,740.50	30,874.01	0.00	0.00	1,866.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	205.13 Each	64.09	13,146.57	12,375.30	0.00	0.00	771.28	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	205.13 Each	67.82	13,911.70	13,140.42	0.00	0.00	771.28	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.5.3	Final Blast	Detail	451.28	Hour	159.61	72,029.11	67,922.83	0.00	0.00	4,106.28	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	451.28 Each	64.09	28,922.46	27,225.65	0.00	0.00	1,696.81	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	451.28 Each	67.82	30,605.73	28,908.92	0.00	0.00	1,696.81	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.6	Filling Labour	Detail	124,088.00	Tonne	2.06	256,108.61	241,466.01	0.00	0.00	14,642.61	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.6.1	Fill Prep	Detail	328.20	Hour	237.16	77,836.57	73,357.00	0.00	0.00	4,479.57	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		2.00	656.41 Each	64.09	42,069.03	39,600.95	0.00	0.00	2,468.08	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	328.20 Each	67.82	22,258.71	21,024.67	0.00	0.00	1,234.04	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.1.6.2	Pour Time	Detail	1,116.92	Hour	159.61	178,272.04	168,109.01	0.00	0.00	10,163.03	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	1,116.92 Each	64.09	71,583.09	67,383.49	0.00	0.00	4,199.60	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,116.92 Each	67.82	75,749.18	71,549.58	0.00	0.00	4,199.60	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.2	Cable Bolting	Detail	124,088.00	Tonne	0.27	33,348.45	0.00	14,050.87	0.00	19,297.59	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.2.1	Materials	Detail	2,177.76	Meter	8.86	19,297.59	0.00	0.00	0.00	19,297.59	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMGS1014	Breather Tube		2,177.76	Meter	1.00	2,177.76	0.00	0.00	0.00	2,177.76	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		348.44	Each	25.00	8,711.05	0.00	0.00	0.00	8,711.05	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,177.76	Kilogram	0.50	1,088.88	0.00	0.00	0.00	1,088.88	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,177.76	Each	1.58	3,440.86	0.00	0.00	0.00	3,440.86	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	3,879.03	3,879.03	0.00	0.00	0.00	3,879.03	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.2.2	Equipment Operating	Detail	2,177.76	Meter	6.45	14,050.87	0.00	14,050.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1007	ITH		1.00	295.75 Each	47.51	14,050.87	0.00	14,050.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.3	Drop Raise Drilling	Detail	124,088.00	Tonne	0.70	86,606.44	0.00	21,620.17	0.00	64,986.27	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.6.2.3.1	Materials	Detail	2,817.07	Meter	23.07	64,986.27	0.00	0.00	0.00	64,986.27	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	64,986.27	64,986.27	0.00	0.00	0.00	64,986.27	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.3.2	Equipment Operating	Detail	2,817.07	Meter	7.67	21,620.17	0.00	21,620.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	455.07 Each	47.51	21,620.17	0.00	21,620.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.4	Drilling	Detail	124,088.00	Tonne	2.68	333,051.53	0.00	72,790.99	0.00	260,260.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.4.1	Materials	Detail	11,281.97	Meter	23.07	260,260.53	0.00	0.00	0.00	260,260.53	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	260,260.53	260,260.53	0.00	0.00	0.00	260,260.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.4.2	Equipment Operating	Detail	11,281.97	Meter	6.45	72,790.99	0.00	72,790.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,532.12 Each	47.51	72,790.99	0.00	72,790.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.5	Blasting	Detail	124,088.00	Tonne	1.03	127,976.45	0.00	0.00	0.00	388.85	127,587.60	0.00	0.00	0.00	0.00
1.7.2.5.6.2.5.1	Materials	Detail	124,088.00	Tonne	1.03	127,976.45	0.00	0.00	0.00	388.85	127,587.60	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		115,089.77	Kilogram	1.01	116,240.67	0.00	0.00	0.00	0.00	116,240.67	0.00	0.00	0.00	0.00
SUEX10016	Booster		321.37	Each	1.21	388.85	0.00	0.00	0.00	388.85	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		341.88	Meter	0.29	99.14	0.00	0.00	0.00	0.00	99.14	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		321.37	Each	35.00	11,247.78	0.00	0.00	0.00	0.00	11,247.78	0.00	0.00	0.00	0.00
1.7.2.5.6.2.5.2	Equipment Operating	Detail	1.88	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.6.2.6	Mucking	Detail	124,088.00	Tonne	3.38	419,263.57	0.00	419,263.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	3,474.46 Each	120.67	419,263.57	0.00	419,263.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.6.2.7	Backfill	Detail	67,945.02	Tonne	12.25	832,326.65	0.00	0.00	0.00	832,326.65	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		67,945.03	Tonne	12.25	832,326.65	0.00	0.00	0.00	832,326.65	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7	515 Sub Level - UC	Detail	16,885.00	Tonne	27.79	469,189.38	222,437.98	131,981.95	0.00	92,684.45	22,085.01	0.00	0.00	0.00	0.00
1.7.2.5.7.1	Haulage - Mining Block 5 (445L to 550L)	Detail	16,885.00	Tonne	7.93	133,964.70	44,076.04	86,628.90	0.00	3,259.75	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7.1.1	Truck Haulage Labour	Detail	16,885.00	Tonne	2.80	47,335.80	44,076.04	0.00	0.00	3,259.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	866.96 Each	54.60	47,335.80	44,076.04	0.00	0.00	3,259.75	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7.1.2	Truck Haulage Equipment	Detail	16,885.00	Tonne	5.13	86,628.90	0.00	86,628.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	578.45 Each	149.76	86,628.90	0.00	86,628.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7.2	4 x 4.5 Ore Development - 4 m/day	Detail	152.00	Meter	2,088.86	317,506.40	178,361.94	45,353.05	0.00	71,706.41	22,085.01	0.00	0.00	0.00	0.00
1.7.2.5.7.2.1	Labour	Detail	152.00	Meter	1,245.09	189,253.68	178,361.94	0.00	0.00	10,891.74	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	798.00 Each	67.82	54,120.36	51,119.88	0.00	0.00	3,000.48	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,596.00 Each	64.09	102,287.64	96,286.68	0.00	0.00	6,000.96	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7.2.2	Materials	Detail	152.00	Meter	545.39	82,899.67	0.00	0.00	0.00	60,814.66	22,085.01	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		152.00	Meter	50.00	7,600.00	0.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,142.15	2,142.15	0.00	0.00	0.00	486.72	1,655.43	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	2,142.15	2,142.15	0.00	0.00	0.00	486.72	1,655.43	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	11,509.80	11,509.80	0.00	0.00	0.00	11,509.80	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	7,106.93	3,553.47	0.00	0.00	0.00	3,553.47	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	18,774.14	18,774.14	0.00	0.00	0.00	0.00	18,774.14	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	474.05	35,553.50	0.00	0.00	0.00	35,553.50	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	270.74	1,624.45	0.00	0.00	0.00	1,624.45	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.7.2.3	Equipment Operating	Detail	152.00	Meter	298.38	45,353.05	0.00	45,353.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	113.09 Each	120.67	13,646.33	0.00	13,646.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	144.55 Each	33.57	4,852.61	0.00	4,852.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	145.46 Each	184.61	26,854.11	0.00	26,854.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.7.3	Backfill Pipe	Detail	152.00	Meter	116.57	17,718.29	0.00	0.00	0.00	17,718.29	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	15,407.21	17,718.29	0.00	0.00	0.00	17,718.29	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8	Stoping 550 L Block	Detail	120,123.00	Tonne	28.61	3,436,403.77	981,901.93	1,127,157.08	0.00	1,203,833.99	123,510.78	0.00	0.00	0.00	0.00
1.7.2.5.8.1	Haulage - Mining Block 5 (445L to 550L)	Detail	120,123.00	Tonne	7.93	953,049.53	313,565.08	616,293.95	0.00	23,190.49	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.1.1	Truck Haulage Labour	Detail	120,123.00	Tonne	2.80	336,755.58	313,565.08	0.00	0.00	23,190.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	6,167.68 Each	54.60	336,755.58	313,565.08	0.00	0.00	23,190.49	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.1.2	Truck Haulage Equipment	Detail	120,123.00	Tonne	5.13	616,293.95	0.00	616,293.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	4,115.21 Each	149.76	616,293.95	0.00	616,293.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2	Blasthole Mining - Lower Sulfide	Detail	120,123.00	Tonne	20.67	2,483,354.24	668,336.84	510,863.12	0.00	1,180,643.49	123,510.78	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1	Labour	Detail	120,123.00	Tonne	5.91	709,337.59	668,336.84	0.00	0.00	41,000.74	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.1	Cable Labour	Detail	120,123.00	Tonne	0.09	11,302.42	10,651.95	0.00	0.00	650.47	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.1.1	Drilling	Detail	47.66	Hour	77.55	3,695.78	3,478.95	0.00	0.00	216.82	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	47.66 Each	64.09	3,054.36	2,875.17	0.00	0.00	179.19	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.8.2.1.1.2	Install & Grout	Detail	47.66	Hour	159.61	7,606.64	7,173.00	0.00	0.00	433.64	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	47.66 Each	64.09	3,054.36	2,875.17	0.00	0.00	179.19	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	47.66 Each	67.82	3,232.12	3,052.93	0.00	0.00	179.19	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.2	Drop Raise Labour	Detail	120,123.00	Tonne	0.42	50,760.54	47,801.83	0.00	0.00	2,958.72	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.2.1	Drill	Detail	504.70	Hour	77.55	39,139.29	36,843.08	0.00	0.00	2,296.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	504.70 Each	64.09	32,346.52	30,448.83	0.00	0.00	1,897.69	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.2.2	Blast	Detail	72.81	Hour	159.61	11,621.26	10,958.75	0.00	0.00	662.51	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	72.81 Each	64.09	4,666.38	4,392.62	0.00	0.00	273.77	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	72.81 Each	67.82	4,937.96	4,664.20	0.00	0.00	273.77	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.3	Drilling Labour	Detail	10,921.48	Meter	1.66	18,079.60	17,031.12	0.00	0.00	1,048.48	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	184.36 Each	64.09	11,815.92	11,122.71	0.00	0.00	693.21	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.25	46.09 Each	67.82	3,125.90	2,952.60	0.00	0.00	173.30	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.4	Mucking Labour	Detail	120,123.00	Tonne	2.17	260,831.38	245,529.06	0.00	0.00	15,302.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	3,363.44 Each	64.09	215,563.13	202,916.58	0.00	0.00	12,646.55	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		0.00	0.00 Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.5	Production Loading Labour	Detail	120,123.00	Tonne	1.00	120,438.50	113,572.47	0.00	0.00	6,866.03	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.5.1	Slot Blast	Detail	119.14	Hour	159.61	19,016.61	17,932.50	0.00	0.00	1,084.11	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	119.14 Each	64.09	7,635.90	7,187.92	0.00	0.00	447.98	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	119.14 Each	67.82	8,080.30	7,632.32	0.00	0.00	447.98	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.8.2.1.5.2	Void Blast	Detail	198.57	Hour	159.61	31,694.34	29,887.49	0.00	0.00	1,806.85	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	198.57 Each	64.09	12,726.50	11,979.87	0.00	0.00	746.63	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	198.57 Each	67.82	13,467.17	12,720.54	0.00	0.00	746.63	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.5.3	Final Blast	Detail	436.86	Hour	159.61	69,727.55	65,752.49	0.00	0.00	3,975.07	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	436.86 Each	64.09	27,998.30	26,355.71	0.00	0.00	1,642.59	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	436.86 Each	67.82	29,627.78	27,985.19	0.00	0.00	1,642.59	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.6	Filling Labour	Detail	120,123.00	Tonne	2.06	247,925.14	233,750.41	0.00	0.00	14,174.73	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.6.1	Fill Prep	Detail	317.72	Hour	237.16	75,349.45	71,013.01	0.00	0.00	4,336.44	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		2.00	635.43 Each	64.09	40,724.79	38,335.57	0.00	0.00	2,389.22	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	317.72 Each	67.82	21,547.48	20,352.87	0.00	0.00	1,194.61	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.1.6.2	Pour Time	Detail	1,081.23	Hour	159.61	172,575.69	162,737.40	0.00	0.00	9,838.29	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
LALD1001	Miner		1.00	1,081.23 Each	64.09	69,295.78	65,230.37	0.00	0.00	4,065.41	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	1,081.23 Each	67.82	73,328.76	69,263.35	0.00	0.00	4,065.41	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.2	Cable Bolting	Detail	120,123.00	Tonne	0.27	32,282.87	0.00	13,601.90	0.00	18,680.97	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.2.1	Materials	Detail	2,108.18	Meter	8.86	18,680.97	0.00	0.00	0.00	18,680.97	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
IMGS1014	Breather Tube		2,108.18	Meter	1.00	2,108.18	0.00	0.00	0.00	2,108.18	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		337.31	Each	25.00	8,432.70	0.00	0.00	0.00	8,432.70	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		2,108.18	Kilogram	0.50	1,054.09	0.00	0.00	0.00	1,054.09	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		2,108.18	Each	1.58	3,330.92	0.00	0.00	0.00	3,330.92	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	3,755.08	3,755.08	0.00	0.00	0.00	3,755.08	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.2.2	Equipment Operating	Detail	2,108.18	Meter	6.45	13,601.90	0.00	13,601.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1007	ITH		1.00	286.30 Each	47.51	13,601.90	0.00	13,601.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.3	Drop Raise Drilling	Detail	120,123.00	Tonne	0.70	83,839.09	0.00	20,929.34	0.00	62,909.75	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.8.2.3.1	Materials	Detail	2,727.06	Meter	23.07	62,909.75	0.00	0.00	0.00	62,909.75	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	62,909.75	62,909.75	0.00	0.00	0.00	62,909.75	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.3.2	Equipment Operating	Detail	2,727.06	Meter	7.67	20,929.34	0.00	20,929.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	440.52 Each	47.51	20,929.34	0.00	20,929.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.4	Drilling	Detail	120,123.00	Tonne	2.68	322,409.49	0.00	70,465.09	0.00	251,944.40	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.4.1	Materials	Detail	10,921.48	Meter	23.07	251,944.40	0.00	0.00	0.00	251,944.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	251,944.40	251,944.40	0.00	0.00	0.00	251,944.40	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.4.2	Equipment Operating	Detail	10,921.48	Meter	6.45	70,465.09	0.00	70,465.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	1,483.16 Each	47.51	70,465.09	0.00	70,465.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.5	Blasting	Detail	120,123.00	Tonne	1.03	123,887.20	0.00	0.00	0.00	376.43	123,510.78	0.00	0.00	0.00	0.00
1.7.2.5.8.2.5.1	Materials	Detail	120,123.00	Tonne	1.03	123,887.20	0.00	0.00	0.00	376.43	123,510.78	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		111,412.30	Kilogram	1.01	112,526.42	0.00	0.00	0.00	0.00	112,526.42	0.00	0.00	0.00	0.00
SUEX10016	Booster		311.10	Each	1.21	376.43	0.00	0.00	0.00	376.43	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		330.95	Meter	0.29	95.98	0.00	0.00	0.00	0.00	95.98	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		311.10	Each	35.00	10,888.38	0.00	0.00	0.00	0.00	10,888.38	0.00	0.00	0.00	0.00
1.7.2.5.8.2.5.2	Equipment Operating	Detail	1.82	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.8.2.6	Mucking	Detail	120,123.00	Tonne	3.38	405,866.79	0.00	405,866.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	3,363.44 Each	120.67	405,866.79	0.00	405,866.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.8.2.7	Backfill	Detail	65,773.97	Tonne	12.25	805,731.21	0.00	0.00	0.00	805,731.21	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		65,773.98	Tonne	12.25	805,731.21	0.00	0.00	0.00	805,731.21	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9	550 Level - UC	Detail	16,267.00	Tonne	25.97	422,383.12	198,529.53	123,142.15	0.00	81,387.05	19,324.38	0.00	0.00	0.00	0.00
1.7.2.5.9.1	Haulage - Mining Block 5 (445L to 550L)	Detail	16,267.00	Tonne	7.93	129,061.52	42,462.84	83,458.24	0.00	3,140.45	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9.1.1	Truck Haulage Labour	Detail	16,267.00	Tonne	2.80	45,603.28	42,462.84	0.00	0.00	3,140.45	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	835.22 Each	54.60	45,603.28	42,462.84	0.00	0.00	3,140.45	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9.1.2	Truck Haulage Equipment	Detail	16,267.00	Tonne	5.13	83,458.24	0.00	83,458.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	557.28 Each	149.76	83,458.24	0.00	83,458.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9.2	4 x 4.5 Ore Development - 4 m/day	Detail	133.00	Meter	2,088.86	277,818.10	156,066.70	39,683.92	0.00	62,743.11	19,324.38	0.00	0.00	0.00	0.00
1.7.2.5.9.2.1	Labour	Detail	133.00	Meter	1,245.09	165,596.97	156,066.70	0.00	0.00	9,530.27	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	698.25 Each	67.82	47,355.32	44,729.90	0.00	0.00	2,625.42	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	1,396.50 Each	64.09	89,501.69	84,250.85	0.00	0.00	5,250.84	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9.2.2	Materials	Detail	133.00	Meter	545.39	72,537.21	0.00	0.00	0.00	53,212.83	19,324.38	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		133.00	Meter	50.00	6,650.00	0.00	0.00	0.00	6,650.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,874.38	1,874.38	0.00	0.00	0.00	425.88	1,448.50	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,874.38	1,874.38	0.00	0.00	0.00	425.88	1,448.50	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	10,071.08	10,071.08	0.00	0.00	0.00	10,071.08	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	6,218.57	3,109.28	0.00	0.00	0.00	3,109.28	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	16,427.38	16,427.38	0.00	0.00	0.00	0.00	16,427.38	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	414.79	31,109.31	0.00	0.00	0.00	31,109.31	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	236.90	1,421.40	0.00	0.00	0.00	1,421.40	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.9.2.3	Equipment Operating	Detail	133.00	Meter	298.38	39,683.92	0.00	39,683.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	98.95 Each	120.67	11,940.54	0.00	11,940.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	126.48 Each	33.57	4,246.03	0.00	4,246.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	127.28 Each	184.61	23,497.35	0.00	23,497.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.9.3	Backfill Pipe	Detail	133.00	Meter	116.57	15,503.50	0.00	0.00	0.00	15,503.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	13,481.31	15,503.50	0.00	0.00	0.00	15,503.50	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10	580 Level - UC	Detail	8,787.00	Tonne	26.01	228,506.23	107,424.53	66,564.94	0.00	44,055.45	10,461.32	0.00	0.00	0.00	0.00
1.7.2.5.10.1	Haulage - Mining Block 5 (445L to 550L)	Detail	8,787.00	Tonne	7.93	69,715.59	22,937.29	45,081.92	0.00	1,696.39	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10.1.1	Truck Haulage Labour	Detail	8,787.00	Tonne	2.80	24,633.68	22,937.29	0.00	0.00	1,696.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	451.17 Each	54.60	24,633.68	22,937.29	0.00	0.00	1,696.39	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10.1.2	Truck Haulage Equipment	Detail	8,787.00	Tonne	5.13	45,081.92	0.00	45,081.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	301.03 Each	149.76	45,081.92	0.00	45,081.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10.2	4 x 4.5 Ore Development - 4 m/day	Detail	72.00	Meter	2,088.86	150,397.77	84,487.23	21,483.02	0.00	33,966.19	10,461.32	0.00	0.00	0.00	0.00
1.7.2.5.10.2.1	Labour	Detail	72.00	Meter	1,245.09	89,646.48	84,487.23	0.00	0.00	5,159.25	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1000	Lead Miner		1.00	378.00 Each	67.82	25,635.96	24,214.68	0.00	0.00	1,421.28	0.00	0.00	0.00	0.00	0.00
LALD1001	Miner		2.00	756.00 Each	64.09	48,452.04	45,609.48	0.00	0.00	2,842.56	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.10.2.2	Materials	Detail	72.00	Meter	545.39	39,268.27	0.00	0.00	0.00	28,806.95	10,461.32	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMVR1006	42" Flex Duct - All Inclusive (Adapters, hanging hardware, etc)		72.00	Meter	50.00	3,600.00	0.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00
ASUPI1006	Water - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,014.70	1,014.70	0.00	0.00	0.00	230.55	784.15	0.00	0.00	0.00	0.00
ASUPI1005	Air - 50 mm (2") Steel Pipe SCHD40		1.00	Meter	1,014.70	1,014.70	0.00	0.00	0.00	230.55	784.15	0.00	0.00	0.00	0.00
AIMGS1003	Ground Support - 4 x 4.5 - In Ore		1.00	Meter	5,452.01	5,452.01	0.00	0.00	0.00	5,452.01	0.00	0.00	0.00	0.00	0.00
ASUEEL1000	Electrical Cables		0.50	Meter	3,366.44	1,683.22	0.00	0.00	0.00	1,683.22	0.00	0.00	0.00	0.00	0.00
ASUEX1001	Explosives - 4 x 4.5		1.00	Meter	8,893.02	8,893.02	0.00	0.00	0.00	0.00	8,893.02	0.00	0.00	0.00	0.00
ASUDR1000	Jumbo Drilling		75.00	Meter	224.55	16,841.13	0.00	0.00	0.00	16,841.13	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		6.00	Meter	128.25	769.48	0.00	0.00	0.00	769.48	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10.2.3	Equipment Operating	Detail	72.00	Meter	298.38	21,483.02	0.00	21,483.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		0.18	53.57 Each	120.67	6,464.05	0.00	6,464.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1002	Scissorlift		0.23	68.47 Each	33.57	2,298.61	0.00	2,298.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CEUM1000	2 Boom Jumbo		0.23	68.90 Each	184.61	12,720.37	0.00	12,720.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.10.3	Backfill Pipe	Detail	72.00	Meter	116.57	8,392.87	0.00	0.00	0.00	8,392.87	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUPI1007	Backfill - 200 mm (8") Steel Pipe SCHD40		1.15	Meter	7,298.15	8,392.87	0.00	0.00	0.00	8,392.87	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11	Stoping 580 L Block	Detail	76,266.00	Tonne	28.61	2,181,770.10	623,408.78	715,631.16	0.00	764,313.27	78,416.90	0.00	0.00	0.00	0.00
1.7.2.5.11.1	Haulage - Mining Block 5 (445L to 550L)	Detail	76,266.00	Tonne	7.93	605,090.41	199,082.23	391,284.55	0.00	14,723.63	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.1.1	Truck Haulage Labour	Detail	76,266.00	Tonne	2.80	213,805.86	199,082.23	0.00	0.00	14,723.63	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1012	Haulage Truck Driver		1.00	3,915.86 Each	54.60	213,805.86	199,082.23	0.00	0.00	14,723.63	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.1.2	Truck Haulage Equipment	Detail	76,266.00	Tonne	5.13	391,284.55	0.00	391,284.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEMH1000	45 Tonne Truck		1.00	2,612.74 Each	149.76	391,284.55	0.00	391,284.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2	Blasthole Mining - Lower Sulfide	Detail	76,266.00	Tonne	20.67	1,576,679.69	424,326.55	324,346.60	0.00	749,589.64	78,416.90	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1	Labour	Detail	76,266.00	Tonne	5.91	450,357.89	424,326.55	0.00	0.00	26,031.34	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.11.2.1.1	Cable Labour	Detail	76,266.00	Tonne	0.09	7,175.90	6,762.92	0.00	0.00	412.98	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.1.1	Drilling	Detail	30.26	Hour	77.55	2,346.44	2,208.78	0.00	0.00	137.66	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	30.26	Each	64.09	1,939.21	1,825.44	0.00	0.00	113.77	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.1.2	Install & Grout	Detail	30.26	Hour	159.61	4,829.45	4,554.13	0.00	0.00	275.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	30.26	Each	64.09	1,939.21	1,825.44	0.00	0.00	113.77	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	30.26	Each	67.82	2,052.07	1,938.30	0.00	0.00	113.77	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.2	Drop Raise Labour	Detail	76,266.00	Tonne	0.42	32,227.83	30,349.34	0.00	0.00	1,878.49	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.2.1	Drill	Detail	320.44	Hour	77.55	24,849.50	23,391.64	0.00	0.00	1,457.86	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	320.44	Each	64.09	20,536.78	19,331.94	0.00	0.00	1,204.84	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.2.2	Blast	Detail	46.23	Hour	159.61	7,378.33	6,957.70	0.00	0.00	420.63	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	46.23	Each	64.09	2,962.68	2,788.87	0.00	0.00	173.81	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	1.00	46.23	Each	67.82	3,135.11	2,961.30	0.00	0.00	173.81	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.3	Drilling Labour	Detail	6,934.04	Meter	1.66	11,478.72	10,813.04	0.00	0.00	665.68	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	117.05	Each	64.09	7,501.92	7,061.80	0.00	0.00	440.12	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.25	29.26	Each	67.82	1,984.63	1,874.60	0.00	0.00	110.03	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.4	Mucking Labour	Detail	76,266.00	Tonne	2.17	165,601.64	155,886.21	0.00	0.00	9,715.43	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner	1.00	2,135.45	Each	64.09	136,860.86	128,831.58	0.00	0.00	8,029.28	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner	0.00	0.00	Each	67.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.5	Production Loading Labour	Detail	76,266.00	Tonne	1.00	76,466.31	72,107.08	0.00	0.00	4,359.23	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.11.2.1.5.1	Slot Blast	Detail	75.64	Hour	159.61	12,073.63	11,385.33	0.00	0.00	688.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	75.64 Each	64.09	4,848.03	4,563.60	0.00	0.00	284.42	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	75.64 Each	67.82	5,130.18	4,845.76	0.00	0.00	284.42	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.5.2	Void Blast	Detail	126.07	Hour	159.61	20,122.71	18,975.55	0.00	0.00	1,147.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	126.07 Each	64.09	8,080.04	7,606.01	0.00	0.00	474.04	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	126.07 Each	67.82	8,550.30	8,076.26	0.00	0.00	474.04	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.5.3	Final Blast	Detail	277.36	Hour	159.61	44,269.97	41,746.20	0.00	0.00	2,523.77	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	277.36 Each	64.09	17,776.10	16,733.22	0.00	0.00	1,042.88	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	277.36 Each	67.82	18,810.66	17,767.78	0.00	0.00	1,042.88	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.6	Filling Labour	Detail	76,266.00	Tonne	2.06	157,407.48	148,407.96	0.00	0.00	8,999.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.6.1	Fill Prep	Detail	201.72	Hour	237.16	47,839.31	45,086.11	0.00	0.00	2,753.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		2.00	403.43 Each	64.09	25,856.14	24,339.23	0.00	0.00	1,516.92	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	201.72 Each	67.82	13,680.48	12,922.02	0.00	0.00	758.46	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.1.6.2	Pour Time	Detail	686.47	Hour	159.61	109,568.18	103,321.85	0.00	0.00	6,246.32	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LALD1001	Miner		1.00	686.47 Each	64.09	43,995.84	41,414.71	0.00	0.00	2,581.13	0.00	0.00	0.00	0.00	0.00
LALD1000	Lead Miner		1.00	686.47 Each	67.82	46,556.37	43,975.25	0.00	0.00	2,581.13	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.2	Cable Bolting	Detail	76,266.00	Tonne	0.27	20,496.37	0.00	8,635.83	0.00	11,860.53	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.2.1	Materials	Detail	1,338.48	Meter	8.86	11,860.53	0.00	0.00	0.00	11,860.53	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
IMGS1014	Breather Tube		1,338.48	Meter	1.00	1,338.48	0.00	0.00	0.00	1,338.48	0.00	0.00	0.00	0.00	0.00
IMGS1013	Cable Bolt - 6.5 m x 16 mm		214.16	Each	25.00	5,353.92	0.00	0.00	0.00	5,353.92	0.00	0.00	0.00	0.00	0.00
IMCO1001	Grout		1,338.48	Kilogram	0.50	669.24	0.00	0.00	0.00	669.24	0.00	0.00	0.00	0.00	0.00
IMGS1006	Plate 8"x8" x 3/16" -SS39		1,338.48	Each	1.58	2,114.80	0.00	0.00	0.00	2,114.80	0.00	0.00	0.00	0.00	0.00
ASUDR2000	Hand Held Drilling		1.00	Meter	2,384.10	2,384.10	0.00	0.00	0.00	2,384.10	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.7.2.5.11.2.2.2	Equipment Operating	Detail	1,338.48	Meter	6.45	8,635.83	0.00	8,635.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	181.77 Each	47.51	8,635.83	0.00	8,635.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.3	Drop Raise Drilling	Detail	76,266.00	Tonne	0.70	53,229.38	0.00	13,288.02	0.00	39,941.35	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.3.1	Materials	Detail	1,731.41	Meter	23.07	39,941.35	0.00	0.00	0.00	39,941.35	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	39,941.35	39,941.35	0.00	0.00	0.00	39,941.35	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.3.2	Equipment Operating	Detail	1,731.41	Meter	7.67	13,288.02	0.00	13,288.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	279.69 Each	47.51	13,288.02	0.00	13,288.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.4	Drilling	Detail	76,266.00	Tonne	2.68	204,697.54	0.00	44,738.23	0.00	159,959.30	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.4.1	Materials	Detail	6,934.04	Meter	23.07	159,959.30	0.00	0.00	0.00	159,959.30	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
ASUDR3000	ITH Drilling Supplies (4.5")		1.00	Meter	159,959.30	159,959.30	0.00	0.00	0.00	159,959.30	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.4.2	Equipment Operating	Detail	6,934.04	Meter	6.45	44,738.23	0.00	44,738.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1007	ITH		1.00	941.66 Each	47.51	44,738.23	0.00	44,738.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.5	Blasting	Detail	76,266.00	Tonne	1.03	78,655.89	0.00	0.00	0.00	238.99	78,416.90	0.00	0.00	0.00	0.00
1.7.2.5.11.2.5.1	Materials	Detail	76,266.00	Tonne	1.03	78,655.89	0.00	0.00	0.00	238.99	78,416.90	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUEX1015	Emulsion		70,735.58	Kilogram	1.01	71,442.94	0.00	0.00	0.00	0.00	71,442.94	0.00	0.00	0.00	0.00
SUEX10016	Booster		197.51	Each	1.21	238.99	0.00	0.00	0.00	238.99	0.00	0.00	0.00	0.00	0.00
SUEX1002	Copper Duplex		210.12	Meter	0.29	60.94	0.00	0.00	0.00	0.00	60.94	0.00	0.00	0.00	0.00
SUEX1016	Electronic Cap		197.51	Each	35.00	6,913.02	0.00	0.00	0.00	0.00	6,913.02	0.00	0.00	0.00	0.00
1.7.2.5.11.2.5.2	Equipment Operating	Detail	1.16	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		0.00	0.00 Each	61.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.7.2.5.11.2.6	Mucking	Detail	76,266.00	Tonne	3.38	257,684.51	0.00	257,684.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1008	4.5 m3 LHD		1.00	2,135.45 Each	120.67	257,684.51	0.00	257,684.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7.2.5.11.2.7	Backfill	Detail	41,759.84	Tonne	12.25	511,558.12	0.00	0.00	0.00	511,558.12	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFI1000	Backfill		41,759.85	Tonne	12.25	511,558.12	0.00	0.00	0.00	511,558.12	0.00	0.00	0.00	0.00	0.00
1.8	Indirects	Detail	1.00	LS	88,907,084.12	88,907,084.12	50,203,478.37	6,136,384.39	1,248,800.00	3,443,621.43	25,807,259.93	2,067,540.00	0.00	0.00	0.00
1.8.1	Company Labour	Detail	1.00	LS	42,738,051.34	42,738,051.34	39,893,276.70	0.00	0.00	2,844,774.64	0.00	0.00	0.00	0.00	0.00
1.8.1.1	2011	Detail	1.00	Year	1,185,465.85	1,185,465.85	1,102,689.45	0.00	0.00	82,776.40	0.00	0.00	0.00	0.00	0.00
1.8.1.1.1	Rotation	Detail	1.00	Year	291,565.05	291,565.05	263,534.25	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager		0.00	0.00 Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss		0.00	0.00 Each	62.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator		0.00	0.00 Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid		0.00	0.00 Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent		0.00	0.00 Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse		0.00	0.00 Each	44.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour		2.00	3,727.50 Each	52.14	194,351.85	180,336.45	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman		2.00	3,727.50 Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder		0.00	0.00 Each	62.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		0.00	0.00 Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic		0.00	0.00 Each	71.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician		0.00	0.00 Each	63.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician		0.00	0.00 Each	57.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling		0.00	0.00 Each	47.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator		0.00	0.00 Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician		0.00	0.00 Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.1.2	Non-Rotation	Detail	1.00	Year	893,900.80	893,900.80	839,155.20	0.00	0.00	54,745.60	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	1.00	2,080.00	Each	73.33	152,526.40	144,705.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	0.00	0.00	Each	67.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	0.00	0.00	Each	62.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.1.2	2012	Detail	1.00	Year	4,001,467.60	4,001,467.60	3,734,051.70	0.00	0.00	267,415.90	0.00	0.00	0.00	0.00	0.00

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1.8.1.2.1	Rotation	Detail	1.00	Year	2,752,386.00	2,752,386.00	2,563,178.10	0.00	0.00	189,207.90	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	3.00	5,591.25	Each	62.06	346,992.98	325,969.88	0.00	0.00	21,023.10	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.2.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.3	2013	Detail	1.00	Year	4,117,131.93	4,117,131.93	3,842,708.33	0.00	0.00	274,423.60	0.00	0.00	0.00	0.00	0.00

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1.8.1.3.1	Rotation	Detail	1.00	Year	2,868,050.33	2,868,050.33	2,671,834.73	0.00	0.00	196,215.60	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	4.00	7,455.00	Each	62.06	462,657.30	434,626.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.3.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.4	2014	Detail	1.00	Year	4,852,828.60	4,852,828.60	4,529,351.10	0.00	0.00	323,477.50	0.00	0.00	0.00	0.00	0.00

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1.8.1.4.1	Rotation	Detail	1.00	Year	3,603,747.00	3,603,747.00	3,358,477.50	0.00	0.00	245,269.50	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	7.00	13,046.25	Each	62.06	809,650.28	760,596.38	0.00	0.00	49,053.90	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.4.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.5	2015	Detail	1.00	Year	5,199,821.58	5,199,821.58	4,855,320.98	0.00	0.00	344,500.60	0.00	0.00	0.00	0.00	0.00

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1.8.1.5.1	Rotation	Detail	1.00	Year	3,950,739.98	3,950,739.98	3,684,447.38	0.00	0.00	266,292.60	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	10.00	18,637.50	Each	62.06	1,156,643.25	1,086,566.25	0.00	0.00	70,077.00	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.5.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.6	2016	Detail	1.00	Year	5,315,485.90	5,315,485.90	4,963,977.60	0.00	0.00	351,508.30	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.6.1	Rotation	Detail	1.00	Year	4,066,404.30	4,066,404.30	3,793,104.00	0.00	0.00	273,300.30	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	11.00	20,501.25	Each	62.06	1,272,307.58	1,195,222.88	0.00	0.00	77,084.70	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.6.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.7	2017	Detail	1.00	Year	5,315,485.90	5,315,485.90	4,963,977.60	0.00	0.00	351,508.30	0.00	0.00	0.00	0.00	0.00

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1.8.1.7.1	Rotation	Detail	1.00	Year	4,066,404.30	4,066,404.30	3,793,104.00	0.00	0.00	273,300.30	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	11.00	20,501.25	Each	62.06	1,272,307.58	1,195,222.88	0.00	0.00	77,084.70	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.7.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.8	2018	Detail	1.00	Year	5,199,821.58	5,199,821.58	4,855,320.98	0.00	0.00	344,500.60	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.8.1	Rotation	Detail	1.00	Year	3,950,739.98	3,950,739.98	3,684,447.38	0.00	0.00	266,292.60	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	10.00	18,637.50	Each	62.06	1,156,643.25	1,086,566.25	0.00	0.00	70,077.00	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	4.00	7,455.00	Each	57.46	428,364.30	400,333.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.1.8.2	Non-Rotation	Detail	1.00	Year	1,249,081.60	1,249,081.60	1,170,873.60	0.00	0.00	78,208.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent	1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist	0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist	1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk	1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer	1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner	1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic	1.00	2,080.00	Each	62.37	129,729.60	121,908.80	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.1.9	2019	Detail	1.00	Year	4,505,542.78	4,505,542.78	4,204,714.58	0.00	0.00	300,828.20	0.00	0.00	0.00	0.00	0.00

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1.8.1.9.1	Rotation	Detail	1.00	Year	3,505,229.18	3,505,229.18	3,266,967.38	0.00	0.00	238,261.80	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,863.75	Each	44.50	82,936.88	75,929.18	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	7,455.00	Each	52.14	388,703.70	360,672.90	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	3,727.50	Each	26.08	97,213.20	83,197.80	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	8.00	14,910.00	Each	62.06	925,314.60	869,253.00	0.00	0.00	56,061.60	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	3,727.50	Each	63.03	234,944.33	220,928.93	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	2.00	3,727.50	Each	57.46	214,182.15	200,166.75	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	9,318.75	Each	47.60	443,572.50	408,534.00	0.00	0.00	35,038.50	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.9.2	Non-Rotation	Detail	1.00	Year	1,000,313.60	1,000,313.60	937,747.20	0.00	0.00	62,566.40	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**							
LAGE1000	Project Manager		0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent		1.00	2,080.00	Each	86.41	179,732.80	171,912.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent		0.00	0.00	Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer		0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer		1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1006	Surveyor		1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1007	Technician		0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist		0.00	0.00	Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician		0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist		1.00	2,080.00	Each	54.19	112,715.20	104,894.40	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1011	Clerk		1.00	2,080.00	Each	38.08	79,206.40	71,385.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1012	Administrator		0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer		1.00	2,080.00	Each	67.26	139,900.80	132,080.00	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner		1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent		0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract		0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner		1.00	2,080.00	Each	57.23	119,038.40	111,217.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic		0.00	0.00	Each	62.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.1.10	2020	Detail	1.00	Year	3,044,999.64	3,044,999.64	2,841,164.40	0.00	0.00	203,835.24	0.00	0.00	0.00	0.00	0.00

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1.8.1.10.1	Rotation	Detail	1.00	Year	2,379,300.84	2,379,300.84	2,216,524.80	0.00	0.00	162,776.04	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
LAGE1000	Project Manager	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	5,586.00	Each	62.10	346,890.60	325,887.24	0.00	0.00	21,003.36	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator	0.00	0.00	Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1014	Security/First Aid	4.00	5,586.00	Each	52.14	291,254.04	270,250.68	0.00	0.00	21,003.36	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent	0.00	0.00	Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1018	Warehouse	1.00	1,396.50	Each	44.50	62,144.25	56,893.41	0.00	0.00	5,250.84	0.00	0.00	0.00	0.00	0.00
LAGE1019	Surface Support Labour	4.00	5,586.00	Each	52.14	291,254.04	270,250.68	0.00	0.00	21,003.36	0.00	0.00	0.00	0.00	0.00
LAGE1020	Dryman	2.00	2,793.00	Each	26.08	72,841.44	62,339.76	0.00	0.00	10,501.68	0.00	0.00	0.00	0.00	0.00
LASC1002	Mechanic/Welder	7.00	9,775.50	Each	62.06	606,667.53	569,911.65	0.00	0.00	36,755.88	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner	0.00	0.00	Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	2,793.00	Each	71.55	199,839.15	189,337.47	0.00	0.00	10,501.68	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	2.00	2,793.00	Each	63.03	176,042.79	165,541.11	0.00	0.00	10,501.68	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	0.00	0.00	Each	57.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAMH1000	Material Handling	5.00	6,982.50	Each	47.60	332,367.00	306,112.80	0.00	0.00	26,254.20	0.00	0.00	0.00	0.00	0.00
LAGE1022	Backfill Plant Operator	0.00	0.00	Each	52.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician	0.00	0.00	Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.1.10.2	Non-Rotation	Detail	1.00	Year	665,698.80	665,698.80	624,639.60	0.00	0.00	41,059.20	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager		0.00	0.00 Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1001	Mine Superintendent		1.00	1,560.00 Each	86.41	134,799.60	128,934.00	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent		0.00	0.00 Each	92.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1004	Chief Mine Engineer		0.00	0.00 Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer		1.00	1,560.00 Each	66.33	103,474.80	97,609.20	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1006	Surveyor		1.00	1,560.00 Each	54.19	84,536.40	78,670.80	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1007	Technician		0.00	0.00 Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1008	Chief Mine Geologist		0.00	0.00 Each	73.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1009	Geological Technician		0.00	0.00 Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1010	Beat Geologist		0.00	0.00 Each	54.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1011	Clerk		1.00	1,560.00 Each	38.08	59,404.80	53,539.20	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1012	Administrator		0.00	0.00 Each	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1013	Safety/Trainer		1.00	1,560.00 Each	67.26	104,925.60	99,060.00	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1015	Mtce Planner		1.00	1,560.00 Each	57.23	89,278.80	83,413.20	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LAGE1016	Construction Superintendent		0.00	0.00 Each	98.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1017	Purch/Material/Contract		0.00	0.00 Each	57.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1021	Mine Planner		1.00	1,560.00 Each	57.23	89,278.80	83,413.20	0.00	0.00	5,865.60	0.00	0.00	0.00	0.00	0.00
LASC1008	Lead Construction Miner		0.00	0.00 Each	63.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1020	Industrial Mechanic		0.00	0.00 Each	62.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.2	Contractor Labour	Detail	1.00	LS	10,909,048.46	10,909,048.46	10,310,201.67	0.00	0.00	598,846.79	0.00	0.00	0.00	0.00	0.00
1.8.2.1	2011	Detail	1.00	Year	480,784.30	480,784.30	461,857.97	0.00	0.00	18,926.34	0.00	0.00	0.00	0.00	0.00
1.8.2.1.1	Rotation	Detail	1.00	Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1002	Mechanic/Welder		0.00	0.00 Each	62.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician		0.00	0.00 Each	57.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss		0.00	0.00 Each	62.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.2.1.2	Non-Rotation	Detail	1.00	Year	480,784.30	480,784.30	461,857.97	0.00	0.00	18,926.34	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager		1.00	2,080.00 Each	98.55	204,984.00	197,163.20	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent		1.00	2,080.00 Each	92.48	192,358.40	184,537.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer		0.00	0.00 Each	66.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.2.2	2012	Detail	1.00	Year	2,092,612.80	2,092,612.80	1,979,430.12	0.00	0.00	113,182.67	0.00	0.00	0.00	0.00	0.00
1.8.2.2.1	Rotation	Detail	1.00	Year	1,444,889.15	1,444,889.15	1,360,095.98	0.00	0.00	84,793.17	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1002	Mechanic/Welder	3.00	5,591.25	Each	62.06	346,992.98	325,969.88	0.00	0.00	21,023.10	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	0.00	0.00	Each	57.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	1.00	1,863.75	Each	63.03	117,472.16	110,464.46	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
1.8.2.2.2	Non-Rotation	Detail	1.00	Year	647,723.65	647,723.65	619,334.14	0.00	0.00	28,389.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager	1.00	2,080.00	Each	98.55	204,984.00	197,163.20	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	1.00	2,080.00	Each	92.48	192,358.40	184,537.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.2.3	2013	Detail	1.00	Year	3,051,542.36	3,051,542.36	2,879,004.47	0.00	0.00	172,537.89	0.00	0.00	0.00	0.00	0.00
1.8.2.3.1	Rotation	Detail	1.00	Year	2,403,818.72	2,403,818.72	2,259,670.33	0.00	0.00	144,148.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1002	Mechanic/Welder	8.00	14,910.00	Each	62.06	925,314.60	869,253.00	0.00	0.00	56,061.60	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician	2.00	3,727.50	Each	57.46	214,182.15	200,166.75	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss	4.00	7,455.00	Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic	2.00	3,727.50	Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician	1.00	1,863.75	Each	63.03	117,472.16	110,464.46	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
1.8.2.3.2	Non-Rotation	Detail	1.00	Year	647,723.65	647,723.65	619,334.14	0.00	0.00	28,389.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager	1.00	2,080.00	Each	98.55	204,984.00	197,163.20	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent	1.00	2,080.00	Each	92.48	192,358.40	184,537.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer	1.00	2,080.00	Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.2.4	2014	Detail	1.00	Year	3,051,542.36	3,051,542.36	2,879,004.47	0.00	0.00	172,537.89	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.2.4.1	Rotation	Detail	1.00	Year	2,403,818.72	2,403,818.72	2,259,670.33	0.00	0.00	144,148.39	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1002	Mechanic/Welder		8.00	14,910.00 Each	62.06	925,314.60	869,253.00	0.00	0.00	56,061.60	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician		2.00	3,727.50 Each	57.46	214,182.15	200,166.75	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss		4.00	7,455.00 Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic		2.00	3,727.50 Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician		1.00	1,863.75 Each	63.03	117,472.16	110,464.46	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
1.8.2.4.2	Non-Rotation	Detail	1.00	Year	647,723.65	647,723.65	619,334.14	0.00	0.00	28,389.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager		1.00	2,080.00 Each	98.55	204,984.00	197,163.20	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent		1.00	2,080.00 Each	92.48	192,358.40	184,537.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer		1.00	2,080.00 Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.2.5	2015	Detail	1.00	Year	2,232,566.63	2,232,566.63	2,110,904.64	0.00	0.00	121,661.99	0.00	0.00	0.00	0.00	0.00
1.8.2.5.1	Rotation	Detail	1.00	Year	1,584,842.98	1,584,842.98	1,491,570.49	0.00	0.00	93,272.49	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LASC1002	Mechanic/Welder		4.00	7,455.00 Each	62.06	462,657.30	434,626.50	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1004	Electrician		0.00	0.00 Each	57.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAGE1003	Shift Boss		4.00	7,455.00 Each	62.10	462,955.50	434,924.70	0.00	0.00	28,030.80	0.00	0.00	0.00	0.00	0.00
LASC1018	Lead Mechanic		2.00	3,727.50 Each	71.55	266,702.63	252,687.23	0.00	0.00	14,015.40	0.00	0.00	0.00	0.00	0.00
LASC1019	Lead Electrician		1.00	1,863.75 Each	63.03	117,472.16	110,464.46	0.00	0.00	7,007.70	0.00	0.00	0.00	0.00	0.00
1.8.2.5.2	Non-Rotation	Detail	1.00	Year	647,723.65	647,723.65	619,334.14	0.00	0.00	28,389.50	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
LAGE1000	Project Manager		1.00	2,080.00 Each	98.55	204,984.00	197,163.20	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1002	Mtce Superintendent		1.00	2,080.00 Each	92.48	192,358.40	184,537.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
LAGE1005	Senior Engineer		1.00	2,080.00 Each	66.33	137,966.40	130,145.60	0.00	0.00	7,820.80	0.00	0.00	0.00	0.00	0.00
1.8.3	Indirect Supplies	Detail	1.00	LS	4,925,124.58	4,925,124.58	0.00	0.00	0.00	0.00	4,925,124.58	0.00	0.00	0.00	0.00
1.8.3.1	2011	Detail	1.00	LS	93,337.80	93,337.80	0.00	0.00	0.00	0.00	93,337.80	0.00	0.00	0.00	0.00
1.8.3.1.1	Engineering and Geology	Detail	60.00	Day	142.26	8,535.60	0.00	0.00	0.00	0.00	8,535.60	0.00	0.00	0.00	0.00
1.8.3.1.1.1	Travelling Expenses	Plug	60.00	Day	25.35	1,521.00	0.00	0.00	0.00	0.00	1,521.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.3.1.1.2	Professional Fee	Plug	60.00	Day	4.23	253.80	0.00	0.00	0.00	0.00	253.80	0.00	0.00	0.00	0.00
1.8.3.1.1.3	Software License	Plug	60.00	Day	112.68	6,760.80	0.00	0.00	0.00	0.00	6,760.80	0.00	0.00	0.00	0.00
1.8.3.1.2	Mining	Detail	60.00	Day	754.92	45,295.20	0.00	0.00	0.00	0.00	45,295.20	0.00	0.00	0.00	0.00
1.8.3.1.2.1	Building and Yard Mtce	Plug	60.00	Day	101.41	6,084.60	0.00	0.00	0.00	0.00	6,084.60	0.00	0.00	0.00	0.00
1.8.3.1.2.2	Pump Mtce	Plug	60.00	Day	169.01	10,140.60	0.00	0.00	0.00	0.00	10,140.60	0.00	0.00	0.00	0.00
1.8.3.1.2.3	Ventilation Supplies and Mtce	Plug	60.00	Day	169.01	10,140.60	0.00	0.00	0.00	0.00	10,140.60	0.00	0.00	0.00	0.00
1.8.3.1.2.4	Compressor Mtce	Plug	60.00	Day	211.27	12,676.20	0.00	0.00	0.00	0.00	12,676.20	0.00	0.00	0.00	0.00
1.8.3.1.2.5	Dry Operating	Plug	60.00	Day	70.42	4,225.20	0.00	0.00	0.00	0.00	4,225.20	0.00	0.00	0.00	0.00
1.8.3.1.2.6	Potable Water Supply - Allow	Plug	60.00	Day	33.80	2,028.00	0.00	0.00	0.00	0.00	2,028.00	0.00	0.00	0.00	0.00
1.8.3.1.3	Administration	Detail	60.00	Day	658.45	39,507.00	0.00	0.00	0.00	0.00	39,507.00	0.00	0.00	0.00	0.00
1.8.3.1.3.1	Office Supplies	Plug	60.00	Day	70.42	4,225.20	0.00	0.00	0.00	0.00	4,225.20	0.00	0.00	0.00	0.00
1.8.3.1.3.2	Freight and Courier	Plug	60.00	Day	150.00	9,000.00	0.00	0.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00
1.8.3.1.3.3	Computer and Phone	Plug	60.00	Day	338.03	20,281.80	0.00	0.00	0.00	0.00	20,281.80	0.00	0.00	0.00	0.00
1.8.3.1.3.4	Septic Removal	Plug	60.00	Day	100.00	6,000.00	0.00	0.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00
1.8.3.2	2012	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.2.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.2.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.2.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.2.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.2.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00

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1.8.3.2.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.2.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.2.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.2.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.2.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.2.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.2.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.2.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.2.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.2.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.2.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.3	2013	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.3.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.3.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.3.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.3.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.3.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.3.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.3.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.3.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.3.3.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.3.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.3.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.3.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.3.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.3.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.3.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.3.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.4	2014	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.4.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.4.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.4.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.4.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.4.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.4.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.4.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.4.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.4.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.4.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.4.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00

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1.8.3.4.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.4.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.4.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.4.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.4.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.5	2015	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.5.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.5.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.5.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.5.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.5.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.5.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.5.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.5.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.5.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.5.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.5.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.5.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.5.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.5.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00

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1.8.3.5.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.5.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.6	2016	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.6.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.6.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.6.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.6.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.6.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.6.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.6.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.6.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.6.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.6.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.6.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.6.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.6.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.6.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.6.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.6.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.7	2017	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00

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1.8.3.7.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.7.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.7.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.7.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.7.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.7.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.7.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.7.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.7.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.7.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.7.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.7.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.7.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.7.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.7.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.7.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.8	2018	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.8.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.8.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.8.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00

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1.8.3.8.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.8.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.8.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00
1.8.3.8.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.8.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.8.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.8.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.8.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.8.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.8.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.8.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.8.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.8.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.9	2019	Detail	1.00	LS	552,248.65	552,248.65	0.00	0.00	0.00	0.00	552,248.65	0.00	0.00	0.00	0.00
1.8.3.9.1	Engineering and Geology	Detail	355.00	Day	142.26	50,502.30	0.00	0.00	0.00	0.00	50,502.30	0.00	0.00	0.00	0.00
1.8.3.9.1.1	Travelling Expenses	Plug	355.00	Day	25.35	8,999.25	0.00	0.00	0.00	0.00	8,999.25	0.00	0.00	0.00	0.00
1.8.3.9.1.2	Professional Fee	Plug	355.00	Day	4.23	1,501.65	0.00	0.00	0.00	0.00	1,501.65	0.00	0.00	0.00	0.00
1.8.3.9.1.3	Software License	Plug	355.00	Day	112.68	40,001.40	0.00	0.00	0.00	0.00	40,001.40	0.00	0.00	0.00	0.00
1.8.3.9.2	Mining	Detail	355.00	Day	754.92	267,996.60	0.00	0.00	0.00	0.00	267,996.60	0.00	0.00	0.00	0.00
1.8.3.9.2.1	Building and Yard Mtce	Plug	355.00	Day	101.41	36,000.55	0.00	0.00	0.00	0.00	36,000.55	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.3.9.2.2	Pump Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.9.2.3	Ventilation Supplies and Mtce	Plug	355.00	Day	169.01	59,998.55	0.00	0.00	0.00	0.00	59,998.55	0.00	0.00	0.00	0.00
1.8.3.9.2.4	Compressor Mtce	Plug	355.00	Day	211.27	75,000.85	0.00	0.00	0.00	0.00	75,000.85	0.00	0.00	0.00	0.00
1.8.3.9.2.5	Dry Operating	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.9.2.6	Potable Water Supply - Allow	Plug	355.00	Day	33.80	11,999.00	0.00	0.00	0.00	0.00	11,999.00	0.00	0.00	0.00	0.00
1.8.3.9.3	Administration	Detail	355.00	Day	658.45	233,749.75	0.00	0.00	0.00	0.00	233,749.75	0.00	0.00	0.00	0.00
1.8.3.9.3.1	Office Supplies	Plug	355.00	Day	70.42	24,999.10	0.00	0.00	0.00	0.00	24,999.10	0.00	0.00	0.00	0.00
1.8.3.9.3.2	Freight and Courier	Plug	355.00	Day	150.00	53,250.00	0.00	0.00	0.00	0.00	53,250.00	0.00	0.00	0.00	0.00
1.8.3.9.3.3	Computer and Phone	Plug	355.00	Day	338.03	120,000.65	0.00	0.00	0.00	0.00	120,000.65	0.00	0.00	0.00	0.00
1.8.3.9.3.4	Septic Removal	Plug	355.00	Day	100.00	35,500.00	0.00	0.00	0.00	0.00	35,500.00	0.00	0.00	0.00	0.00
1.8.3.10	2020	Detail	1.00	LS	413,797.58	413,797.58	0.00	0.00	0.00	0.00	413,797.58	0.00	0.00	0.00	0.00
1.8.3.10.1	Engineering and Geology	Detail	266.00	Day	142.26	37,841.16	0.00	0.00	0.00	0.00	37,841.16	0.00	0.00	0.00	0.00
1.8.3.10.1.1	Travelling Expenses	Plug	266.00	Day	25.35	6,743.10	0.00	0.00	0.00	0.00	6,743.10	0.00	0.00	0.00	0.00
1.8.3.10.1.2	Professional Fee	Plug	266.00	Day	4.23	1,125.18	0.00	0.00	0.00	0.00	1,125.18	0.00	0.00	0.00	0.00
1.8.3.10.1.3	Software License	Plug	266.00	Day	112.68	29,972.88	0.00	0.00	0.00	0.00	29,972.88	0.00	0.00	0.00	0.00
1.8.3.10.2	Mining	Detail	266.00	Day	754.92	200,808.72	0.00	0.00	0.00	0.00	200,808.72	0.00	0.00	0.00	0.00
1.8.3.10.2.1	Building and Yard Mtce	Plug	266.00	Day	101.41	26,975.06	0.00	0.00	0.00	0.00	26,975.06	0.00	0.00	0.00	0.00
1.8.3.10.2.2	Pump Mtce	Plug	266.00	Day	169.01	44,956.66	0.00	0.00	0.00	0.00	44,956.66	0.00	0.00	0.00	0.00
1.8.3.10.2.3	Ventilation Supplies and Mtce	Plug	266.00	Day	169.01	44,956.66	0.00	0.00	0.00	0.00	44,956.66	0.00	0.00	0.00	0.00
1.8.3.10.2.4	Compressor Mtce	Plug	266.00	Day	211.27	56,197.82	0.00	0.00	0.00	0.00	56,197.82	0.00	0.00	0.00	0.00

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1.8.3.10.2.5	Dry Operating	Plug	266.00	Day	70.42	18,731.72	0.00	0.00	0.00	0.00	18,731.72	0.00	0.00	0.00	0.00
1.8.3.10.2.6	Potable Water Supply - Allow	Plug	266.00	Day	33.80	8,990.80	0.00	0.00	0.00	0.00	8,990.80	0.00	0.00	0.00	0.00
1.8.3.10.3	Administration	Detail	266.00	Day	658.45	175,147.70	0.00	0.00	0.00	0.00	175,147.70	0.00	0.00	0.00	0.00
1.8.3.10.3.1	Office Supplies	Plug	266.00	Day	70.42	18,731.72	0.00	0.00	0.00	0.00	18,731.72	0.00	0.00	0.00	0.00
1.8.3.10.3.2	Freight and Courier	Plug	266.00	Day	150.00	39,900.00	0.00	0.00	0.00	0.00	39,900.00	0.00	0.00	0.00	0.00
1.8.3.10.3.3	Computer and Phone	Plug	266.00	Day	338.03	89,915.98	0.00	0.00	0.00	0.00	89,915.98	0.00	0.00	0.00	0.00
1.8.3.10.3.4	Septic Removal	Plug	266.00	Day	100.00	26,600.00	0.00	0.00	0.00	0.00	26,600.00	0.00	0.00	0.00	0.00
1.8.4	Propane	Detail	1.00	LS	5,347,870.13	5,347,870.13	0.00	0.00	0.00	0.00	5,347,870.13	0.00	0.00	0.00	0.00
1.8.4.1	2012	Plug	100,000.00	Litre	0.53	53,000.00	0.00	0.00	0.00	0.00	53,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		78,364.99	Litre	0.53	41,533.45	0.00	0.00	0.00	0.00	41,533.45	0.00	0.00	0.00	0.00
1.8.4.2	2013	Plug	800,000.00	Litre	0.53	424,000.00	0.00	0.00	0.00	0.00	424,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		642,093.87	Litre	0.53	340,309.75	0.00	0.00	0.00	0.00	340,309.75	0.00	0.00	0.00	0.00
1.8.4.3	2014	Plug	1,167,025.00	Litre	0.53	618,523.25	0.00	0.00	0.00	0.00	618,523.25	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,167,025.00	Litre	0.53	618,523.25	0.00	0.00	0.00	0.00	618,523.25	0.00	0.00	0.00	0.00
1.8.4.4	2015	Plug	1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00

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1.8.4.5	2016	Plug	1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
1.8.4.6	2017	Plug	1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
1.8.4.7	2018	Plug	1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
1.8.4.8	2019	Plug	1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		1,458,781.00	Litre	0.53	773,153.93	0.00	0.00	0.00	0.00	773,153.93	0.00	0.00	0.00	0.00
1.8.4.9	2020	Plug	729,391.00	Litre	0.53	386,577.23	0.00	0.00	0.00	0.00	386,577.23	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
SUFU2000	Propane		0.00	Litre	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUFU2000	Propane		729,391.00	Litre	0.53	386,577.23	0.00	0.00	0.00	0.00	386,577.23	0.00	0.00	0.00	0.00
1.8.5	Power	Detail	1.00	LS	13,454,265.22	13,454,265.22	0.00	0.00	0.00	0.00	13,454,265.22	0.00	0.00	0.00	0.00
1.8.5.1	2011	Plug	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.5.2	2012	Plug	1.00	LS	986,436.77	986,436.77	0.00	0.00	0.00	0.00	986,436.77	0.00	0.00	0.00	0.00
1.8.5.3	2013	Plug	1.00	LS	1,526,126.16	1,526,126.16	0.00	0.00	0.00	0.00	1,526,126.16	0.00	0.00	0.00	0.00
1.8.5.4	2014	Plug	1.00	LS	1,668,149.16	1,668,149.16	0.00	0.00	0.00	0.00	1,668,149.16	0.00	0.00	0.00	0.00
1.8.5.5	2015	Plug	1.00	LS	1,726,726.61	1,726,726.61	0.00	0.00	0.00	0.00	1,726,726.61	0.00	0.00	0.00	0.00
1.8.5.6	2016	Plug	1.00	LS	1,679,008.68	1,679,008.68	0.00	0.00	0.00	0.00	1,679,008.68	0.00	0.00	0.00	0.00

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1.8.5.7	2017	Plug	1.00	LS	1,592,511.18	1,592,511.18	0.00	0.00	0.00	0.00	1,592,511.18	0.00	0.00	0.00	0.00
1.8.5.8	2018	Plug	1.00	LS	1,500,662.78	1,500,662.78	0.00	0.00	0.00	0.00	1,500,662.78	0.00	0.00	0.00	0.00
1.8.5.9	2019	Plug	1.00	LS	1,623,845.92	1,623,845.92	0.00	0.00	0.00	0.00	1,623,845.92	0.00	0.00	0.00	0.00
1.8.5.10	2020	Plug	1.00	LS	1,150,797.96	1,150,797.96	0.00	0.00	0.00	0.00	1,150,797.96	0.00	0.00	0.00	0.00
1.8.6	Mobile Equipment	Detail	1.00	LS	7,385,184.39	7,385,184.39	0.00	6,136,384.39	1,248,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1	Company Equipment	Detail	1.00	Year	7,201,766.79	7,201,766.79	0.00	5,952,966.79	1,248,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1	2011	Detail	1.00	Year	81,644.54	81,644.54	0.00	57,844.54	23,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1.1	Scissor Lift	Detail	170.00	Hour	33.57	5,706.90	0.00	5,706.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1002	Scissorlift		1.00	170.00 Each	33.57	5,706.90	0.00	5,706.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1.2	Boom Truck	Detail	221.00	Hour	61.10	13,503.10	0.00	13,503.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	221.00 Each	61.10	13,503.10	0.00	13,503.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1.3	Surface Payloader/Forklift	Detail	221.00	Hour	146.14	32,296.94	0.00	32,296.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	221.00 Each	146.14	32,296.94	0.00	32,296.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1.4	Surface Pick up Trucks	Detail	136.00	Hour	46.60	6,337.60	0.00	6,337.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	544.00 Each	11.65	6,337.60	0.00	6,337.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.1.5	D9 Dozer Operating and Rental	Plug	0.17	Year	140,000.00	23,800.00	0.00	0.00	23,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2	2012	Detail	1.00	Year	527,613.00	527,613.00	0.00	387,613.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.6.1.2.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.3	Personnel Carrier	Detail		1,000.00 Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1011	Personnel Carrier		0.00	0.00 Each	53.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.4	Forklift	Detail		1,300.00 Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1012	Forklift		0.00	0.00 Each	63.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.5	Boom Truck	Detail		1,300.00 Hour	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	1,300.00 Each	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.6	Grader	Detail		1,000.00 Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1013	Grader		0.00	0.00 Each	74.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.7	Explosive Truck	Detail		1,000.00 Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1014	Explosives Truck		0.00	0.00 Each	54.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.8	Fuel/Lube Truck	Detail		800.00 Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1015	Fuel/Lube Truck		0.00	0.00 Each	46.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.9	Surface Payloader/Forklift	Detail		1,300.00 Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.10	Surface Pick up Trucks	Detail		800.00 Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.2.11	D9 Dozer Operating and Rental	Plug		1.00 Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.3	2013	Detail	1.00	Year	781,211.00	781,211.00	0.00	641,211.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift	1.00	1,300.00	Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck	4.00	3,200.00	Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.3	Personnel Carrier	Detail	1,000.00	Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1011	Personnel Carrier	1.00	1,000.00	Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.4	Forklift	Detail	1,300.00	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1012	Forklift	0.00	0.00	Each	63.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.5	Boom Truck	Detail	1,300.00	Hour	122.20	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck	2.00	2,600.00	Each	61.10	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1013	Grader	1.00	1,000.00	Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.7	Explosive Truck	Detail	1,000.00	Hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1014	Explosives Truck	0.00	0.00	Each	54.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.8	Fuel/Lube Truck	Detail	800.00	Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck	1.00	800.00	Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.9	Surface Payloader/Forklift	Detail	1,300.00	Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader	1.00	1,300.00	Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.6.1.3.10	Surface Pick up Trucks	Detail	800.00	Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.3.11	D9 Dozer Operating and Rental	Plug	1.00	Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4	2014	Detail	1.00	Year	918,209.00	918,209.00	0.00	778,209.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.3	Personnel Carrier	Detail	1,000.00	Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.4	Forklift	Detail	1,300.00	Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.5	Boom Truck	Detail	1,300.00	Hour	122.20	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		2.00	2,600.00 Each	61.10	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.7	Explosive Truck	Detail	1,000.00	Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.4.8	Fuel/Lube Truck	Detail	800.00	Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.9	Surface Payloader/Forklift	Detail	1,300.00	Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.10	Surface Pick up Trucks	Detail	800.00	Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.4.11	D9 Dozer Operating and Rental	Plug	1.00	Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5	2015	Detail	1.00	Year	908,889.00	908,889.00	0.00	768,889.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.3	Personnel Carrier	Detail	1,000.00	Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.4	Forklift	Detail	1,300.00	Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.5	Boom Truck	Detail	1,300.00	Hour	122.20	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		2.00	2,600.00 Each	61.10	158,860.00	0.00	158,860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.6.1.5.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.7	Explosive Truck	Detail		1,000.00 Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.8	Fuel/Lube Truck	Detail		800.00 Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.9	Surface Payloader/Forklift	Detail		1,300.00 Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.10	Surface Pick up Trucks	Detail		800.00 Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.5.11	D9 Dozer Operating and Rental	Plug		1.00 Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6	2016	Detail		1.00 Year	838,779.00	838,779.00	0.00	698,779.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.1	Scissor Lift	Detail		1,300.00 Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.2	Utility Pick Up	Detail		800.00 Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.3	Personnel Carrier	Detail		1,000.00 Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.6.1.6.4	Forklift	Detail	1,300.00	Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.5	Boom Truck	Detail	1,300.00	Hour	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	1,300.00 Each	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.7	Explosive Truck	Detail	1,000.00	Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.8	Fuel/Lube Truck	Detail	800.00	Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.9	Surface Payloader/Forklift	Detail	1,300.00	Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.10	Surface Pick up Trucks	Detail	800.00	Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.6.11	D9 Dozer Operating and Rental	Plug	1.00	Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7	2017	Detail	1.00	Year	838,779.00	838,779.00	0.00	698,779.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.7.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.3	Personnel Carrier	Detail		1,000.00 Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.4	Forklift	Detail		1,300.00 Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.5	Boom Truck	Detail		1,300.00 Hour	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	1,300.00 Each	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.6	Grader	Detail		1,000.00 Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.7	Explosive Truck	Detail		1,000.00 Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.8	Fuel/Lube Truck	Detail		800.00 Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.9	Surface Payloader/Forklift	Detail		1,300.00 Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.10	Surface Pick up Trucks	Detail		800.00 Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.7.11	D9 Dozer Operating and Rental	Plug		1.00 Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.8	2018	Detail	1.00	Year	838,779.00	838,779.00	0.00	698,779.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.3	Personnel Carrier	Detail	1,000.00	Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.4	Forklift	Detail	1,300.00	Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.5	Boom Truck	Detail	1,300.00	Hour	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	1,300.00 Each	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.7	Explosive Truck	Detail	1,000.00	Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.8	Fuel/Lube Truck	Detail	800.00	Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.9	Surface Payloader/Forklift	Detail	1,300.00	Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.8.10	Surface Pick up Trucks	Detail	800.00	Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.8.11	D9 Dozer Operating and Rental	Plug	1.00	Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9	2019	Detail	1.00	Year	838,779.00	838,779.00	0.00	698,779.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.1	Scissor Lift	Detail	1,300.00	Hour	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1002	Scissorlift		1.00	1,300.00 Each	33.57	43,641.00	0.00	43,641.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.2	Utility Pick Up	Detail	800.00	Hour	46.60	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		4.00	3,200.00 Each	11.65	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.3	Personnel Carrier	Detail	1,000.00	Hour	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1011	Personnel Carrier		1.00	1,000.00 Each	53.07	53,070.00	0.00	53,070.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.4	Forklift	Detail	1,300.00	Hour	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1012	Forklift		1.00	1,300.00 Each	63.76	82,888.00	0.00	82,888.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.5	Boom Truck	Detail	1,300.00	Hour	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1003	Boom Truck		1.00	1,300.00 Each	61.10	79,430.00	0.00	79,430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.6	Grader	Detail	1,000.00	Hour	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1013	Grader		1.00	1,000.00 Each	74.93	74,930.00	0.00	74,930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.7	Explosive Truck	Detail	1,000.00	Hour	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CEUM1014	Explosives Truck		1.00	1,000.00 Each	54.11	54,110.00	0.00	54,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.9.8	Fuel/Lube Truck	Detail	800.00	Hour	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck		1.00	800.00 Each	46.06	36,848.00	0.00	36,848.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.9	Surface Payloader/Forklift	Detail	1,300.00	Hour	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	1,300.00 Each	146.14	189,982.00	0.00	189,982.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.10	Surface Pick up Trucks	Detail	800.00	Hour	58.25	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		5.00	4,000.00 Each	11.65	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.9.11	D9 Dozer Operating and Rental	Plug	1.00	Year	140,000.00	140,000.00	0.00	0.00	140,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10	2020	Detail	1.00	Year	629,084.25	629,084.25	0.00	524,084.25	105,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.1	Scissor Lift	Detail	975.00	Hour	33.57	32,730.75	0.00	32,730.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1002	Scissorlift		1.00	975.00 Each	33.57	32,730.75	0.00	32,730.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.2	Utility Pick Up	Detail	600.00	Hour	46.60	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		4.00	2,400.00 Each	11.65	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.3	Personnel Carrier	Detail	750.00	Hour	53.07	39,802.50	0.00	39,802.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1011	Personnel Carrier		1.00	750.00 Each	53.07	39,802.50	0.00	39,802.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.4	Forklift	Detail	975.00	Hour	63.76	62,166.00	0.00	62,166.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1012	Forklift		1.00	975.00 Each	63.76	62,166.00	0.00	62,166.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.5	Boom Truck	Detail	975.00	Hour	61.10	59,572.50	0.00	59,572.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1003	Boom Truck		1.00	975.00 Each	61.10	59,572.50	0.00	59,572.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.8.6.1.10.6	Grader	Detail	750.00	Hour	74.93	56,197.50	0.00	56,197.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1013	Grader		1.00	750.00 Each	74.93	56,197.50	0.00	56,197.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.7	Explosive Truck	Detail	750.00	Hour	54.11	40,582.50	0.00	40,582.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1014	Explosives Truck		1.00	750.00 Each	54.11	40,582.50	0.00	40,582.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.8	Fuel/Lube Truck	Detail	600.00	Hour	46.06	27,636.00	0.00	27,636.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CEUM1015	Fuel/Lube Truck		1.00	600.00 Each	46.06	27,636.00	0.00	27,636.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.9	Surface Payloader/Forklift	Detail	975.00	Hour	146.14	142,486.50	0.00	142,486.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1001	Cat 980 Loader		1.00	975.00 Each	146.14	142,486.50	0.00	142,486.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.10	Surface Pick up Trucks	Detail	600.00	Hour	58.25	34,950.00	0.00	34,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		5.00	3,000.00 Each	11.65	34,950.00	0.00	34,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.1.10.11	D9 Dozer Operating and Rental	Plug	0.75	Year	140,000.00	105,000.00	0.00	0.00	105,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2	Contractor Equipment	Detail	1.00	Year	183,417.60	183,417.60	0.00	183,417.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.1	2011	Detail	1.00	Year	6,337.60	6,337.60	0.00	6,337.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.1.1	Scissor Lift	Detail	136.00	Hour	23.30	3,168.80	0.00	3,168.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		2.00	272.00 Each	11.65	3,168.80	0.00	3,168.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.1.2	Surface Pick up Trucks	Detail	136.00	Hour	23.30	3,168.80	0.00	3,168.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
CESM1000	Pickup Truck		2.00	272.00 Each	11.65	3,168.80	0.00	3,168.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.2	2012	Detail	1.00	Year	46,600.00	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.6.2.2.1	Scissor Lift	Detail	800.00	Hour	23.30	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		2.00	1,600.00 Each	11.65	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.2.2	Surface Pick up Trucks	Detail	800.00	Hour	34.95	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		3.00	2,400.00 Each	11.65	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.3	2013	Detail	1.00	Year	46,600.00	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.3.1	Scissor Lift	Detail	800.00	Hour	23.30	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		2.00	1,600.00 Each	11.65	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.3.2	Surface Pick up Trucks	Detail	800.00	Hour	34.95	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		3.00	2,400.00 Each	11.65	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.4	2014	Detail	1.00	Year	46,600.00	46,600.00	0.00	46,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.4.1	Scissor Lift	Detail	800.00	Hour	23.30	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		2.00	1,600.00 Each	11.65	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.4.2	Surface Pick up Trucks	Detail	800.00	Hour	34.95	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		3.00	2,400.00 Each	11.65	27,960.00	0.00	27,960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.5	2015	Detail	1.00	Year	37,280.00	37,280.00	0.00	37,280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.5.1	Scissor Lift	Detail	800.00	Hour	23.30	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		2.00	1,600.00 Each	11.65	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.6.2.5.2	Surface Pick up Trucks	Detail	800.00	Hour	23.30	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resource Code	**Description**		**Quantity**	**Pay Hours UM**	**Unit Cost**	**Total Cost**				**Total Costs by Category**					
CESM1000	Pickup Truck		2.00	1,600.00 Each	11.65	18,640.00	0.00	18,640.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.8.7	Facility Rentals	Detail	1.00	LS	2,067,540.00	2,067,540.00	0.00	0.00	0.00	0.00	0.00	2,067,540.00	0.00	0.00	0.00
1.8.7.1	2011	Detail	2.00	Month	3,370.00	6,740.00	0.00	0.00	0.00	0.00	0.00	6,740.00	0.00	0.00	0.00
1.8.7.1.1	Office Trailer Rental (12 x 60)	Plug	2.00	Month	900.00	1,800.00	0.00	0.00	0.00	0.00	0.00	1,800.00	0.00	0.00	0.00
1.8.7.1.2	30 man Dry Rental (x3)	Plug	0.30	Month	13,800.00	4,140.00	0.00	0.00	0.00	0.00	0.00	4,140.00	0.00	0.00	0.00
1.8.7.1.3	Security Trailer Rental	Plug	2.00	Month	400.00	800.00	0.00	0.00	0.00	0.00	0.00	800.00	0.00	0.00	0.00
1.8.7.2	2012	Detail	12.00	Month	20,300.00	243,600.00	0.00	0.00	0.00	0.00	0.00	243,600.00	0.00	0.00	0.00
1.8.7.2.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.2.2	Office Trailer Rental (12 x 60)	Plug	12.00	Month	900.00	10,800.00	0.00	0.00	0.00	0.00	0.00	10,800.00	0.00	0.00	0.00
1.8.7.2.3	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.2.4	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.3	2013	Detail	12.00	Month	20,300.00	243,600.00	0.00	0.00	0.00	0.00	0.00	243,600.00	0.00	0.00	0.00
1.8.7.3.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.3.2	Office Trailer Rental (12 x 60)	Plug	12.00	Month	900.00	10,800.00	0.00	0.00	0.00	0.00	0.00	10,800.00	0.00	0.00	0.00
1.8.7.3.3	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.3.4	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.4	2014	Detail	12.00	Month	20,300.00	243,600.00	0.00	0.00	0.00	0.00	0.00	243,600.00	0.00	0.00	0.00
1.8.7.4.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.4.2	Office Trailer Rental (12 x 60)	Plug	12.00	Month	900.00	10,800.00	0.00	0.00	0.00	0.00	0.00	10,800.00	0.00	0.00	0.00
1.8.7.4.3	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.4.4	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00

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1.8.7.5	2015	Detail	12.00	Month	20,300.00	243,600.00	0.00	0.00	0.00	0.00	0.00	243,600.00	0.00	0.00	0.00
1.8.7.5.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.5.2	Office Trailer Rental (12 x 60)	Plug	12.00	Month	900.00	10,800.00	0.00	0.00	0.00	0.00	0.00	10,800.00	0.00	0.00	0.00
1.8.7.5.3	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.5.4	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.6	2016	Detail	12.00	Month	19,400.00	232,800.00	0.00	0.00	0.00	0.00	0.00	232,800.00	0.00	0.00	0.00
1.8.7.6.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.6.2	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.6.3	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.7	2017	Detail	12.00	Month	19,400.00	232,800.00	0.00	0.00	0.00	0.00	0.00	232,800.00	0.00	0.00	0.00
1.8.7.7.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.7.2	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.7.3	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.8	2018	Detail	12.00	Month	19,400.00	232,800.00	0.00	0.00	0.00	0.00	0.00	232,800.00	0.00	0.00	0.00
1.8.7.8.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.8.2	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00
1.8.7.8.3	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.9	2019	Detail	12.00	Month	19,400.00	232,800.00	0.00	0.00	0.00	0.00	0.00	232,800.00	0.00	0.00	0.00
1.8.7.9.1	Office Complex Rental (x2) (24 x 64)	Plug	12.00	Month	5,200.00	62,400.00	0.00	0.00	0.00	0.00	0.00	62,400.00	0.00	0.00	0.00
1.8.7.9.2	30 man Dry Rental (x3)	Plug	12.00	Month	13,800.00	165,600.00	0.00	0.00	0.00	0.00	0.00	165,600.00	0.00	0.00	0.00

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1.8.7.9.3	Security Trailer Rental	Plug	12.00	Month	400.00	4,800.00	0.00	0.00	0.00	0.00	0.00	4,800.00	0.00	0.00	0.00
1.8.7.10	2020	Detail	8.00	Month	19,400.00	155,200.00	0.00	0.00	0.00	0.00	0.00	155,200.00	0.00	0.00	0.00
1.8.7.10.1	Office Complex Rental (x2) (24 x 64)	Plug	8.00	Month	5,200.00	41,600.00	0.00	0.00	0.00	0.00	0.00	41,600.00	0.00	0.00	0.00
1.8.7.10.2	30 man Dry Rental (x3)	Plug	8.00	Month	13,800.00	110,400.00	0.00	0.00	0.00	0.00	0.00	110,400.00	0.00	0.00	0.00
1.8.7.10.3	Security Trailer Rental	Plug	8.00	Month	400.00	3,200.00	0.00	0.00	0.00	0.00	0.00	3,200.00	0.00	0.00	0.00
1.8.8	Diamond Drilling	Detail	1.00	LS	2,080,000.00	2,080,000.00	0.00	0.00	0.00	0.00	2,080,000.00	0.00	0.00	0.00	0.00
1.8.8.1	2012	Detail	4,000.00	Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
UNDR3000	Diamond Drilling	4,000.00		Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
1.8.8.2	2013	Detail	1.00	Meter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.8.3	2014	Detail	4,000.00	Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
UNDR3000	Diamond Drilling	4,000.00		Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
1.8.8.4	2015	Detail	4,000.00	Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
UNDR3000	Diamond Drilling	4,000.00		Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
1.8.8.5	2016	Detail	4,000.00	Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
Resource Code	**Description**	**Quantity**	**Pay Hours**	**UM**	**Unit Cost**	**Total Cost**	**Total Costs by Category**								
UNDR3000	Diamond Drilling	4,000.00		Meter	130.00	520,000.00	0.00	0.00	0.00	0.00	520,000.00	0.00	0.00	0.00	0.00
1.8.8.6	2017	Detail	1.00	Meter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.8.7	2018	Detail	1.00	Meter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.8.8	2019	Detail	1.00	Meter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8.8.9	2020	Detail	1.00	Meter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9	Equipment Purchase	Detail	1.00	LS	19,013,500.00	19,013,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,013,500.00	0.00
1.9.1	2012	Detail	1.00	LS	7,410,000.00	7,410,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,410,000.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	6.00		Each	50,000.00	300,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300,000.00	0.00
UNCA1012	Boomtruck	1.00		Each	442,000.00	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	442,000.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	6.00		Each	165,000.00	990,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	990,000.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	1.00		Each	325,000.00	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	325,000.00	0.00
UNCA1000	Haulage Truck 28 t	1.00		Each	863,000.00	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	863,000.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	2.00		Each	691,000.00	1,382,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,382,000.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	2.00		Each	915,000.00	1,830,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,830,000.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	1.00		Each	426,000.00	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	426,000.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	2.00		Each	426,000.00	852,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	852,000.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.2	2013	Detail	1.00	LS	3,518,500.00	3,518,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,518,500.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	1.00		Each	452,000.00	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	452,000.00	0.00
UNCA1019	Surface Pickup trucks	2.00		Each	50,000.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00	0.00
UNCA1012	Boomtruck	1.00		Each	442,000.00	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	442,000.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	1.00		Each	115,000.00	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	115,000.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	1.00		Each	863,000.00	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	863,000.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	1.00		Each	1,020,000.00	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,020,000.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	1.00		Each	420,000.00	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	420,000.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.25		Each	426,000.00	106,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	106,500.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.3	2014	Detail	1.00	LS	2,891,000.00	2,891,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,891,000.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	1.00		Each	1,227,000.00	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,227,000.00	0.00
UNCA1011	Forklift	2.00		Each	180,000.00	360,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	360,000.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	1.00		Each	494,000.00	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	494,000.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	1.00		Each	810,000.00	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	810,000.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.4	2015	Detail	1.00	LS	1,227,000.00	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,227,000.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	1.00		Each	1,227,000.00	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,227,000.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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1.9.5	2016	Detail	1.00	LS	3,057,000.00	3,057,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,057,000.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	1.00		Each	1,020,000.00	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,020,000.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	1.00		Each	1,227,000.00	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,227,000.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	1.00		Each	810,000.00	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	810,000.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.6	2017	Detail	1.00	LS	910,000.00	910,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	910,000.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	5.00		Each	50,000.00	250,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	250,000.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	4.00		Each	165,000.00	660,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	660,000.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.7	2018	Detail	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.8	2019	Detail	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CBS Position Code	CI Description	Cost Source	Cost Item Forecast (T/O) Quantity	UM	Unit Cost	Total Cost	Total Costs by Category: Labor Install	Owned Equipment	Rented Equipment	Materials Permanent	Supplies	Sub-Contractor Construction	Allowance	Equipment Permanent	Undefined
1.9.9	2020	Detail	1.00	LS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Resource Code	Description	Quantity	Pay Hours	UM	Unit Cost	Total Cost	Total Costs by Category								
UNCA1006	ITH Drill	0.00		Each	985,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1017	Fuel Truck	0.00		Each	452,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1019	Surface Pickup trucks	0.00		Each	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1012	Boomtruck	0.00		Each	442,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1009	Utility Pick up (MineCat 5 man)	0.00		Each	165,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1002	Ejector Box	0.00		Each	110,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1010	Personnel Carrier	0.00		Each	115,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1018	Surface Loader	0.00		Each	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1000	Haulage Truck 28 t	0.00		Each	863,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1016	ANFO Loader Trucks	0.00		Each	457,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1004	LHD 4.5m³	0.00		Each	691,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1007	Top Hammer	0.00		Each	1,020,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1005	2 boom jumbo	0.00		Each	915,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1001	Haualge Truck 45 t	0.00		Each	1,227,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1011	Forklift	0.00		Each	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1015	Emulsion Loader	0.00		Each	494,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1014	Grader	0.00		Each	420,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1003	LHD 6m³	0.00		Each	810,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1013	Transmixer Shotcrete	0.00		Each	480,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UNCA1008	Scissor Lift	0.00		Each	426,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Grand Total		210,353,624.83	87,141,476.50	26,523,855.11	1,272,800.00	39,336,408.30	30,197,640.64	2,822,440.00	200,005.78	21,717,057.00	1,141,941.50

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