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TAILINGS RESOURCE ESTIMATE

KING ISLAND

Prepared for: King Island Scheelite Project.

Tim Callaghan, October 2011

MAP CONVENTIONS

Coordinates in this report and in digital data associated with this report are recorded as GDA94 Zone 55.

RL's in this report are MSL.

Cross sections are drawn looking northeast.

EXECUTIVE SUMMARY

Historic production from the Dolphin and Bold Head Scheelite Mines continued intermittently from the 1930's to the 1990's. The process used a gravity recovery circuit and significant WO_3 is reported to have been lost to the tailings storage facility which was utilized since the early 1970's. The tailings storage facility is located just east of the Dolphin Mine in an interdunal basin.

King Island Scheelite completed a study into the recovery and reprocessing of the tailings resource in conjunction with the redevelopment of the Dolphin and Bold Head Mines. A JORC compliant resource estimation involving a systematic drilling program was required as part of the studies. Tasmanian Drilling were contracted to conduct an air-core reverse circulation drilling program utilizing a 7 tonne 4WD truck mounted rig in March 2011, completing 112 holes for a total of 1,212m. Drill spacing was approximately 40 x 40m with most holes drilled to basement. All holes were vertical (-90^{o}). The average length of drill holes was 11m with a maximum of 23m. A 200g sub sample was speared from each 1m downhole sample and assayed by XRF for WO_3. Bulk samples from the drilling program have been used for check analysis and for metallurgical testwork.

Statistical studies of the 1m composite data suggests 51% of the tailings resource is coarser 1-2mm sand fraction, 34% is the 0.5-1mm silt fraction and 15% is the <0.5% clay fraction. There is a definite statistical preference for higher WO_3 contents in the finer fractions with the sand fraction averaging 0.13% WO_3, silt 0.19% WO_3 and clay 0.30% WO_3.

A kriged blockmodel estimation of the tailings resource was completed in June 2011 on receipt of all assay data. The tailings facility is estimated to contain a Measured Resource in accordance with the 2004 JORC Code of **2.7Mt @ 0.17% WO_3** at a 0.08% WO_3 cutoff. The grade reconciles very well with historic production figures with an average tail grade of 0.17% WO_3. The tailings volume of 1.6 Mm^3 is significantly higher than a 2009 estimate based on the basin surveys and topographic surveys of 1.2M m^3 (De Paoli, 2009). The tailings resource has been classified as a Measured Resource because the drill spacing of 40m is less than the variogram range of 60m, the tailings basement is well constrained by drilling and the grade reconciles very well with historic production figures.

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1 INTRODUCTION

The Dolphin Mine is located in the southeastern corner of King Island, Tasmania. The Mine was originally operated by Geopeko Ltd. along with the satellite Bold Head Mine located several kilometers to the north.

The Dolphin and Bold Head Scheelite Mines operated intermittently since their discovery and start up in 1920 until the 1990, with several forced shutdowns due to low tungsten prices. The site was decommissioned and rehabilitated in 1990.

King Island Scheelite (KIS) have been investigating the potential of re-opening the mine. Initial investigations into the viability of an open cut and seawall were inconclusive and the focus has changed to rehabilitation of the underground workings and production from remnant resources.

Re-estimation of the Dolphin Resource based on geological domains used by Geopeko has resulted in the definition of an Indicated and Inferred Resource 8.94Mt @ 0.92% WO_3 at a cutoff of 0.25% WO_3 (Callaghan, 2010). Subsequent reserve estimation at a 0.5% WO_3 cutoff of 3.27Mt @ 0.97% WO_3 (Fudge, 2011) has resulted in significant improvements in the viability of reopening the Dolphin Mine as an underground operation.

A request was made by KIS to investigate the potential of re-treating the historic tailings to provide a cash flow during re-commissioning of the mine and as an opportunity to extend the project life. A tailings resource may also be beneficial to the project to provide additional mill feed in the event of any production shortfalls of the mining operation.

The tailings storage facility was utilized since the early 1970's until mine closure. It was constructed in an interdunal basin with a 9m rock wall on the seaward side and a 5m rock wall on the Bold Head Haul Road. A separation wall separates a polishing pond from the main storage facility. The historic mill used a gravity recovery circuit and significant WO_3 is reported to have been lost to the tailings storage facility. Recoveries of 80% were reported but may have been as low as 67% (Alan fudge pers comm). Tailings grades are officially reported to be 0.17% WO_3 but actual grades may have been as high as 0.28% WO_3.

The volume of tailings is unsure as some of the tailings were used as fill and there were some documented spills. An estimate of the tailings volume was made by SMEF (De Paoli, 2009) based on tailings basin surveys and a recent topographic survey by Survey Resources is reported to be approximately 1.2M m^3.

Resource and Exploration Geology were contracted to complete a drilling program designed to provide a reliable resource estimation of the historic tailings. Tasmanian Drilling were contacted to complete the drilling program in March 2011. Samples were received from the laboratory and resource estimation completed in June 2011.

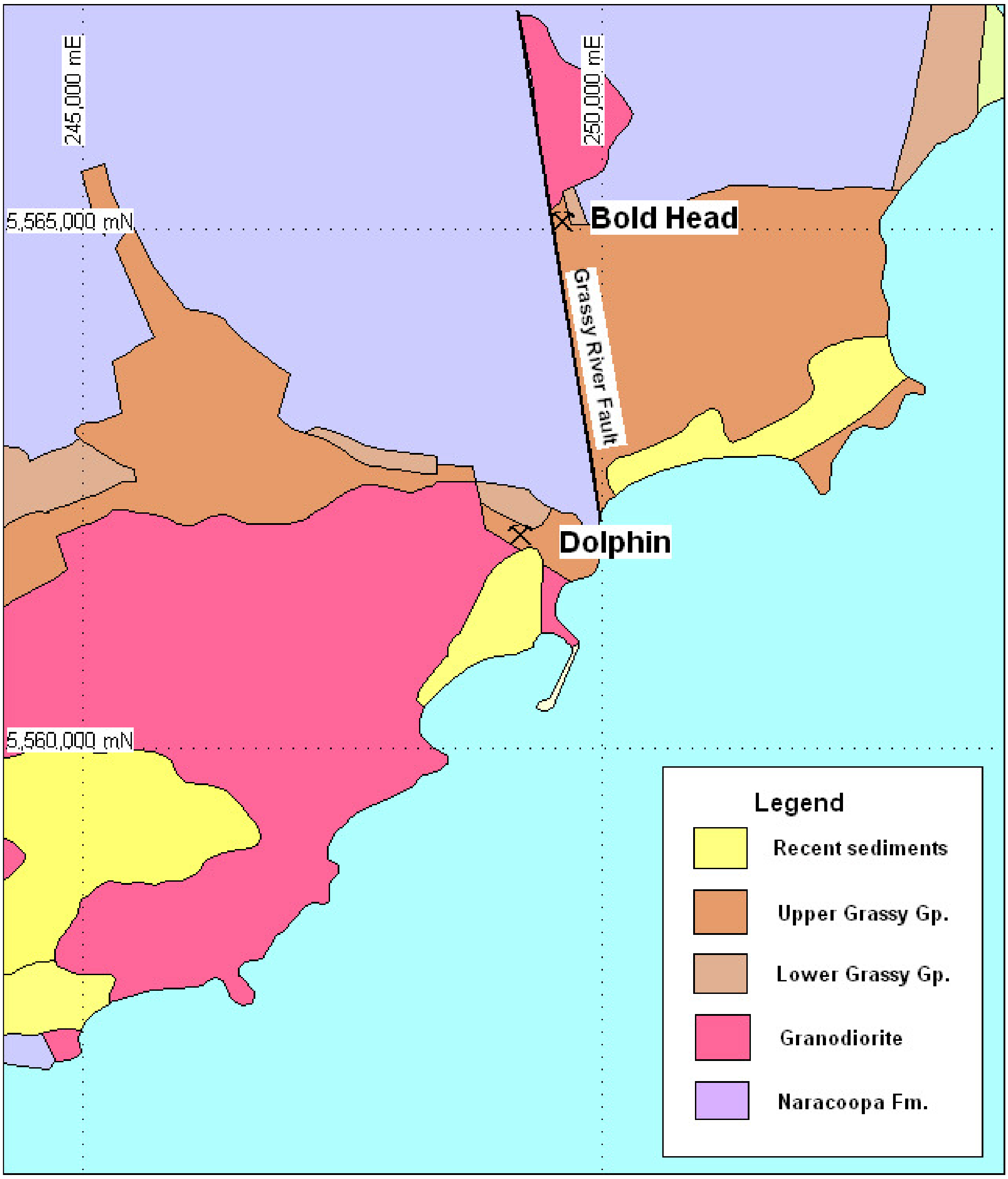

Figure 1. Dolphin and Bold Head Location Plan and Simplified Geology.

3 DATA

Data used for the estimate includes:

- Drilling database (Access)
- Topographic DTM (surpac, dxf)

Tasmanian Drilling were contacted to complete an air-core reverse circulation (ACRC) drilling program utilizing a 7 tonne 4WD truck mounted air core rig. The rig was mobilised to King Island in March and the program completed over 12 days. A total of 112 holes were drilled for 1212m.

Samples of 2-5kg per metre were collected in plastic sample bags with minimal contamination. The majority of samples were wet with water injection required to aid recoveries. Sample recoveries were generally good in the sand and silt fraction but less consistent in the clay fraction. Sample recoveries were recorded in the field logs.

Each metre sample was logged in the field and classified as sand, silt or clay depending on the dominant grain size. The basement was also logged as basement. Field logs were entered into an access data base.

A 200g sub-sample was speared from each bag and sent to Burnie ALS laboratories for analysis of WO_3 by fusion disc XRF. 51 of the samples submitted were not assayed due to insufficient sample or sample damage.

In addition 91 bulk 1m samples were also sent to ALS to assess the validity of the sub-sampling process and to provide bulk samples for sizing and metallurgical testwork. There is very good correlation between the bulk sample and the 200g sub sample although a small bias towards the 200g sub samples in high grade samples is evident. However given the minor nature of the bias and the number of samples above 2500ppm the discrepancy is not considered material for resource estimation.

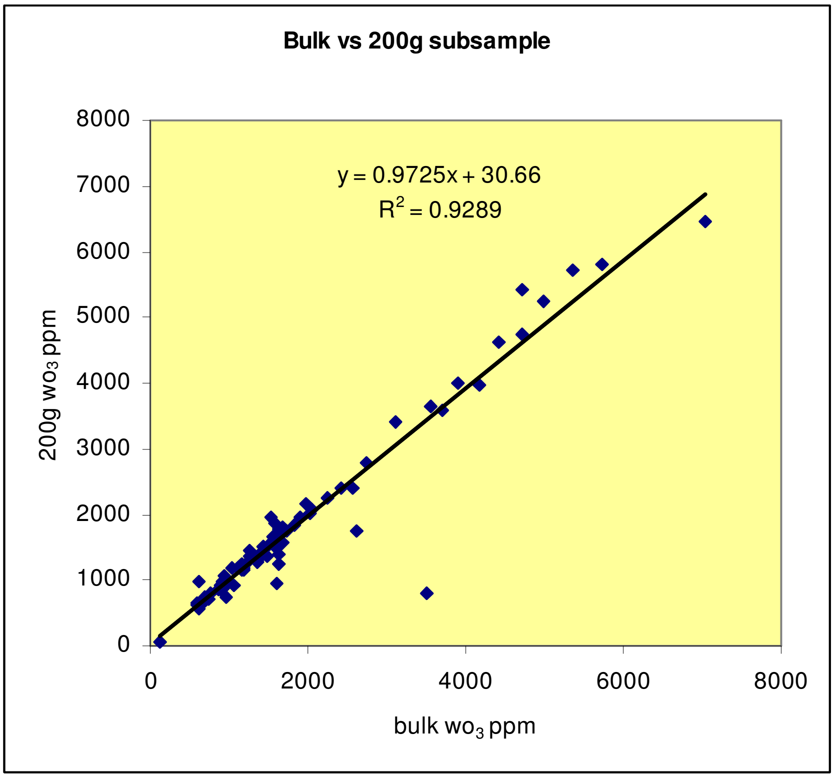

Figure 2. Bulk sample vs 200g sub sample.

Data provided with this report includes:

- Access database
- Topographic DTM (Surpac)
- Basement DTM (Surpac)
- Block modeled Resource Estimate (Surpac)
- Mineral Resource Estimate Report (pdf)

TABLE 1. Summary of Tailings Sampling Techniques and Data	
Criteria	**Status**
Drilling Techniques	• Air-core reverse circulation • 112 holes for 1,212m
Sample recovery	• Acceptable although generally poorer in clay fraction
Logging	• Field logs entered into access database
Sub-Sample preparation	• 200g sub-sample speared from bulk sample. • Some difficulty in obtaining a good sample from clay fraction
Sample preparation	• Dried and rolled, pulverized to 75µm, 2g sample taken for fusion disc preparation.
Analysis	• Fusion disc XRF for WO_3
Assay QA/QC	• Comparison of sub sample with bulk sample. • Random independent laboratory analysis by Amdel Laboratories. *(In Progress, June 2011)*[1]
Location of Data	• All hole collar surveys by GPS. • All coordinates in GDA94 Zone 55. • All holes vertical.
Data Spacing and distribution	• Drill spacing approximately 40 x 40. • The majority of ACRC holes have been drilled vertical.
Database Integrity	• All data captured and stored in customised access database. • All field drill logs entered into excel spreadsheets prior to being downloaded into database. • Data integrity validated with Surpac Software for EOH depth and sample overlaps. • Manual check by reviewing cross sections with the historic drafted sections and plans.

[1] Independent Analyses were not available at the time of reporting.

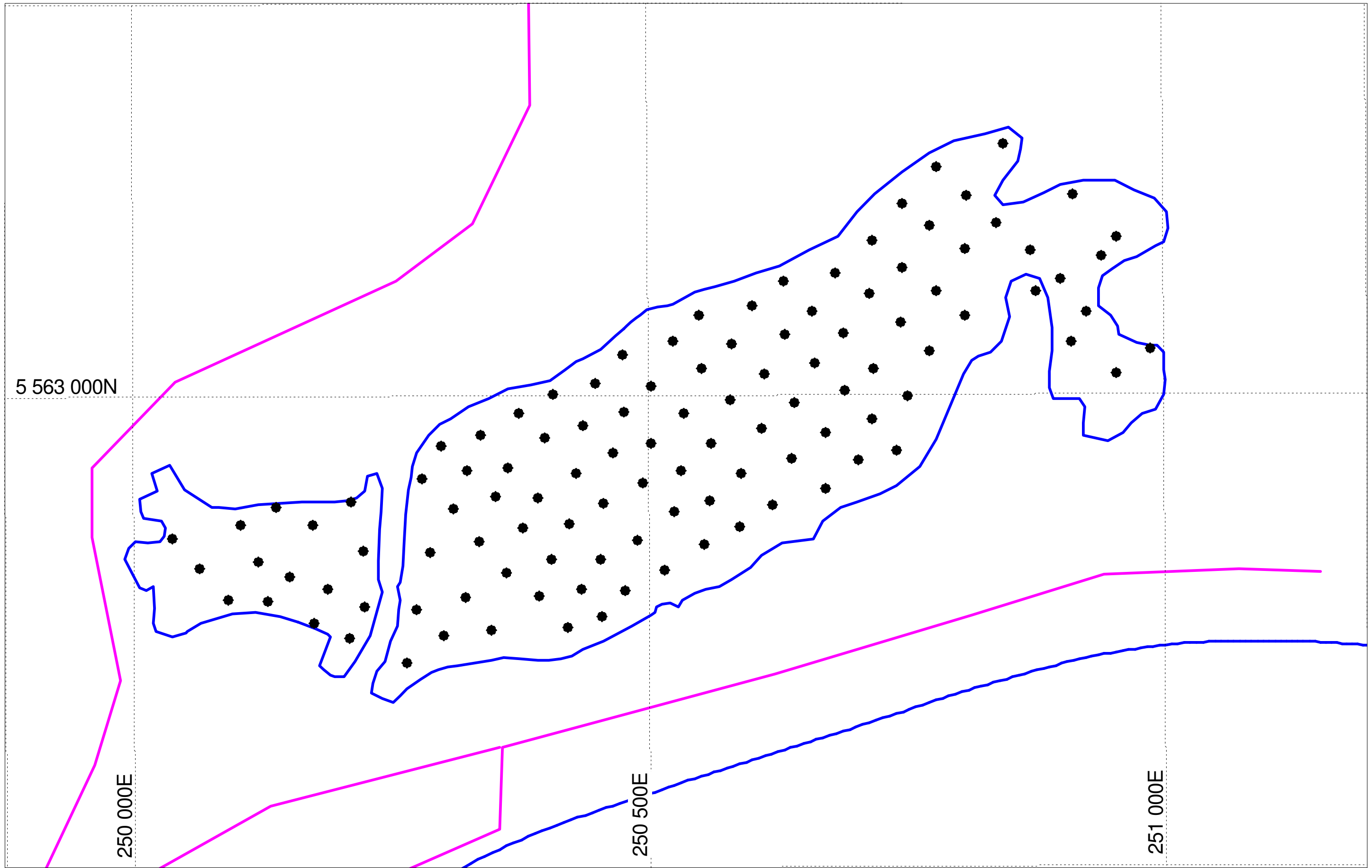

Figure 3. King Island Tailings Dam Location and Drill Holes

Scale 1:5000
GDA94

Resource and Exploration Geology

4 MINERAL RESOURCE ESTIMATION

The Dolphin Mineral Resource has been derived from a kriged block model created with Surpac^{tm} software licensed to Tim Callaghan. The block model extends between 5,562,700 to 5,563,260N, 250,000 to 251,000E and -5 to 35m RL.

4.1 GEOLOGICAL DOMAINING

Digital terrain models of the tailings dam basement have been created from 40m spaced northwest-southeast cross sections utilizing drill hole data and surface topography. A surface digital terrain model was obtained from SEMF from a 2009 survey completed by Survey Resources.

4.2 COMPOSITING OF DATA

Data used for this estimation has been derived solely from ACRC drill holes.

ACRC intercepts of tailings have been flagged with Surpac Software and relevant intervals stored in the access database. DDH data has been composited on 1m lengths.

Composited data is located in Appendix 2 and as .csv files on the attached data disc.

4.3 SAMPLE STATISTICAL STUDIES

Descriptive statistics and histograms of composited data for 1m composites and the three logged size fractions are located in Table 2 and Figures 4-7. The tailings facility is composed of 51% sand fraction (1-2mm), 34% silt (0.5-1mm) and 15% (0<0.5mm) "clay"[2].

All the 1m composited WO_3 data with the exception of the clay fraction demonstrate an essentially normal distribution although slightly positively skewed with high grade tails evident. The mean and median values demonstrate a clear trend to higher WO_3 grades in the finer silt and clay fraction. All samples have a very low coefficient of variation suggesting no top cutting is necessary for resource estimation.

4.4 VARIOGRAM MODELING

Variography of 1m composited data was modeled using Surpac Software and variogram models are located in Figures 8-10. Variogram models were constructed from 1m composited data for the combined lithologies.

Variograms typically displayed low nugget effect with long ranges of about 60m to the first structure, with the exception of the downhole variogram with a range of 7m. As expected there is fairly strong anisotropy evident in the layered tailings sediments with good continuity in the horizontal plane but less so in the vertical.

[2] Field logged clay lithologies are actually slimes or fine rock flour.

Table 2. 1m composite statistics				
	All Lith	Clay	Silt	Sand
Number of samples	1030	145	354	527
Minimum value	40	130	40	68
Maximum value	7038	7038	6247	6985
Mean	1783	3072	1889	1308
Median	1467	2682	1643	1240
Geometric Mean	1502	2470	1635	1173
Variance	1334793	2840867	1119298	382430
Standard Deviation	1155	1685	1058	618
Coefficient of variation	0.65	0.55	0.56	0.47
% pass 150um	82	92	91	70
% pass 38um	42	75	60	22
% pass 8um	15.00	42	22	8

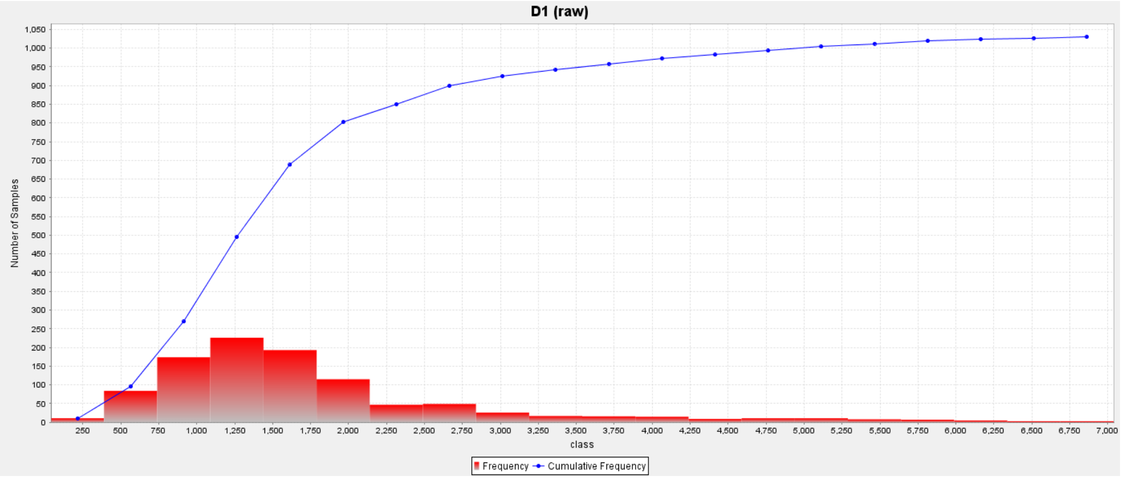

Figure 4. All Lithologies, WO_3 histogram.

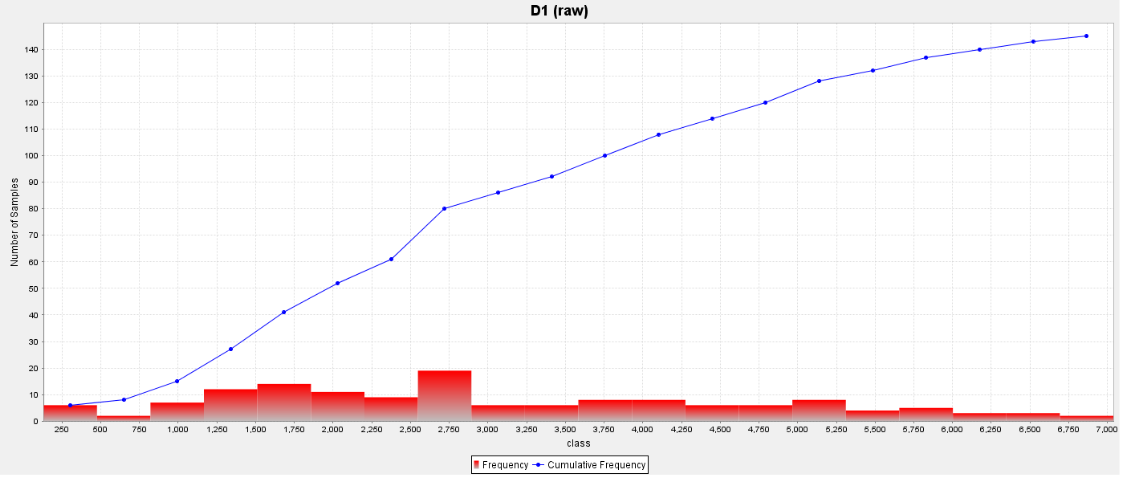

Figure 5. Clay, WO_3 histogram.

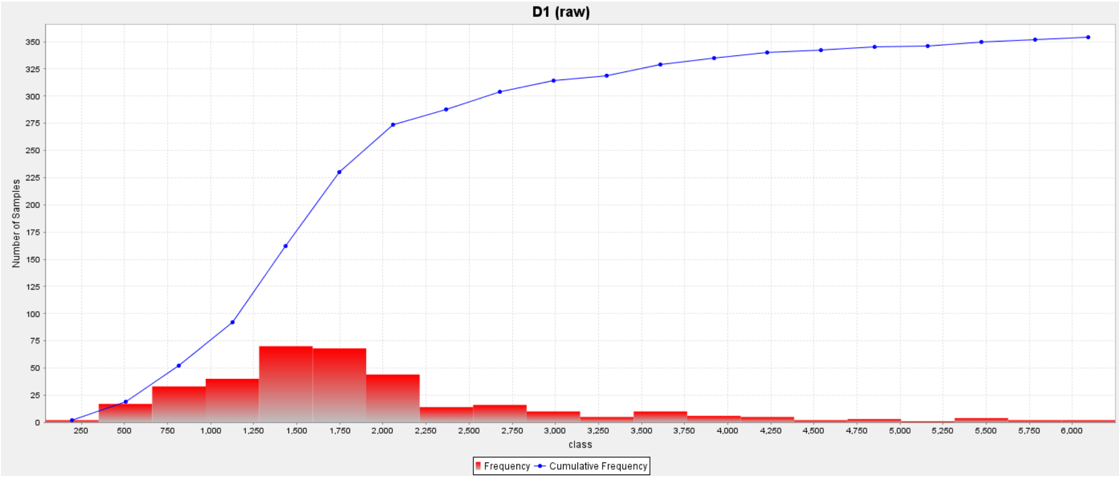

Figure 6. Silt, WO_3 histogram.

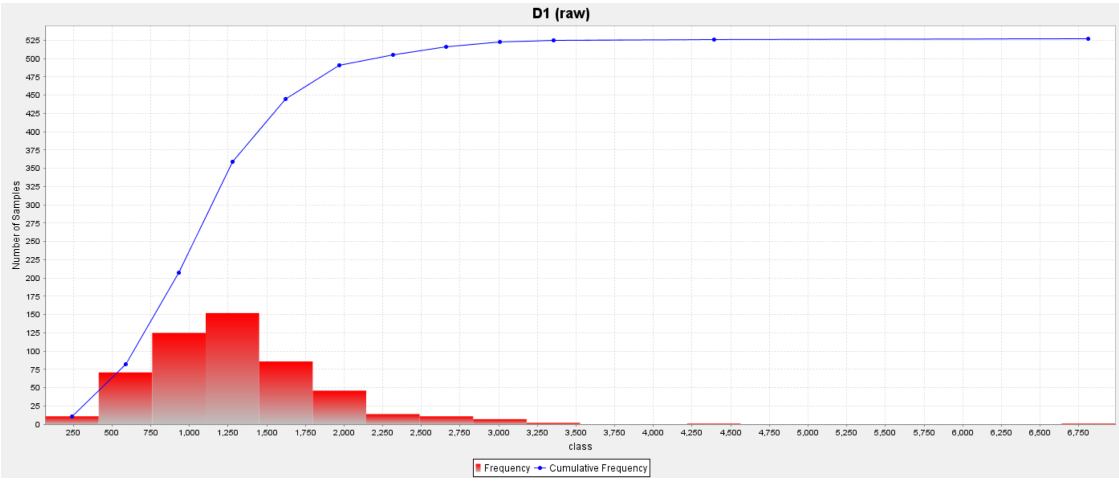

Figure 7. Sand, WO_3 histogram.

Table 3. Variogram Parameters (spherical model)			
Domain	**Nugget**	**Sill**	**Range**
Downhole variogram	170,000	1,160,000	7
060 variogram	170,000	1,030,000	60
150 variogram	170,000	1,130,000	60

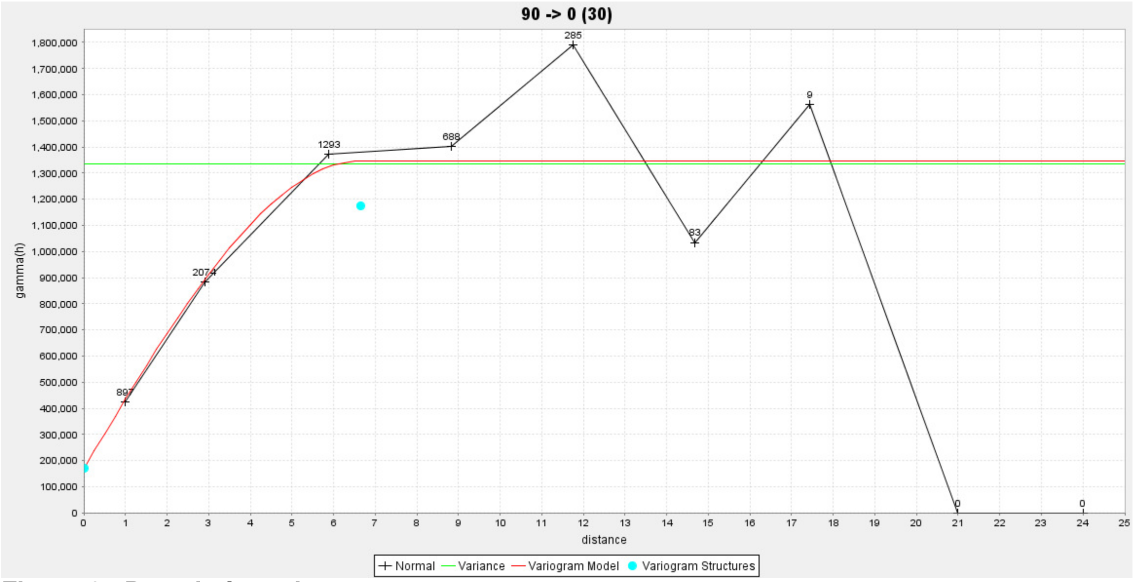

Figure 8. Downhole variogram

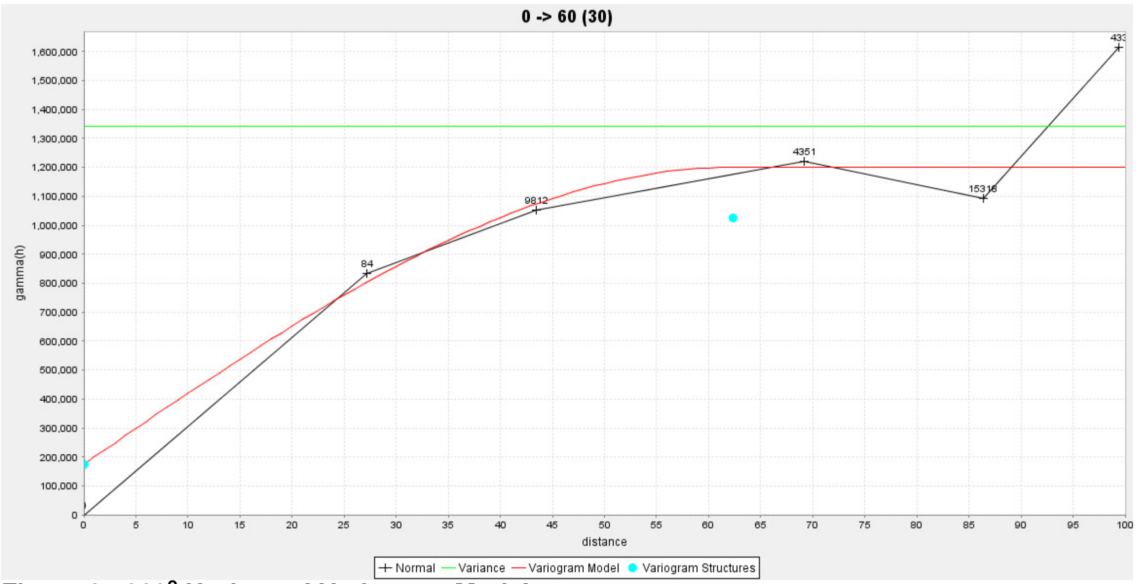

Figure 9. 060^{o} Horizontal Variogram Model

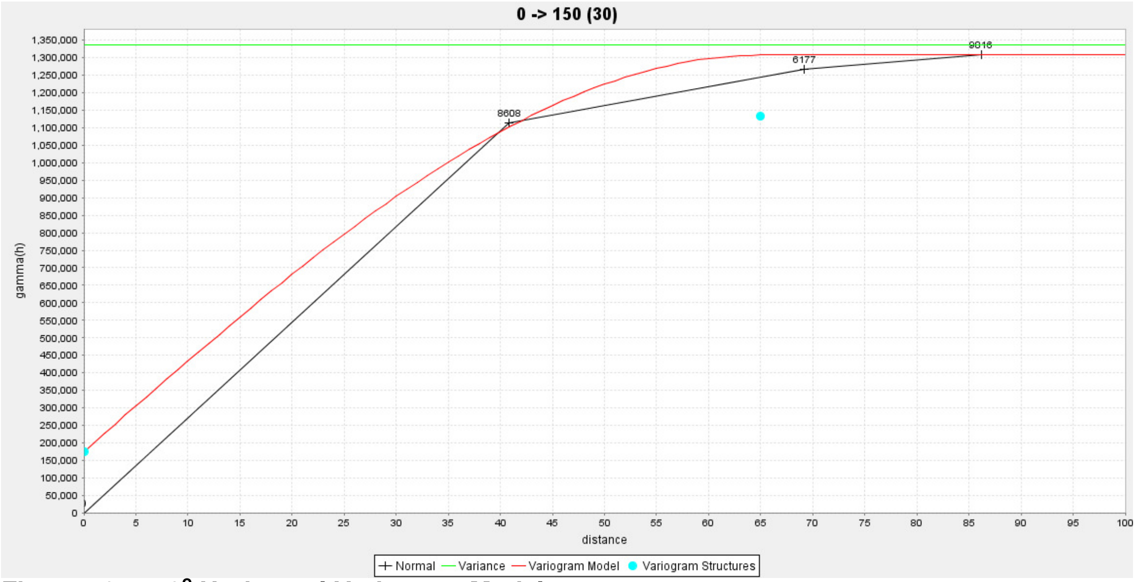

Figure 10. 150° Horizontal Variogram Model

4.5 RESOURCE ESTIMATION PROCEDURE.

The Tailings Resource WO_3 grades have been interpolated into a blockmodel using an ordinary kriging algorithm. Block sizes were set at 20m x 20m x 2m with sub-celling to 5m in the x and y directions and 1m in the z.

Spherical variogram model parameters used for each domain are outlined in Table 3 Search parameters are outlined in Table 4.

Table 4. Search Parameters	
Ellipse plunge	0
Ellipse bearing	060
Ellipse dip	0
Search Radius	100m
Major:semi major ratio	1
Major:minor ratio	5
Discretisation points	3:3:3
Minimum No of samples	4
Maximum No of samples	10

4.6 SPECIFIC GRAVITY

Bulk Density estimations were made utilizing a piston sampler. The moisture content and physical properties of the tailings made sample recoveries difficult. The volume of tailings recovered was measured, dried and weighed and the bulk density calculated.

Sample volumes and weights are listed in Table 5. A **bulk density of 1.6** was used for the estimation. Samples were taken from near surface and may be conservative with increased density likely through compaction at depth.

Table 5. Bulk density						
Sample	**Mass**	**Lith**	**Diam cm**	**length cm**	**vol cm3**	**Density**
D001	2672	sand	10	21	1650	1.62
D002	2378	sand	10	18	1414	1.68
D003	2225	sand	10	14	1100	2.02
D004	2619	sand	10	19	1453	1.80
D005	1953	sand	10	16	1257	1.55
D006	1840	sand	10	14	1100	1.67
D007	863	sand	10	9	668	1.29
D008	2298	silt	10	22	1689	1.36
D009	2341	silt	10	22	1728	1.35
D010	1967	clay	10	13	982	2.00
D011	730	clay	10	8	628	1.16
D012	866	clay	10	7	550	1.57
D013	899	clay	10	8	628	1.43
D014	1056	clay	10	9	707	1.49
D015	1109	clay	10	9	707	1.57
D016	850	clay	10	7	550	1.55
D017	1079	clay	10	9	707	1.53
D018	880	clay	10	7	550	1.60
D019	913	clay	10	8	628	1.45
D020	1124	clay	10	9	707	1.59

5 RESULTS

A Measured Resource of **2.7 Mt @ 0.17% WO_3** at a b lock cutoff of 0.08% WO_3 is estimated for the historic tailings storage in accordance with the 2004 JORC Code.

The grade reconciles well with the historic tailings grade of 0.17% WO_3 lending confidence to the estimation. The model volume of 1.7Mm^3 is significantly higher than the SEMF estimation of 1.2Mm^3 (De Paoli, 2009). Basement modeling from drill holes is considered to be more reliable than historic topographic contours.

The deposit is zoned with the best grades located in the finer fractions concentrated in the deeper southwestern end (Figure 11). The decant pond is generally lower grade than the tailings storage facility containing 0.15Mt @ 0.12% WO_3.

The resource is classified as a Measured Resource given the density of drilling relative to the long ranges of the variograms, the basement definition from drilling data and the very good grade reconciliation with the historic production figures.

The polishing pond was generally lower grade containing 0.17Mt @ 0.11% WO_3.

The grade tonnage curve demonstrates a relatively even increase in head grade and corresponding decrease in tonnage with increasing cutoff.

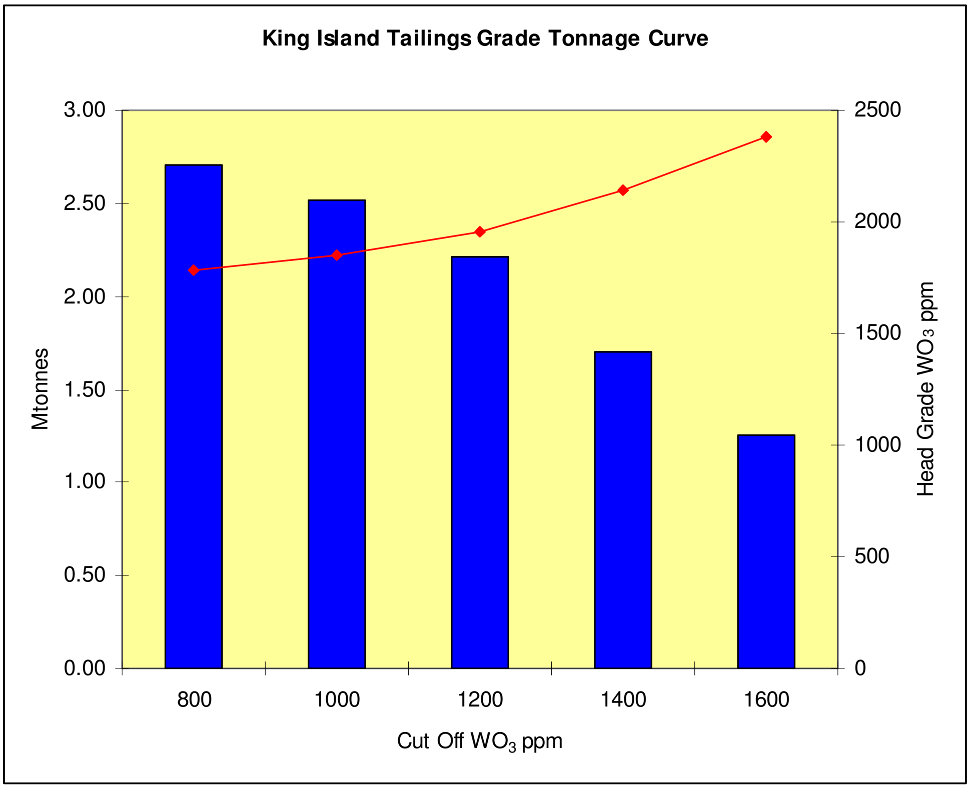

Figure 11. King Island tailings dam grade-tonnage curve.

However the distribution of higher WO_3 grade tonnes is concentrated in the southwestern end of the main dam as is evident from figures 12-15. At a 1400ppm cutoff the southwestern end of the dam contains 1.21Mt @ 2300ppm WO_3 while the remaining tonnage in the NE end of the dam contains 0.46Mt @ 1700ppm. The distribution of tonnes and grade above the 1400ppm WO_3 cutoff within the dam indicate the necessity to mine the southwestern end of the dam in preference to the north east (Figure 15).

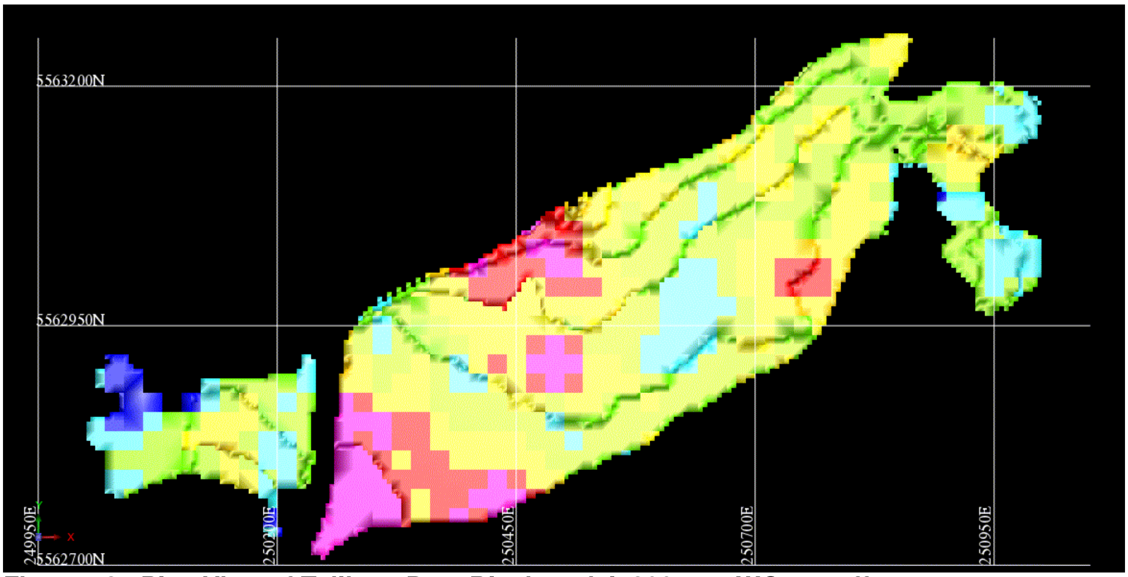

Figure 12. Plan View of Tailings Dam Blockmodel, 800ppm WO_3 cutoff.

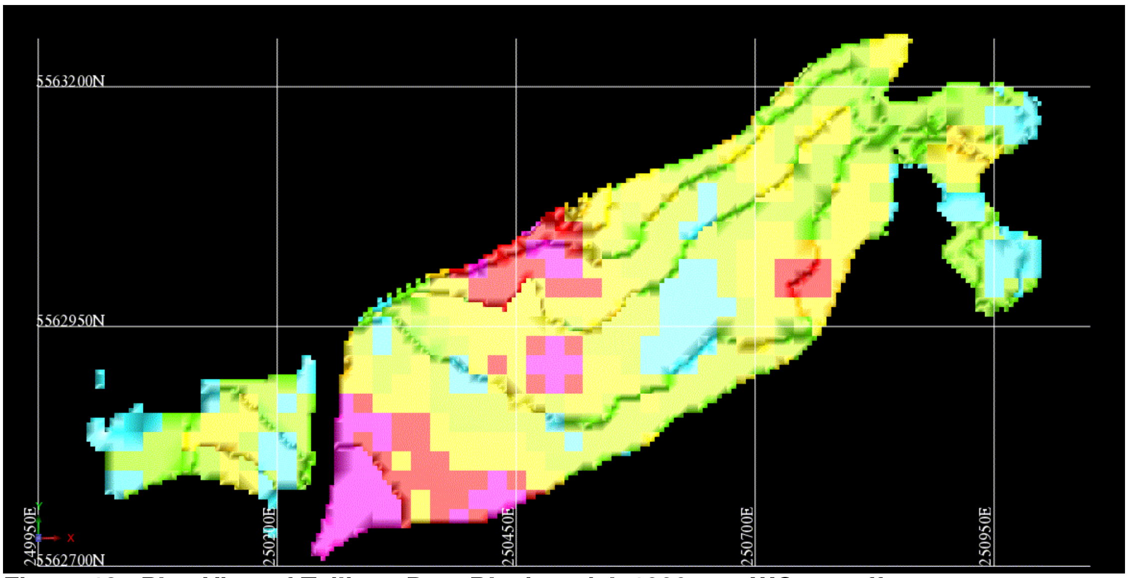

Figure 13. Plan View of Tailings Dam Blockmodel, 1000ppm WO_3 cutoff.

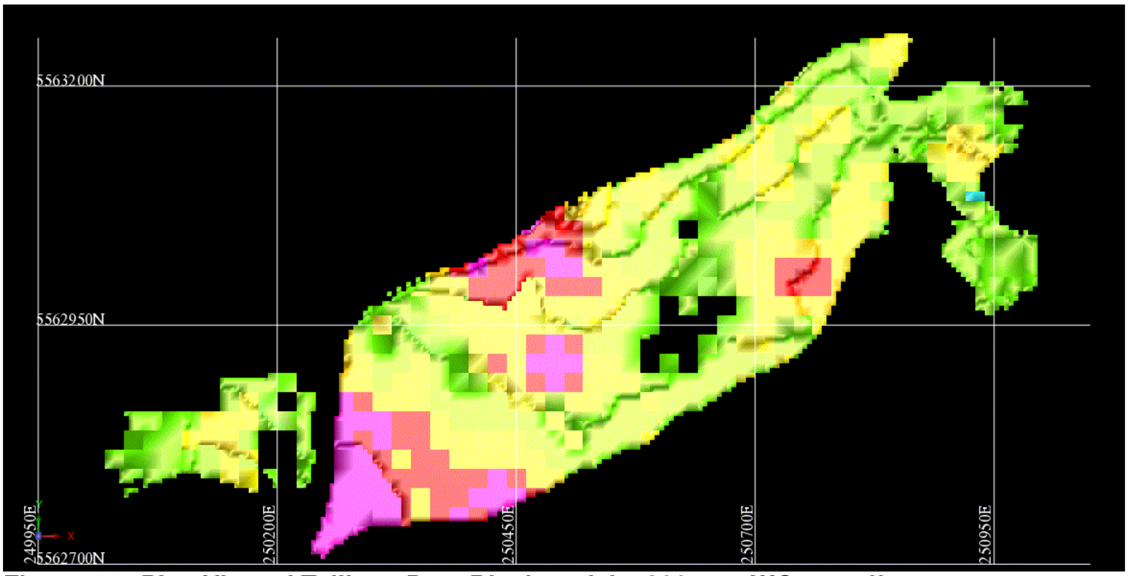

Figure 14. Plan View of Tailings Dam Blockmodel, 1200ppm WO_3 cutoff.

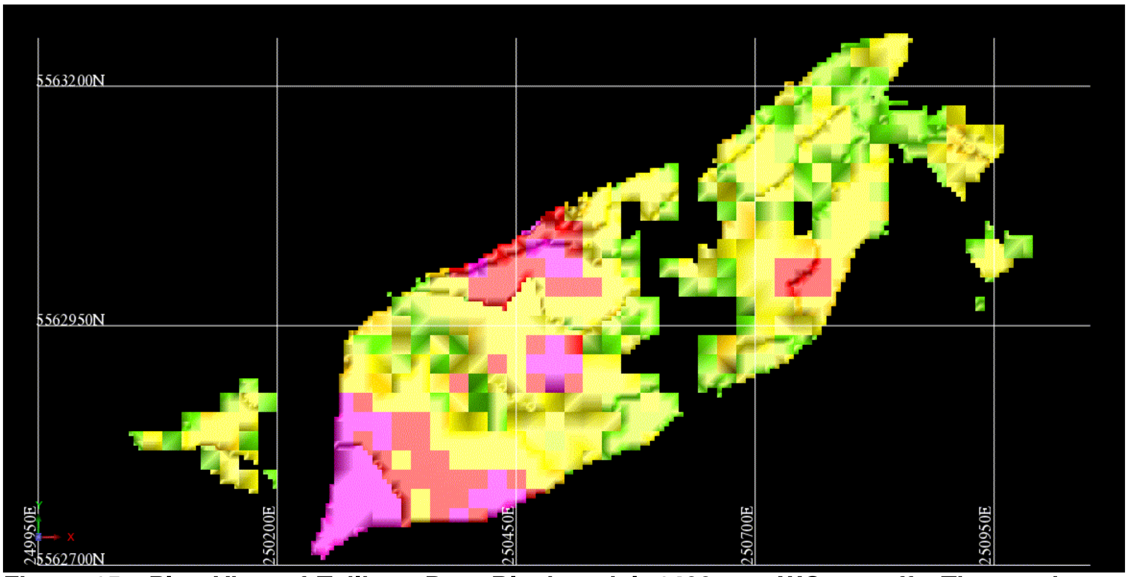

Figure 15. Plan View of Tailings Dam Blockmodel, 1400ppm WO_3 cutoff. The southwest end of the main dam contains 1.21Mt @ 2300ppm while the northeast contains 0.46Mt @ 1700ppm. This suggests the southwest end should be retreated in preference to the northeast.

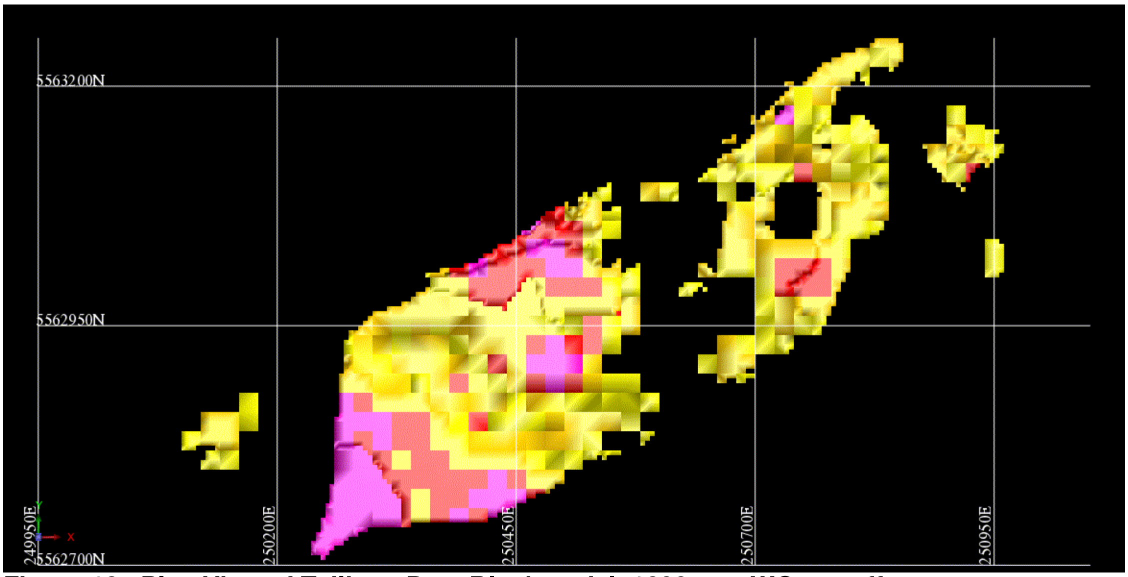

Figure 16. Plan View of Tailings Dam Blockmodel, 1600ppm WO_3 cutoff.

ADDITIONAL NOTES

LIMITATIONS AND CONSENT

The report is provided to the King Island Scheelite Project in the context of a Mineral Resource Estimate and should not be used or relied upon for any other purpose.

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for the use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

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COMPETENT PERSON AND JORC CODE

This report was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Tim Callaghan, who is a Member of The Australian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the competent Person as defined in the JORC Code. This announcement accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context it appears.

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STATEMENT OF INDEPENDENCE

Tim Callaghan has no material interest or entitlement in the securities or assets of the King Island Scheelite project or any associated companies.

References

Callaghan, TJ, 2010. Dolphin Mine Mineral resource Estimation. *Unpublished company report by REG for King Island Scheelite.*

De Paoli, D, 2009. Tailings Volume in Existing Tailings Dam. *Unpublished Memorandum from SEMF for King Island Scheelite.*

Fudge, A, 2011. Mining Inventory and Grade Tonnage Estimates from a 0.50% WO3 Perimeter Data Set. *Unpublished company by Polberro for King Island Scheelite.*

Appendix 1

Drill Collar Details

BHID	Easting	Northing	RL	Depth	Dip
KD001	250280	5562920	27.768	7	-90
KD002	250310	5562890	28.059	13	-90
KD003	250335	5562859	28.057	13	-90
KD004	250361	5562828	28.011	16	-90
KD005	250393	5562805	27.937	19	-90
KD006	250420	5562775	27.825	8	-90
KD007	250454	5562786	27.889	5	-90
KD008	250434	5562812	27.985	16	-90
KD009	250405	5562841	28.089	17	-90
KD010	250378	5562872	28.202	16	-90
KD011	250351	5562902	28.312	14	-90
KD012	250324	5562928	28.372	10	-90
KD013	250299	5562952	28.318	6	-90
KD014	250337	5562962	28.738	7	-90
KD015	250363	5562930	28.638	13	-90
KD016	250392	5562901	28.617	16	-90
KD017	250422	5562876	28.663	18	-90
KD018	250453	5562841	28.416	19	-90
KD019	250476	5562811	28.13	18	-90
KD020	250515	5562830	28.407	23	-90
KD021	250488	5562859	28.691	20	-90
KD022	250456	5562895	28.969	19	-90
KD023	250429	5562924	29.147	17	-90
KD024	250399	5562959	29.449	14	-90
KD025	250374	5562983	29.497	10	-90
KD026	250407	5563001	30.102	12	-90
KD027	250436	5562971	29.906	16	-90
KD028	250465	5562945	29.72	18	-90
KD029	250494	5562915	29.333	18	-90
KD030	250525	5562887	29.099	15	-90
KD031	250553	5562855	28.608	18	-90
KD032	250588	5562873	28.523	12	-90
KD033	250559	5562897	29.004	13	-90
KD034	250531	5562927	29.541	13	-90
KD035	250502	5562954	30.054	14	-90
KD036	250476	5562984	30.309	14	-90
KD037	250448	5563012	30.572	12	-90
KD038	250475	5563040	31.238	12	-90
KD039	250503	5563009	30.717	10	-90
KD040	250534	5562982	30.264	14	-90
KD041	250560	5562953	29.776	16	-90
KD042	250590	5562924	29.272	13	-90
KD043	250620	5562893	28.563	11	-90
KD044	250671	5562909	28.236	6	-90
KD045	250638	5562939	28.821	13	-90
KD046	250609	5562968	29.379	15	-90
KD047	250579	5562995	30.053	15	-90
KD048	250552	5563026	30.718	10	-90
KD049	250524	5563053	31.363	9	-90
KD050	250550	5563078	31.202	5	-90
KD051	250581	5563050	30.505	9	-90
KD052	250612	5563021	29.838	11	-90
KD053	250641	5562993	29.348	14	-90
KD054	250672	5562964	28.867	13	-90
KD055	250703	5562937	28.495	13	-90
KD056	250741	5562946	28.123	10	-90

BHID	Easting	Northing	RL	Depth	Dip
KD057	250717	5562976	28.563	14	-90
KD058	250690	5563005	29.121	10	-90
KD059	250661	5563031	29.687	11	-90
KD060	250632	5563059	30.126	9	-90
KD061	250601	5563087	30.568	6	-90
KD062	250631	5563110	30.659	6	-90
KD063	250659	5563082	30.051	9	-90
KD064	250690	5563060	29.485	13	-90
KD065	250719	5563026	28.867	13	-90
KD066	250752	5562999	28.241	13	-90
KD067	250773	5563043	28.247	12	-90
KD068	250745	5563071	28.963	9	-90
KD069	250715	5563099	29.642	12	-90
KD070	250682	5563119	30.376	9	-90
KD071	250808	5563077	28.05	12	-90
KD072	250780	5563101	28.633	13	-90
KD073	250747	5563123	29.452	11	-90
KD074	250718	5563150	30.244	12	-90
KD075	250808	5563142	28.396	9	-90
KD076	250774	5563164	29.549	7	-90
KD077	250747	5563186	30.546	10	-90
KD078	250846	5563244	30.75	5	-90
KD079	250781	5563221	30.75	9	-90
KD080	250809	5563194	30.811	4	-90
KD081	250839	5563167	29	3	-90
KD082	250871	5563140	28.643	7	-90
KD083	250901	5563112	28.989	10	-90
KD084	250926	5563080	29.413	9	-90
KD085	250955	5563153	30.549	7	-90
KD086	250988	5563044	31.85	6	-90
KD087	250954	5563020	30.963	6	-90
KD088	250911	5563051	30.617	3	-90
KD089	250940	5563134	30.266	9	-90
KD090	250913	5563194	30.699	4	-90
KD091	250877	5563100	29.921	3	-90
KD092	250287	5562848	27.66	11	-90
KD093	250322	5562804	27.654	13	-90
KD094	250346	5562772	27.64	17	-90
KD095	250300	5562767	27.396	12	-90
KD096	250274	5562793	27.303	11	-90
KD097	250264	5562741	27.45	10	-90
KD098	250037	5562862	24.837	4	-90
KD099	250064	5562833	24.794	7	-90
KD100	250091	5562803	24.752	3	-90
KD101	250130	5562801	23.498	5	-90
KD102	250175	5562780	23.74	7	-90
KD103	250209	5562765	24.183	9	-90
KD104	250223	5562795	24.514	8	-90
KD105	250188	5562813	24.204	7	-90
KD106	250151	5562825	23.98	7	-90
KD107	250121	5562840	23.779	3	-90
KD108	250103	5562876	24.75	5	-90
KD109	250138	5562892	24.672	4	-90
KD110	250174	5562875	24.681	4	-90
KD111	250223	5562850	24.75	7	-90
KD112	250211	5562898	24.75	5	-90

Appendix 2

1m Composites