

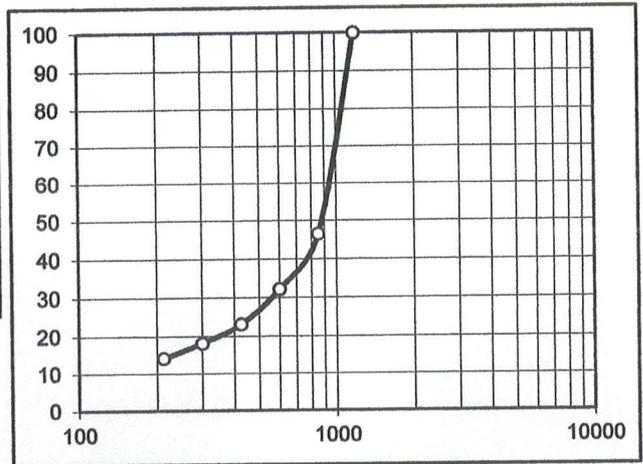
Appendix 4
'Silica upgrading trials'
(Work performed by ALS Ammtec Burnie Tas.)



PROJECT	T0610
SAMPLE	Coarse sand B
FROM TEST NO	T03 Tumble test
DATE	70711
TECHNICIAN	DG

SIZING

Product Sized Coarse sand B	SIZE um	WEIGHTS		
		gm	(%)	%PASS
P80 1057	1700	0.0	0.00	100.0
	1180	0.0	0.00	100.0
	850	1060.0	53.45	46.6
	600	282.8	14.26	32.3
	425	180.0	9.08	23.2
	300	99.1	5.00	18.2
	212	79.2	3.99	14.2
	SUB	282.1	14.22	0.0
TOTAL	1983.2	100.00		



ANALYSES

SIZE um	WT %	SiO2		Al2O3		Fe2O3		TiO2		Cr2O3	
		%	dist	%	dist	%	dist	%	dist	ppm	dist
850	53.45	99.0	54.4	0.381	14.5	0.025	11.4	0.010	16.9	2	21.3
600	14.26	98.8	14.5	0.492	5.0	0.024	2.9	0.011	5.0	1	2.8
425	9.08	98.6	9.2	0.580	3.7	0.032	2.5	0.014	4.0	2	3.6
300	5.00	98.3	5.0	0.658	2.3	0.036	1.5	0.017	2.7	2	2.0
212	3.99	97.7	4.0	0.820	2.3	0.052	1.8	0.028	3.5	3	2.4
-212	14.22	88.0	12.9	7.120	72.1	0.659	79.9	0.151	67.9	24	67.9
CALC	100.00	97.3	100.0	1.405	100.0	0.12	100.0	0.032	100.0	5	100.0
ASSAY		98.0		0.840		0.29					

Tonganah Quartz trials

26/08/2011 T.Q. coarse		
2kg of coarse quartz put in bucket and agitated with drill and paddle		
Dried overnight and split using 2.36mm sieve		
>2.36 mm	872.2 grams	51% of dry total
<2.36 mm	843.1 grams	49% of dry total
Dry total	1715.3 grams	

29/08/2011 T.Q. fine		
4kg of fine quartz + 872 grams of clean >2.36mm quartz put in bucket and agitated with drill and paddle		
Dried overnight and split using 2.36mm sieve		
>2.36 mm	849.7 grams	17.40% of original 4872g
<2.36 mm	1008.9 grams	20.70% of original 4872g
Dry total	1858.6 grams	38.10% of original 4872g
Total % lost in moisture and wash out		61.90% of original 4872g

31/08/2011 T.Q. fine		
4kg of fine quartz + 850 grams of clean >2.36mm quartz put in bucket and agitated with drill and paddle		
Dried overnight and split using 2.36mm sieve		
Wash out fines also dried over weekend		
>2.36 mm	816.4 grams	16.80% of original 4850g
<2.36 mm	1199.1 grams	24.60% of original 4850g
Wash out	2475.0 grams	51.00% of original 4850g
Wash out	2475.0 grams	61.90% of original 4kg of fine quartz
Total	4490.5 grams	92.60% of original 4850g