



Burnie RESEARCH LABORATORY

FLOTATION TESTING
OF
EXPLORER 108 BASE METAL RESOURCE
FOR
WESTGOLD LTD

REPORT NO: T0396

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1. SUMMARY

Four sets of base metal core intersections were received for preparation and preliminary metallurgical testing. These were sections from holes NR108D001, D007, D020 and D022. Testing on composites of each intersection included assay analysis; sized mineralogical assessment and basic flotation routines for lead and zinc recovery.

Intersection composites assayed between 1.3-5.1% Pb, 3.1-8.9% Zn and 7.0-13.0% MgO.

Core intersections received contain a simple base metal suite consisting of galena, sphalerite and minor pyrite and chalcopyrite. Non sulphides include talc, quartz, magnetite and haematite. Sphalerite and galena liberate at relative coarse size with 50% liberation seen at 90 and 65 microns respectively. Associations between galena and sphalerite are moderate but persistent to fine size.

Flotation testing indicates relatively simple separations can be made using conventional reagents yielding high grade lead and zinc concentrates. Floats were performed at grind sizes between 60 and 90 microns.

Talc floats freely in roughing and a pre-float stage is required to remove this prior to sulphide stages. Talc depressant, CMC, was used through lead roughing to reduce MgO recovery into cleaning stages.

Lead flotation responds well to a conventional flotation reagent suite with 60-65% recovery to a 65% lead concentrate. Concentrate cleaning is impeded by fine galena/sphalerite composites. In these tests lead concentrates contain up to 11% zinc. Further testing will be required to assess options for lowering zinc levels in lead concentrate.

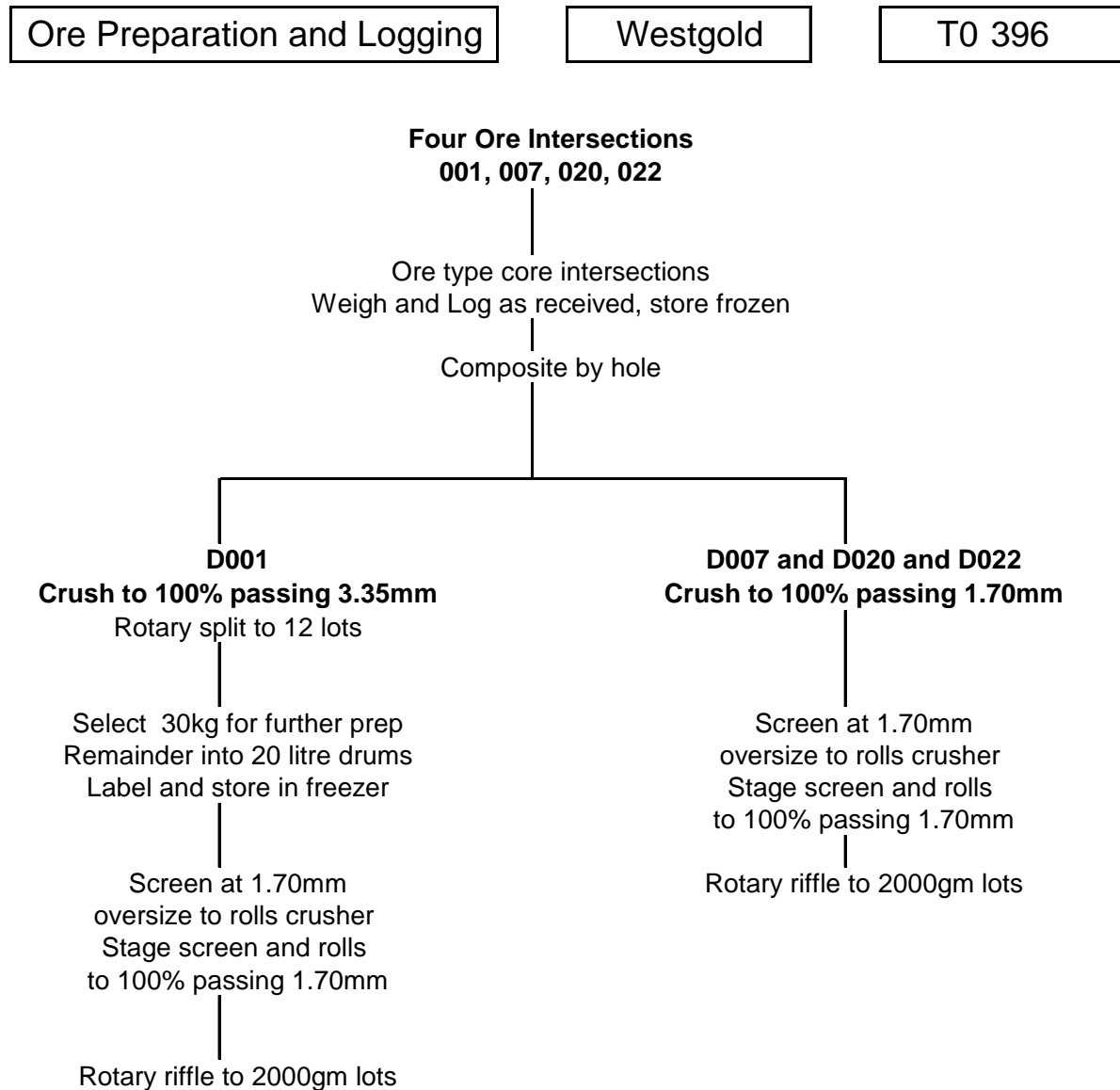
Zinc flotation performance was excellent with >55% Zn concentrates obtained at 80-88% recovery. Concentrates contain moderate silica levels (2-3%, probably as talc) which will require further testing to define rejection routines. Gold, silver and copper values are also recovered into the zinc concentrate.

For D007 a small copper concentrate was produced to mitigate copper concentration in zinc concentrate.

2. SAMPLE PREPARATION

Samples were received as bagged dry quarter core samples. A list of the intersection samples received is appended. Samples were crushed in a single toggle lab jaw crusher to 100% passing 10mm. Crusher discharge was screened at 1.70mm and screen oversize stage rolls crushed to 100% passing 1.70mm.

DIAGRAM 1: PREPARATION



3. TEST METHODS

SAMPLE PREPARATION: DRILL CORE

Samples were received as bagged damp half 45mm core. Samples were crushed in a single toggle lab jaw crusher to 100% passing 25mm. Crusher discharge was screened at 1.70mm and screen oversize stage rolls crushed to 100% passing 1.70mm. The combined crushed ore was rotary split to lots for cold storage.

MINERALOGY

Samples of 200gm were riffle split from the composites generated and wet screened at 38um. Oversize was dried and dry screened to generate dry fractions with the dry -38 returned to the undersize. Undersize was cyclosized to generate sub 38 micron fractions. Individual fractions were riffle split for analysis and recombined as required for mineralogy.

SIZINGS

Samples of around 100gm were riffle split and sized as follows:

- Wet screen at 38um.
- Dry oversize and dry screen to generate dry fractions.
- Dry -38um is returned to undersize.
- Undersize is classified into five fractions (CS1 to CS5) using a Warman Cyclosizer.
- Cut points for each cyclosizer fraction are assigned size according to particle sg.
- Sub cyclosizer pulp was centrifuged to generate a further fraction (CS6).

GRIND ESTABLISHMENT

Samples of fine ore (100% passing 1.70mm) were assessed by batch grinding to establish a curve for discharge p80 versus grind time for the grind conditions required for further testing. The following grind conditions were used:

- 400mm long x 320mm diameter open ended mill steel mill.
- 12.0 kg of a graded (10 – 30mm diameter) mild ball charge.
- 2000gm of prepared ore at 66% solids.
- Grind times of 10 to 30 minutes.

Grind discharges were fully removed, filtered, dried and prepared for sizing as detailed below. Discharge solids were also prepared for head analysis and mineralogical samples.

FLOTATION

Rougher flotation routines were performed under the following conditions:

- Grind at 66% solids in an open mild steel mill and charge.
- Grind reagents and pH control in milling as indicated.
- Flotation tests were performed in a 3.5 litre Agitaire style laboratory cell.
- Dilute reagents were added and conditioned for two minutes prior to flotation.
- Wet concentrate, air rate and time were recorded for each concentrate.
- Products were filtered and dried for weight determination and analysis.

Cleaner flotation routines were performed under the following conditions:

- Flotation tests were performed in 2.7 and 1.5 litre Agitaire style laboratory cells.

- Floats were performed on rougher concentrate pulp without regrind.
- Dilute reagents were added and conditioned for five minutes prior to flotation.
- Wet concentrate, air rate and time were recorded for each concentrate.
- Products were filtered and dried for weight determination and analysis.

STIRRED MILLING

A 2 litre volume stirred mill of the following configuration was used for milling rougher concentrates:

- 120mm diameter shell, four baffles.
- Two 45 degree six blade impellers, 85mm diameter.
- 1000gm of 2x4mm silica sand media.
- 200 to 700gm of concentrate at 50% solids.
- Mill for around 6 minutes at 1200rpm.
- Slurry and media are then flushed over a 600um screen to separate media sand.

FLOTATION TESTS PERFORMED

TEST	ORE	TEST	REAGENTS	NOTES
1	D001	Pre / Ro	Lime NaCN SIBX CuSO4 IF56	Sighter for reagents
2	D001	Pre / Ro	Lime NaCN SIBX CuSO4 IF56	Sighter for reagents and prefloat clean
3	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 CuSO4 IF56	Sighter for regrind Talc depressant
4	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 CuSO4 IF56	Primary grind size
5	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 CuSO4 IF56	Finer regrinds
6	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 CuSO4 IF56	Cleaner pH
7	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	Overall Optimisation
8	D007	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	New Composite
9	D020	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	New Composite
10	D022	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	New Composite
11	D001	Pre / Ro	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	Mineralogy
12	D007	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	With Cu Rougher
13	D001	Pre / Ro / Reg / Cl	Lime NaCN SIBX 1046 ZnSO4 CuSO4 IF56	Optimise

REAGENTS

The following reagents were used in flotation testing:

- IF56: frother, polyglycol blend, C&MS
- SIBX: Sodium Iso Butyl Xanthate, Orica
- NaCN: Sodium Cyanide, Lab Grade
- ZnSO₄: Zinc Sulphate, Lab Grade
- RTD1406: Carboxyl Methyl Cellulose, Tall Bennett
- CuSO₄: :Copper Sulphate, Lab Grade
- Lime: dry slaked lime

4. RESULTS AND DISCUSSION

Table 1 details head analyses of composites generated from core intersections received.

TABLE 1: HEAD SAMPLE ANALYSES

Intersection		Cu % XRF	Pb % XRF	Zn % XRF	Fe % XRF	As % XRF	SiO2 % XRF	S % Leco
D001 Comp Head	396001	0.03	3.11	6.47	7.87	<0.01	56.7	4.02
D007 Comp Head	396049	0.31	5.14	8.94	13.6	<0.01	40.3	7.98
D022 Comp Head	396050	0.04	1.33	3.07	6.28	<0.01	37.3	2.29
D020 Comp Head	396051	0.05	3.52	7.73	4.56	<0.01	52.9	4.42

Intersection		C % Leco	Al2O3 % xrf	Ag ppm aas	Au ppm Fire	MgO % XRF(rep)	Pycno Units (kg/l)
D001 Comp Head	396001	0.84	0.44	20	2.14	11.18	3.01
D007 Comp Head	396049	0.60	1.11	37	1.67	7.98	3.26
D022 Comp Head	396050	3.77	1.78	8	0.14	7.06	2.87
D020 Comp Head	396051	2.28	0.20	40	0.10	13.17	2.97

MINERALOGY

Thin section grain mineralogy was performed on three fractions of each ore type. Table 2 indicates the weighted average results of these fractions for each ore type. The full mineralogical report is appended.

TABLE 2: MINERALOGY SUMMARY FOR ORE

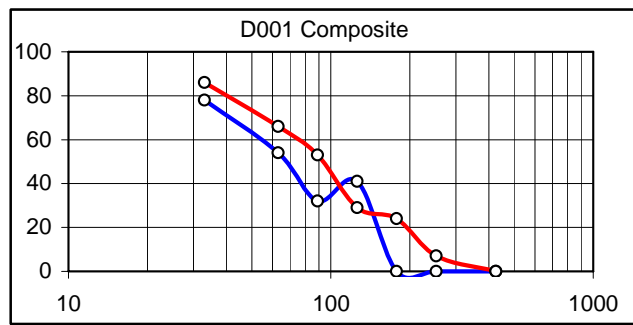
Ore Composite	D001	D007	D020	D022
Grind p80	132	119	138	128
Mineralogy	Lead and zinc sulphides in talc silicates			
Major Sulphide Minerals	Sphalerite Galena			
Gangue Types	Talc Quartz Magnetite Haematite			
Sp:Gn Ratio	5.2 (high)	6.2 (high)	7.1 (v high)	5.4 (high)
Sphalerite 50% lib size um	95	90	90	90
Free Sphalerite %	55	61	59	51
Ass with Gn %	14	16	11	10
Ass with Ga %	6	6	11	24
Galena 50% lib size um	70	65	65	55
Free Galena %	52	55	45	51
Ass with Sp %	16	20	24	21
Ass with Ga %	8	5	12	10

Ore types submitted contain Sphalerite and galena in economic quantities. The sphalerite to galena ratios are very high with a Sp:Gn ratio close to 6.0.

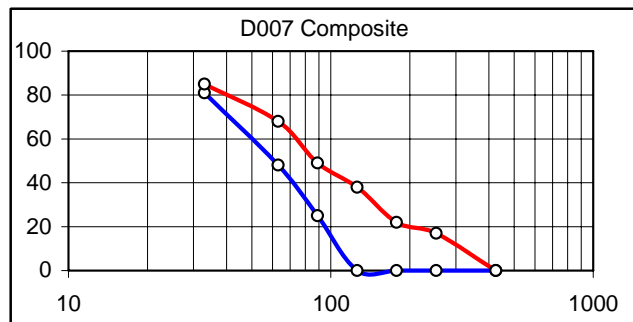
At a grind p80 of 125 microns liberation of sphalerite and galena is significant averaging 55 and 50% respectively. Curves of liberation versus size at this grind size are plotted in Table 3 below.

TABLE 3: GALENA AND SPHALERITE LIBERATION PLOTS

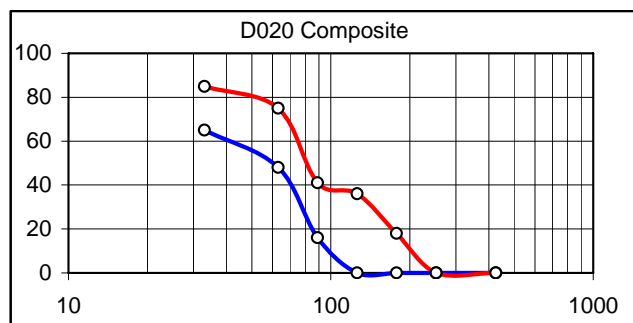
D001	SIZE	Wt	Galena	Sphalerite
Composite	um	(%)	Free	Free
	425	1.0	0	0
	252	4.1	0	7
	178	9.2	0	24
	126	14.1	41	29
	89	13.9	32	53
	63	10.8	54	66
	33	20.9	78	86



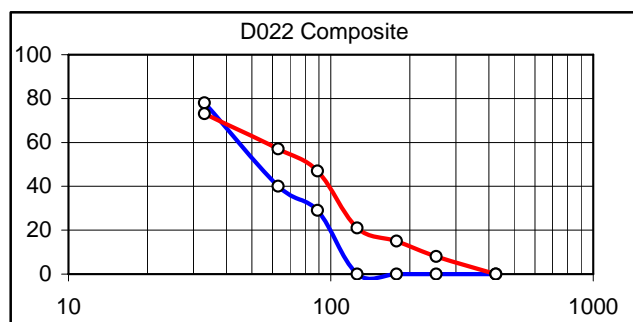
D007	SIZE	Wt	Galena	Sphalerite
Composite	um	(%)	Free	Free
	425	0.7	0	0
	252	2.7	0	17
	178	6.9	0	22
	126	13.6	0	38
	89	15.7	25	49
	63	12.1	48	68
	33	22.1	81	85



D020	SIZE	Wt	Galena	Sphalerite
Composite	um	(%)	Free	Free
	425	1.6	0	0
	252	4.6	0	0
	178	10.1	0	18
	126	13.1	0	36
	89	13.0	16	41
	63	9.3	48	75
	33	23.6	65	85



D022	SIZE	Wt	Galena	Sphalerite
Composite	um	(%)	Free	Free
	425	0.8	0	0
	252	3.3	0	8
	178	8.4	0	15
	126	14.6	0	21
	89	14.8	29	47
	63	10.6	40	57
	33	18.7	78	73



FLOTATION TESTING

Four of the rougher and four of the rougher/cleaner float tests performed are summarised in Tables 4 and 5 below, all float results are detailed in the appendix. Most testing was performed on the D001 composite with flotation routines transferred to the other composites after “optimising”.

Rougher results quickly indicated the need for a prefloat to remove free floating talc prior to base metal flotation. The prefloat contained significant lead and zinc values so a prefloat dilution clean was adopted to allow return of sulphide values to roughing. All tests use a prefloat and prefloat clean.

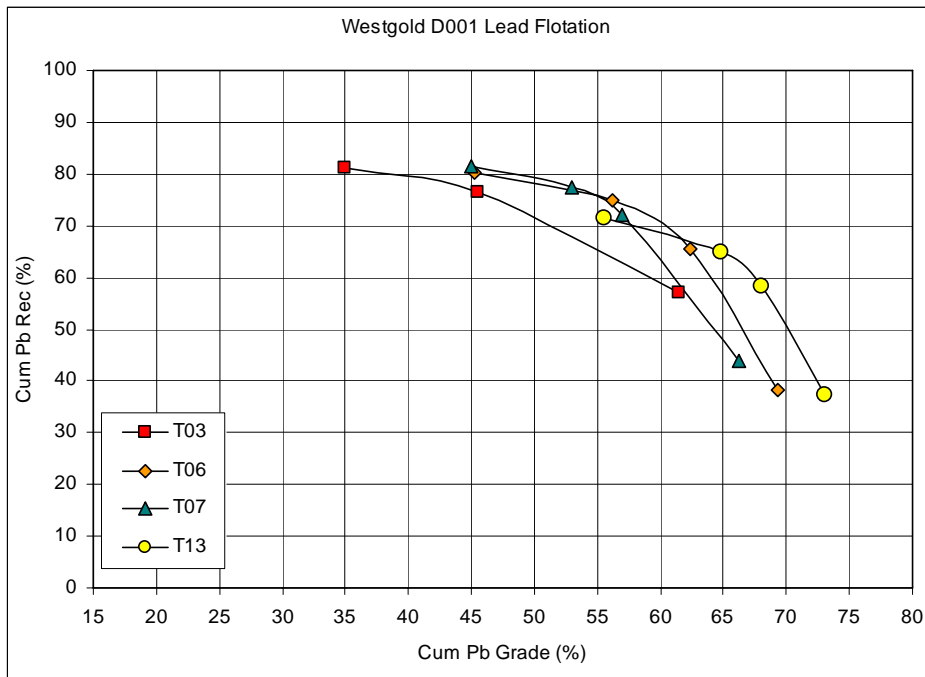
Lead roughing and cleaning respond well to conventional treatment with NaCN/ZnSO₄ and xanthate. Talc depressant was also used to control talc flotation in cleaning. Between 70 and 80% lead recovery is obtained in lead roughing with some 10% loss in cleaning to obtain grades >60% Pb. Concentrates are mainly diluted by sphalerite at around 10% Zn. Further testing of regrind size and depressant chemistry is required.

Zinc roughing and cleaning also respond well to conventional treatment with CuSO₄ and xanthate. Greater than 85% of zinc is recovered to rougher products yielding high grade concentrates at high recovery. Concentrate is mainly diluted by silica (in talc) close to sales limits (around 2.5%), further work is required to enhance silica depression. Concentrates are low in iron and arsenic but both gold and copper are preferentially reporting to the zinc concentrate.

TABLE 4: D001 FLOTATION TEST SUMMARY

TEST NO		3	6	7	13
ORE		D001	D001	D001	D001
Feed Grades	Pb (%)	2.73	2.88	2.87	2.74
	Zn (%)	6.02	6.27	6.27	6.05
	Fe (%)	7.88	7.97	7.71	7.83
	MgO (%)	11.1	11.3	11.1	11.2
Grind	p80 (um)	92	67	67	67
	pH	9.4	9.5	9.5	9.7
Prefloat Conc	Mass (%)	20.7	22.3	20.3	20.5
	Pb (%)	0.57	0.56	0.50	0.41
	Pb Rec (%)	4.3	4.3	3.5	3.1
	Zn (%)	2.02	1.77	1.53	1.45
	Zn Rec (%)	6.9	6.3	5.0	4.9
Lead Cl1 Conc	Mass (%)	6.3	5.1	5.2	3.5
	Pb (%)	34.9	45.3	45.0	55.6
	Pb Rec (%)	81	80	82	72
	Zn (%)	10.3	14.0	16.3	9.78
	Zn Rec (%)	11	11	14	5.7
Lead Cl2 Conc	Mass (%)	2.5	3.0	7.7	2.7
	Pb (%)	61.5	62.4	57.0	64.8
	Pb Rec (%)	57	66	72	65
	Zn (%)	6.8	11.0	17.0	10.1
	Zn Rec (%)	2.9	5.3	9.9	4.6
Zinc Ro Conc	Mass (%)	20.8	24.8	29.0	28.2
	Zn (%)	20.3	19.5	17.4	19.0
	Zn Rec (%)	70	77	81	88
	Pb (%)	1.31	1.46	1.32	2.29
	Pb Rec (%)	9.9	12.6	13.4	24
Zn Cl2 Conc	Mass (%)	4.6	7.4	8.6	8.9
	Zn (%)	57.5	57.9	57.1	57.9
	Zn Rec (%)	44	68	78	85
	Pb (%)	1.88	2.96	3.82	6.25
	Pb Rec (%)	3.1	7.5	11.4	20.3

GRAPH 1: D001 LEAD FLOTATION



GRAPH 2: D001 ZINC FLOTATION

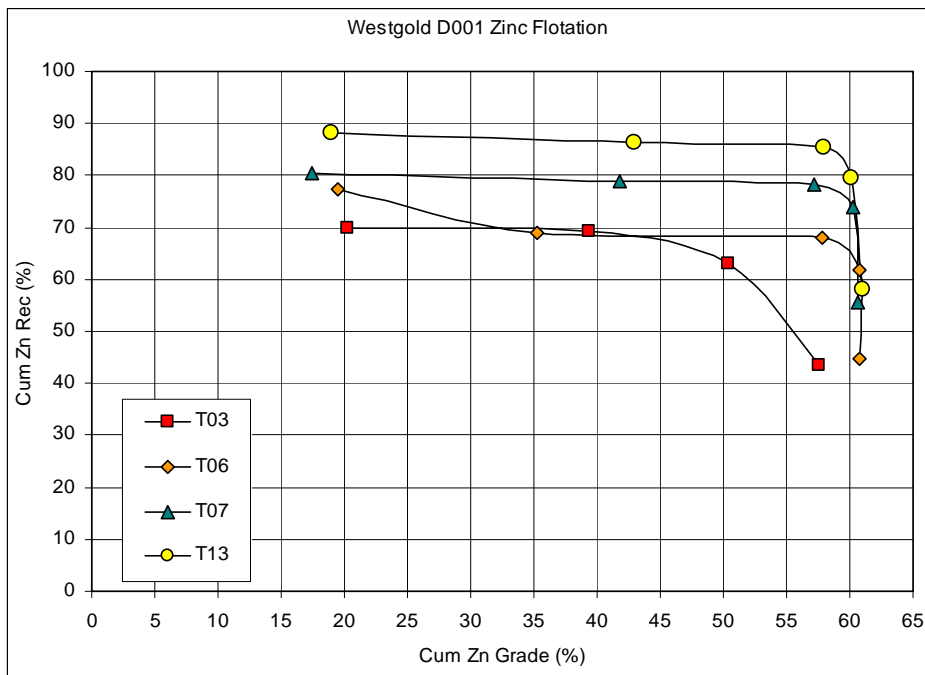
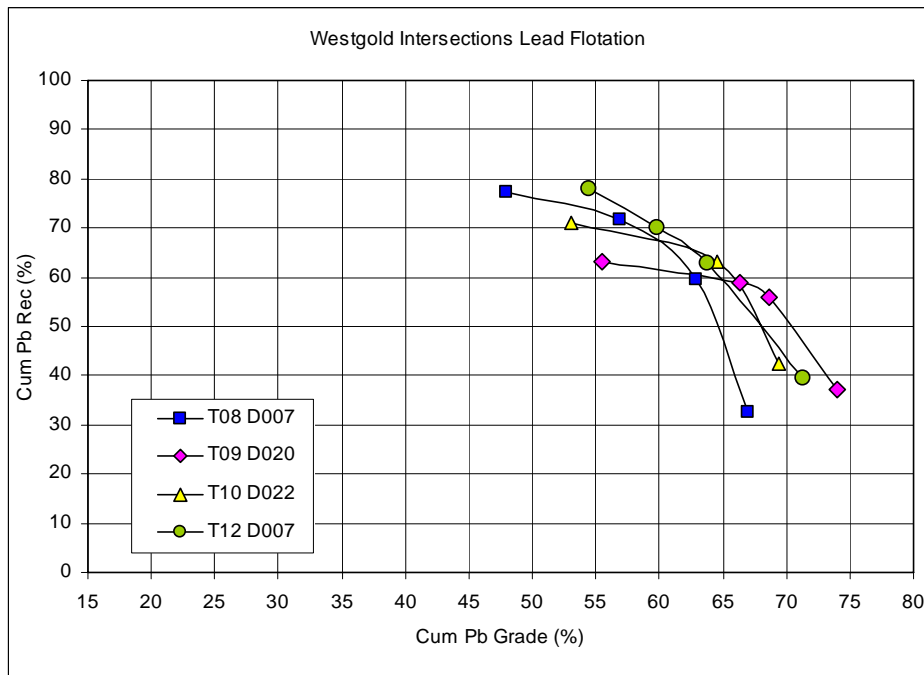


TABLE 5: D007, D020, D022 FLOTATION TEST SUMMARY

TEST NO		8	9	10	12
ORE		D007	D020	D022	D007
Feed Grades	Pb (%)	5.02	3.25	1.09	4.94
	Zn (%)	8.95	7.72	2.91	8.91
	Fe (%)	13.3	4.78	6.75	13.6
	MgO (%)	8.1	7.1	14.2	8.2
Grind	p80 (um)	64	62	62	64
	pH	9.1	9.8	9.5	9.4
Prelfloat Conc	Mass (%)	7.9	8.9	6.9	8.2
	Pb (%)	1.01	0.31	0.16	0.92
	Pb Rec (%)	1.6	0.8	1.0	1.5
	Zn (%)	3.3	1.82	0.85	3.51
	Zn Rec (%)	2.9	2.1	2.0	3.2
Lead Cl1 Conc	Mass (%)	8.1	3.7	1.5	7.1
	Pb (%)	48.0	55.5	53.1	54.5
	Pb Rec (%)	77	63	71	78
	Zn (%)	13.2	9.23	10.0	10.7
	Zn Rec (%)	12.0	4.4	5.0	8.5
Lead Cl2 Conc	Mass (%)	4.7	2.9	1.1	4.9
	Pb (%)	62.9	66.3	64.6	63.8
	Pb Rec (%)	59	59	63	63
	Zn (%)	11.1	10.0	11.0	9.26
	Zn Rec (%)	5.9	3.7	4.0	5.1
Zinc Ro Conc	Mass (%)	30.7	23.4	15.0	30.3
	Zn (%)	24.4	30.4	17.5	25.5
	Zn Rec (%)	84	92	90	87
	Pb (%)	2.92	4.56	1.98	2.85
	Pb Rec (%)	18	33	27	18
Zn Cl2 Conc	Mass (%)	11.6	11.9	4.6	12.5
	Zn (%)	57.5	60.6	56.4	57.3
	Zn Rec (%)	75	71	88	80
	Pb (%)	1.61	4.78	6.00	5.03
	Pb Rec (%)	3.7	13	25	12.7

GRAPH 3: INTERSECTIONS LEAD FLOTATION



GRAPH 4: INTERSECTIONS ZINC FLOTATION

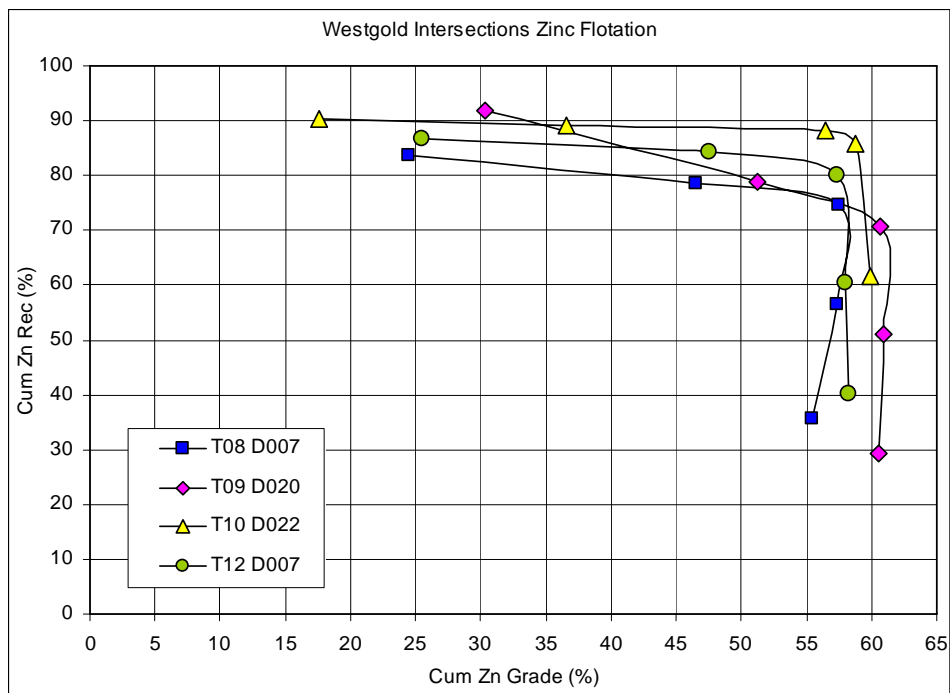


TABLE 6: CONCENTRATE GRADES (FUSION XRF)

ORE	D001	D007	D020	D022
TEST	T13	T12	T09	T10
Lead Conc Grade (%)	64.8	63.8	66.3	64.6
Lead Recovery (%)	65	63	60	63
Lead Conc Zinc (%)	10.1	9.3	10.0	11.0
Zinc Conc Grade (%)	57.9	57.3	51.2	56.4
Zinc Recovery (%)	85	80	79	88

APPENDIX

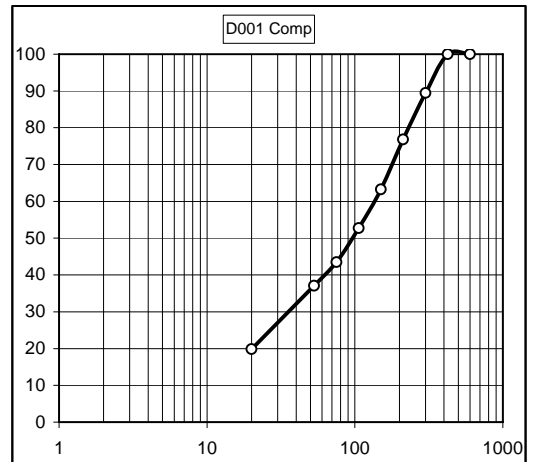
APPENDIX A: GRIND ESTABLISHMENT

Burnie RESEARCH LABORATORY
GRIND ESTABLISHMENT REPORT SHEET

PROJECT	396
ORE	Westgold
DATE	19.06.08
TECHNICIAN	MJR

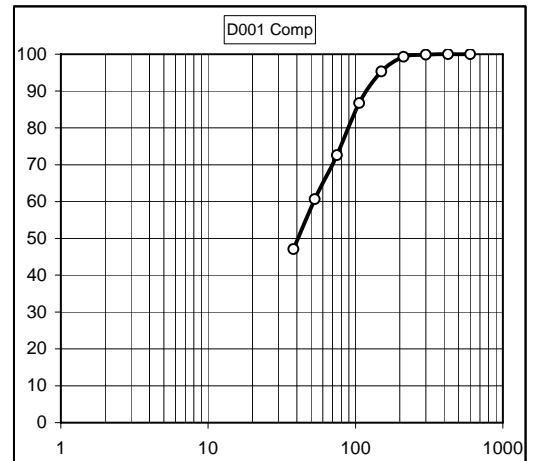
SIZING

D001 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 234	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	26.35	10.52	89.5
MEDIA		ball	212	31.81	12.70	76.8
MEDIA kg		12.0	150	33.96	13.56	63.2
SOLIDS kg		2	106	26.41	10.54	52.7
WATER kg		1	75	23.04	9.20	43.5
TIME min		10.0	53	16.05	6.41	37.1
SPEED rpm		50	20	43.26	17.27	19.8
CYCLOSIZER		CS1	>20	49.65	19.82	0.0
FLOW	185 CS2	27	0.00	0.00	0.0	
TEMP	21 CS3	18	0.00	0.00	0.0	
SG	2.85 CS4	13	0.00	0.00	0.0	
MINS	20 CS5	8	0.00	0.00	0.0	
CENTRIFUGE	CS6	4	0.00	0.00	0.0	
		SUB	0.00	0.00	0.0	
		TOTAL	250.53	100.00		



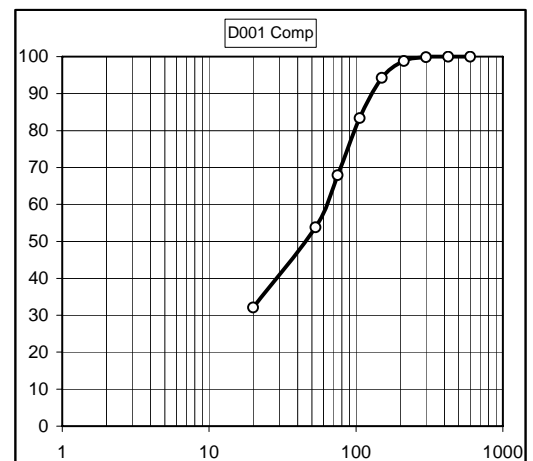
SIZING

D001 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 91	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	0.12	0.10	99.9
MEDIA		ball	212	0.74	0.63	99.3
MEDIA kg		12.00	150	4.73	4.00	95.3
SOLIDS kg		2.00	106	10.07	8.53	86.7
WATER kg		1.00	75	16.72	14.16	72.6
TIME min		20	53	14.12	11.95	60.6
SPEED rpm		50	38	16.03	13.57	47.1
CYCLOSIZER		CS1	34	2.54	2.15	44.9
FLOW	185 CS2	27	4.94	4.18	40.7	
TEMP	21 CS3	18	9.01	7.63	33.1	
SG	2.85 CS4	13	8.45	7.15	25.9	
MINS	20 CS5	8	5.96	5.05	20.9	
CENTRIFUGE	CS6	4	0.00	0.00	20.9	
		SUB	24.68	20.90	0.0	
		TOTAL	118.11	100.00		



SIZING

D001 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 99	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	0.33	0.13	99.9
MEDIA		ball	212	2.62	1.05	98.8
MEDIA kg		12.0	150	11.44	4.57	94.2
SOLIDS kg		2.00	106	27.21	10.88	83.4
WATER kg		1.00	75	38.70	15.47	67.9
TIME min		17	53	35.21	14.08	53.8
SPEED rpm		50	20	54.35	21.73	32.1
CYCLOSIZER		CS1	34	0.00	0.00	32.1
FLOW	185 CS2	27	0.00	0.00	32.1	
TEMP	21 CS3	18	0.00	0.00	32.1	
SG	2.85 CS4	13	0.00	0.00	32.1	
MINS	20 CS5	8	0.00	0.00	32.1	
CENTRIFUGE	CS6	4	0.00	0.00	32.1	
		SUB	80.24	32.08	0.0	
		TOTAL	250.10	100.00		

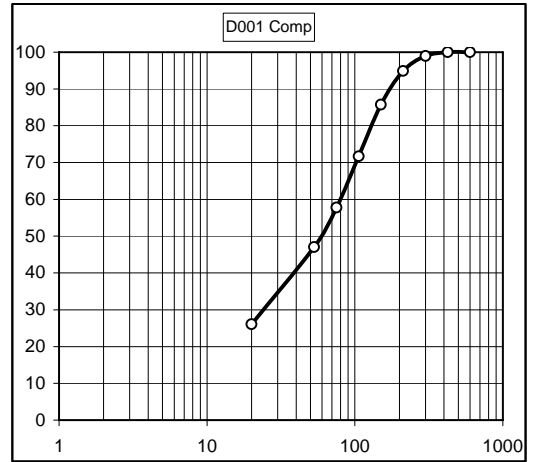


Burnie RESEARCH LABORATORY
GRIND ESTABLISHMENT REPORT SHEET

PROJECT	396
ORE	Westgold
DATE	19.06.08
TECHNICIAN	MJR

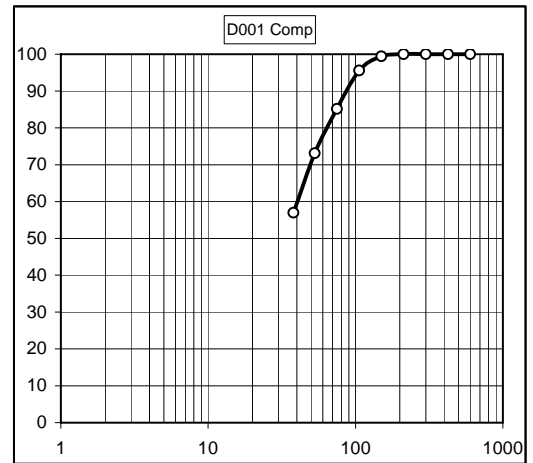
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D001 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 132	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	2.56	1.02	99.0
MEDIA		ball	212	10.19	4.07	94.9
MEDIA kg		12.0	150	22.92	9.16	85.7
SOLIDS kg		2	106	35.17	14.05	71.7
WATER kg		1	75	34.82	13.91	57.8
TIME min		14.0	53	27.02	10.79	47.0
SPEED rpm		50	20	52.34	20.91	26.1
CYCLOSIZER		CS1	27	0.00	0.00	26.1
FLOW	185 CS2	27	0.00	0.00	26.1	
TEMP	21 CS3	18	0.00	0.00	26.1	
SG	2.85 CS4	13	0.00	0.00	26.1	
MINS	20 CS5	8	0.00	0.00	26.1	
CENTRIFUGE	CS6	4	0.00	0.00	26.1	
		SUB	65.29	26.08	0.0	
		TOTAL	250.31	100.00		



-sizing

D001 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 66	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	0.00	0.00	100.0
MEDIA		ball	212	0.00	0.00	100.0
MEDIA kg		12.00	150	0.18	0.57	99.4
SOLIDS kg		2.00	106	1.22	3.89	95.5
WATER kg		1.00	75	3.26	10.40	85.1
TIME min		25.0	53	3.77	12.02	73.1
SPEED rpm		50	38	5.06	16.14	57.0
CYCLOSIZER		CS1	34	0.00	0.00	57.0
FLOW	185 CS2	27	0.00	0.00	57.0	
TEMP	21 CS3	18	0.00	0.00	57.0	
SG	2.85 CS4	13	0.00	0.00	57.0	
MINS	20 CS5	8	0.00	0.00	57.0	
CENTRIFUGE	CS6	4	0.00	0.00	57.0	
		SUB	17.87	56.98	0.0	
		TOTAL	31.36	100.00		

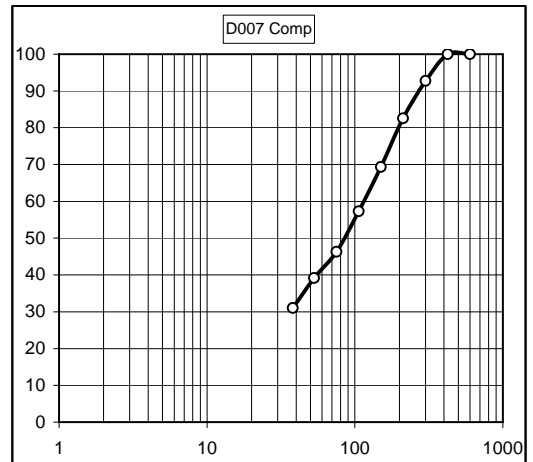


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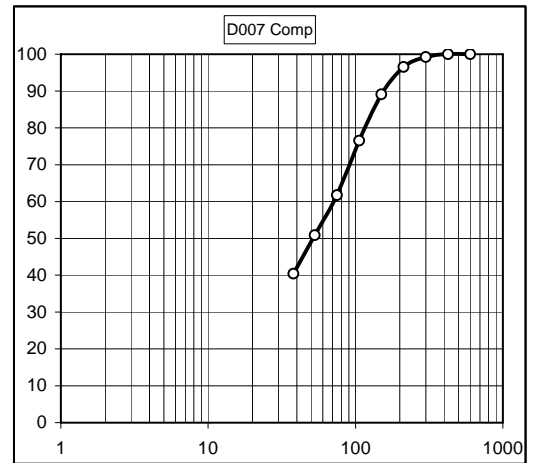
SIZING

D007 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 200	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	6.67	7.28	92.7
MEDIA		ball	212	9.30	10.15	82.6
MEDIA kg		12.0	150	12.09	13.19	69.4
SOLIDS kg		2	106	11.09	12.10	57.3
WATER kg		1	75	10.04	10.96	46.3
TIME min		10.0	53	6.59	7.19	39.1
SPEED rpm		50	38	7.41	8.09	31.0
CYCLOSIZER		CS1	34	0.00	0.00	31.0
FLOW		185 CS2	27	0.00	0.00	31.0
TEMP		21 CS3	18	0.00	0.00	31.0
SG		2.85 CS4	13	0.00	0.00	31.0
MINS	20 CS5	8	0.00	0.00	31.0	
CENTRIFUGE	CS6	4	0.00	0.00	31.0	
		SUB	28.45	31.05	0.0	
		TOTAL	91.64	100.00		



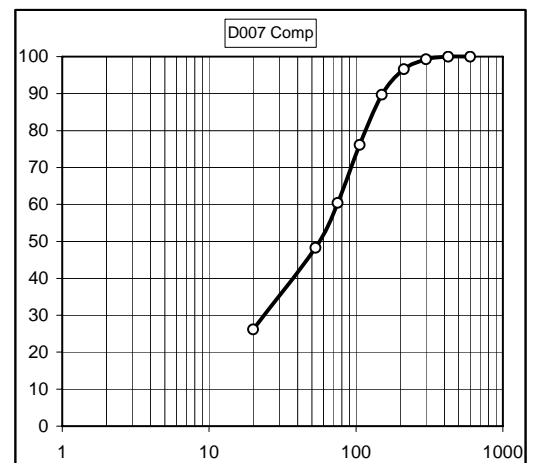
SIZING

D007 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 118	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	1.20	0.75	99.2
MEDIA		ball	212	4.32	2.72	96.5
MEDIA kg		12.00	150	11.83	7.44	89.1
SOLIDS kg		2.00	106	20.03	12.59	76.5
WATER kg		1.00	75	23.49	14.77	61.7
TIME min		15	53	17.26	10.85	50.9
SPEED rpm		50	38	16.60	10.44	40.4
CYCLOSIZER		CS1	34	0.00	0.00	40.4
FLOW		185 CS2	27	0.00	0.00	40.4
TEMP		21 CS3	18	0.00	0.00	40.4
SG		2.85 CS4	13	0.00	0.00	40.4
MINS	20 CS5	8	0.00	0.00	40.4	
CENTRIFUGE	CS6	4	0.00	0.00	40.4	
		SUB	64.31	40.44	0.0	
		TOTAL	159.04	100.00		



SIZING

D007 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 119	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	1.73	0.69	99.3
MEDIA		ball	212	6.77	2.70	96.6
MEDIA kg		12.0	150	17.41	6.94	89.7
SOLIDS kg		2.00	106	34.04	13.57	76.1
WATER kg		1.00	75	39.39	15.71	60.4
TIME min		15	53	30.36	12.11	48.3
SPEED rpm		50	20	55.42	22.10	26.2
CYCLOSIZER		CS1	34	0.00	0.00	26.2
FLOW		185 CS2	27	0.00	0.00	26.2
TEMP		21 CS3	18	0.00	0.00	26.2
SG		2.85 CS4	13	0.00	0.00	26.2
MINS	20 CS5	8	0.00	0.00	26.2	
CENTRIFUGE	CS6	4	0.00	0.00	26.2	
		SUB	65.68	26.19	0.0	
		TOTAL	250.80	100.00		

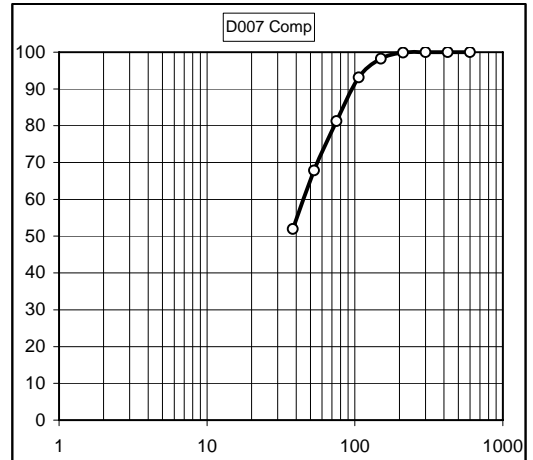


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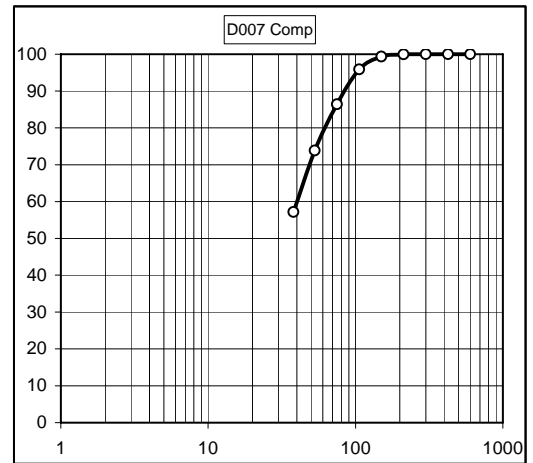
SIZING

D007 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	0.02	0.02	100.0
MEDIA		ball	212	0.16	0.12	99.9
MEDIA kg		12.0	150	2.14	1.64	98.2
SOLIDS kg		2	106	6.65	5.10	93.1
WATER kg		1	75	15.48	11.87	81.3
TIME min		25.0	53	17.45	13.38	67.9
SPEED rpm		50	38	20.84	15.98	51.9
CYCLOSIZER		CS1	34	0.00	0.00	51.9
FLOW		185 CS2	27	0.00	0.00	51.9
TEMP		21 CS3	18	0.00	0.00	51.9
SG		2.85 CS4	13	0.00	0.00	51.9
MINS		20 CS5	8	0.00	0.00	51.9
CENTRIFUGE	CS6	4	0.00	0.00	51.9	
		SUB	67.70	51.90	0.0	
		TOTAL	130.44	100.00		



SIZING

D007 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	0.00	0.00	100.0
MEDIA		ball	212	0.03	0.05	99.9
MEDIA kg		12.00	150	0.34	0.61	99.3
SOLIDS kg		2.00	106	1.95	3.49	95.8
WATER kg		1.00	75	5.28	9.45	86.4
TIME min		28	53	7.01	12.54	73.9
SPEED rpm		50	38	9.32	16.68	57.2
CYCLOSIZER		CS1	34	0.00	0.00	57.2
FLOW		185 CS2	27	0.00	0.00	57.2
TEMP		21 CS3	18	0.00	0.00	57.2
SG		2.85 CS4	13	0.00	0.00	57.2
MINS		20 CS5	8	0.00	0.00	57.2
CENTRIFUGE	CS6	4	0.00	0.00	57.2	
		SUB	31.95	57.18	0.0	
		TOTAL	55.88	100.00		

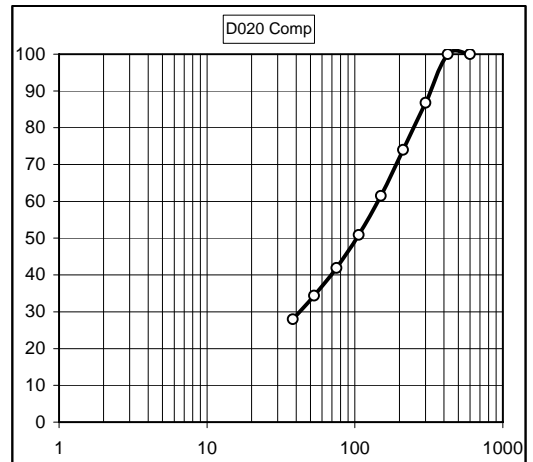


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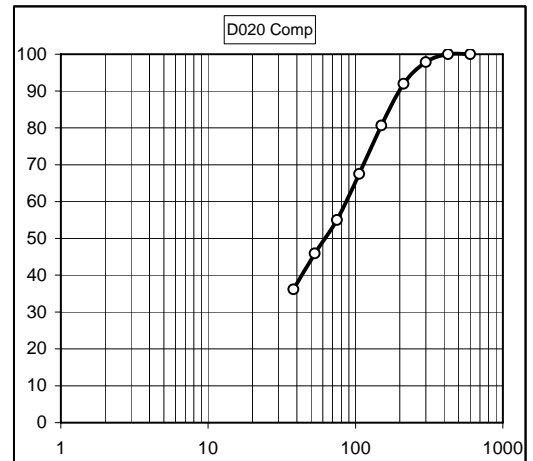
SIZING

D020 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 253	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	11.55	13.22	86.8
MEDIA		ball	212	11.16	12.77	74.0
MEDIA kg		12.0	150	10.91	12.49	61.5
SOLIDS kg		2	106	9.27	10.61	50.9
WATER kg		1	75	7.86	9.00	41.9
TIME min		10.0	53	6.59	7.54	34.4
SPEED rpm		50	38	5.60	6.41	28.0
CYCLOSIZER		CS1	34	0.00	0.00	28.0
FLOW		185 CS2	27	0.00	0.00	28.0
TEMP		21 CS3	18	0.00	0.00	28.0
SG		2.85 CS4	13	0.00	0.00	28.0
MINS		20 CS5	8	0.00	0.00	28.0
CENTRIFUGE	CS6	4	0.00	0.00	28.0	
		SUB	24.43	27.96	0.0	
		TOTAL	87.37	100.00		



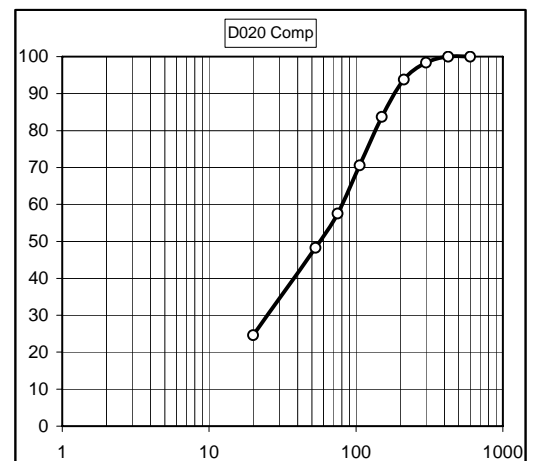
SIZING

D020 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 148	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	2.86	2.19	97.8
MEDIA		ball	212	7.67	5.86	92.0
MEDIA kg		12.00	150	14.79	11.30	80.7
SOLIDS kg		2.00	106	17.21	13.15	67.5
WATER kg		1.00	75	16.40	12.53	55.0
TIME min		15	53	11.89	9.09	45.9
SPEED rpm		50	38	12.70	9.70	36.2
CYCLOSIZER		CS1	34	0.00	0.00	36.2
FLOW		185 CS2	27	0.00	0.00	36.2
TEMP		21 CS3	18	0.00	0.00	36.2
SG		2.85 CS4	13	0.00	0.00	36.2
MINS		20 CS5	8	0.00	0.00	36.2
CENTRIFUGE	CS6	4	0.00	0.00	36.2	
		SUB	47.35	36.18	0.0	
		TOTAL	130.87	100.00		



SIZING

D020 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 138	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	4.04	1.61	98.4
MEDIA		ball	212	11.41	4.56	93.8
MEDIA kg		12.0	150	25.36	10.13	83.7
SOLIDS kg		2.00	106	32.88	13.13	70.6
WATER kg		1.00	75	32.58	13.01	57.6
TIME min		16	53	23.34	9.32	48.2
SPEED rpm		50	20	59.20	23.64	24.6
CYCLOSIZER		CS1	34	0.00	0.00	24.6
FLOW		185 CS2	27	0.00	0.00	24.6
TEMP		21 CS3	18	0.00	0.00	24.6
SG		2.85 CS4	13	0.00	0.00	24.6
MINS		20 CS5	8	0.00	0.00	24.6
CENTRIFUGE	CS6	4	0.00	0.00	24.6	
		SUB	61.61	24.60	0.0	
		TOTAL	250.42	100.00		

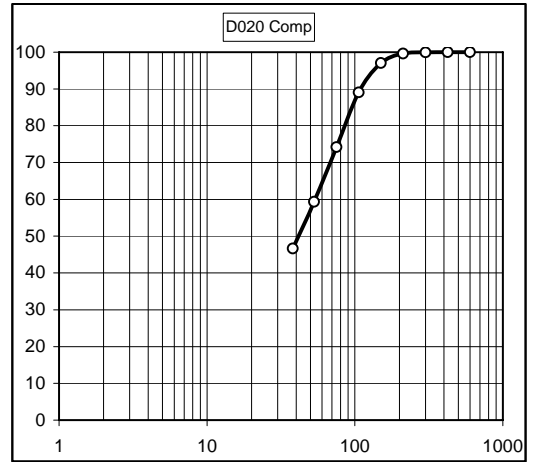


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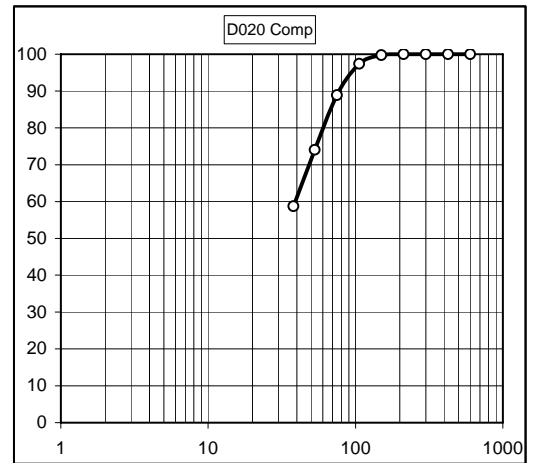
SIZING

D020 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	0.04	0.04	100.0
MEDIA		ball	212	0.39	0.37	99.6
MEDIA kg		12.0	150	2.72	2.55	97.0
SOLIDS kg		2	106	8.55	8.01	89.0
WATER kg		1	75	15.81	14.82	74.2
TIME min		25.0	53	15.89	14.89	59.3
SPEED rpm		50	38	13.53	12.68	46.6
CYCLOSIZER		CS1	34	0.00	0.00	46.6
FLOW	185 CS2	27	0.00	0.00	46.6	
TEMP	21 CS3	18	0.00	0.00	46.6	
SG	2.85 CS4	13	0.00	0.00	46.6	
MINS	20 CS5	8	0.00	0.00	46.6	
CENTRIFUGE	CS6	4	0.00	0.00	46.6	
		SUB	49.77	46.64	0.0	
		TOTAL	106.70	100.00		



SIZING

D020 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	100.0	
TYPE		long	300	0.00	0.00	100.0
MEDIA		ball	212	0.03	0.03	100.0
MEDIA kg		12.00	150	0.25	0.23	99.7
SOLIDS kg		2.00	106	2.59	2.37	97.4
WATER kg		1.00	75	9.28	8.50	88.9
TIME min		35	53	16.15	14.80	74.1
SPEED rpm		50	38	16.75	15.35	58.7
CYCLOSIZER		CS1	34	0.00	0.00	58.7
FLOW	185 CS2	27	0.00	0.00	58.7	
TEMP	21 CS3	18	0.00	0.00	58.7	
SG	2.85 CS4	13	0.00	0.00	58.7	
MINS	20 CS5	8	0.00	0.00	58.7	
CENTRIFUGE	CS6	4	0.00	0.00	58.7	
		SUB	64.08	58.72	0.0	
		TOTAL	109.13	100.00		

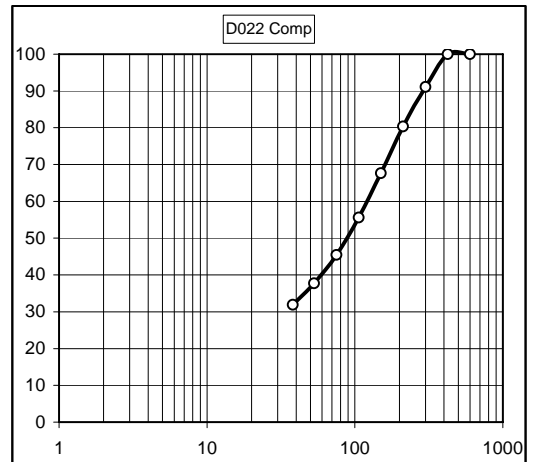


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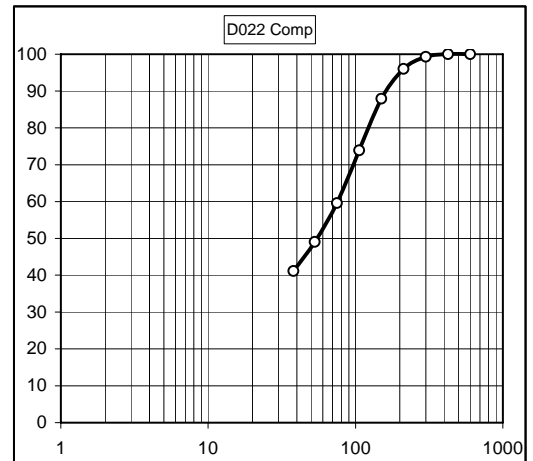
SIZING

D022 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 210	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	10.01	8.88	91.1
MEDIA		ball	212	12.16	10.78	80.3
MEDIA kg		12.0	150	14.29	12.67	67.7
SOLIDS kg		2	106	13.64	12.10	55.6
WATER kg		1	75	11.41	10.12	45.5
TIME min		10.0	53	8.70	7.72	37.7
SPEED rpm		50	38	6.57	5.83	31.9
CYCLOSIZER		CS1	34	0.00	0.00	31.9
FLOW		185 CS2	27	0.00	0.00	31.9
TEMP		21 CS3	18	0.00	0.00	31.9
SG		2.85 CS4	13	0.00	0.00	31.9
MINS	20 CS5	8	0.00	0.00	31.9	
CENTRIFUGE	CS6	4	0.00	0.00	31.9	
		SUB	35.98	31.91	0.0	
		TOTAL	112.76	100.00		



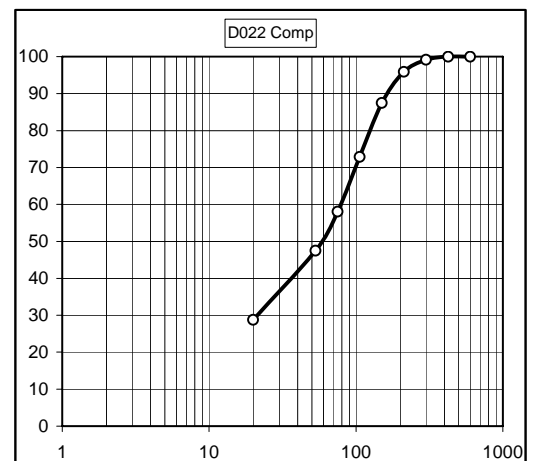
SIZING

D022 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 125	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	0.87	0.71	99.3
MEDIA		ball	212	4.04	3.28	96.0
MEDIA kg		12.00	150	10.00	8.12	87.9
SOLIDS kg		2.00	106	17.25	14.01	73.9
WATER kg		1.00	75	17.56	14.26	59.6
TIME min		15	53	12.99	10.55	49.1
SPEED rpm		50	38	9.75	7.92	41.1
CYCLOSIZER		CS1	34	0.00	0.00	41.1
FLOW		185 CS2	27	0.00	0.00	41.1
TEMP		21 CS3	18	0.00	0.00	41.1
SG		2.85 CS4	13	0.00	0.00	41.1
MINS	20 CS5	8	0.00	0.00	41.1	
CENTRIFUGE	CS6	4	0.00	0.00	41.1	
		SUB	50.64	41.14	0.0	
		TOTAL	123.10	100.00		



SIZING

D022 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS			
			gm	(%)	(%)PASS	
MILL CONDITIONS	p80 128	600	0.00	0.00	100.0	
FEED mm		1700	425	0.00	0.00	100.0
TYPE		long	300	2.07	0.83	99.2
MEDIA		ball	212	8.31	3.31	95.9
MEDIA kg		12.0	150	21.04	8.39	87.5
SOLIDS kg		2.00	106	36.70	14.63	72.8
WATER kg		1.00	75	37.08	14.78	58.1
TIME min		15	53	26.56	10.59	47.5
SPEED rpm		50	20	47.02	18.74	28.7
CYCLOSIZER		CS1	34	0.00	0.00	28.7
FLOW		185 CS2	27	0.00	0.00	28.7
TEMP		21 CS3	18	0.00	0.00	28.7
SG		2.85 CS4	13	0.00	0.00	28.7
MINS	20 CS5	8	0.00	0.00	28.7	
CENTRIFUGE	CS6	4	0.00	0.00	28.7	
		SUB	72.12	28.74	0.0	
		TOTAL	250.90	100.00		

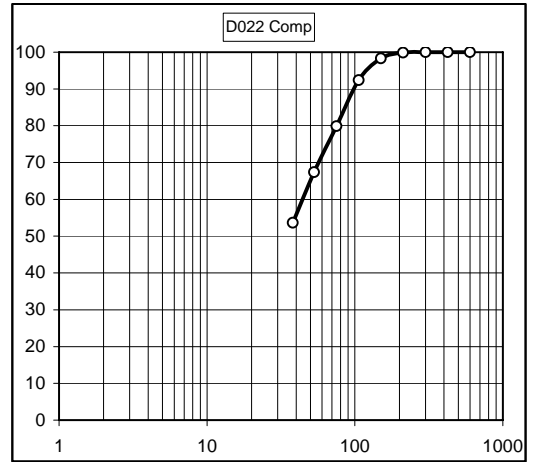


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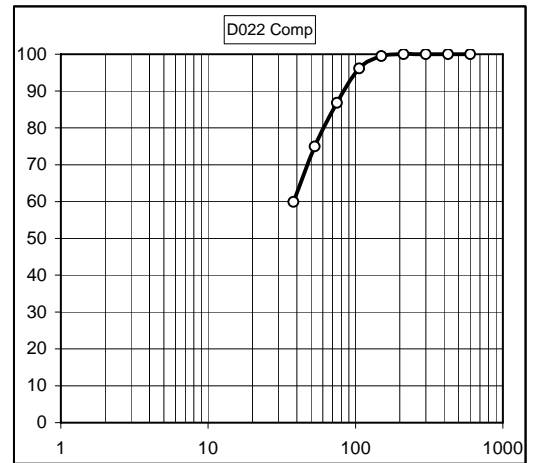
SIZING

D022 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS		
			gm	(%)	(%)PASS
MILL CONDITIONS	p80 75	600	0.00	0.00	100.0
FEED mm		1700	425	0.00	100.0
TYPE		long	300	0.00	100.0
MEDIA		ball	212	0.13	0.12
MEDIA kg		12.0	150	1.69	1.59
SOLIDS kg		2	106	6.28	5.91
WATER kg		1	75	13.24	12.47
TIME min		25.0	53	13.27	12.50
SPEED rpm		50	38	14.62	13.77
CYCLOSIZER		CS1	34	0.00	0.00
FLOW		185 CS2	27	0.00	0.00
TEMP		21 CS3	18	0.00	0.00
SG		2.85 CS4	13	0.00	0.00
MINS		20 CS5	8	0.00	0.00
CENTRIFUGE	CS6	4	0.00	0.00	
SUB			56.96	53.64	0.0
TOTAL			106.19	100.00	



SIZING

D022 Comp GRIND ESTABLISHMENT		SIZE um	WEIGHTS		
			gm	(%)	(%)PASS
MILL CONDITIONS	p80 62	600	0.00	0.00	100.0
FEED mm		1700	425	0.00	100.0
TYPE		long	300	0.00	100.0
MEDIA		ball	212	0.02	0.02
MEDIA kg		12.00	150	0.40	0.47
SOLIDS kg		2.00	106	2.85	3.34
WATER kg		1.00	75	8.00	9.37
TIME min		30	53	10.14	11.87
SPEED rpm		50	38	12.84	15.03
CYCLOSIZER		CS1	34	0.00	0.00
FLOW		185 CS2	27	0.00	0.00
TEMP		21 CS3	18	0.00	0.00
SG		2.85 CS4	13	0.00	0.00
MINS		20 CS5	8	0.00	0.00
CENTRIFUGE	CS6	4	0.00	0.00	
SUB			51.17	59.90	0.0
TOTAL			85.42	100.00	



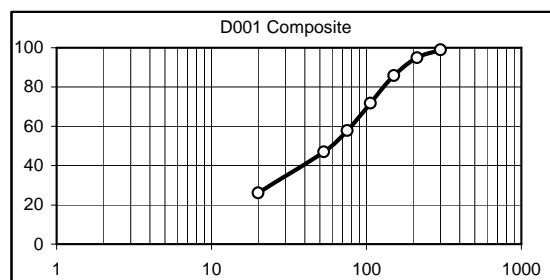
APPENDIX B: SIZINGS FOR MINERALOGY

Burnie RESEARCH LABORATORY
SIZING AND SIZE ANALYSIS REPORT SHEET

PROJECT	T0396
SAMPLE	Westgold
TEST NO	SIZING
DATE	27/07/2008
TECHNICIAN	mw

SIZING

D001 Composite		SIZE um	WEIGHTS		
			gm	(%)	%PASS
P80	132	300	2.56	1.02	99.0
		212	10.19	4.07	94.9
		150	22.92	9.16	85.7
		106	35.17	14.05	71.7
		75	34.82	13.91	57.8
		53	27.02	10.79	47.0
		20	52.34	20.91	26.1
		SUB	65.29	26.08	
		TOTAL	250.31	100.00	



ANALYSES

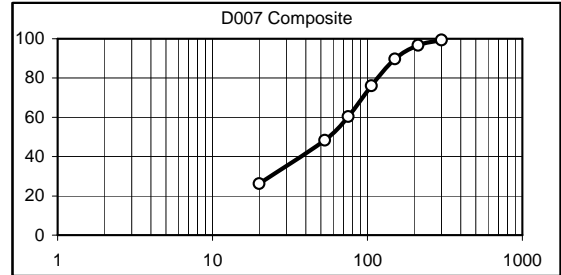
SIZE um	WT %	Cu		Pb		Zn		Fe		As		SiO2	
		%	dist	%	dist	%	dist	ppm	dist	ppm	dist	ppm	dist
212	5.09	0.01	2.1	1.04	1.7	3.73	3.0	6.05	3.9	0.01	5.1	66.22	5.9
150	9.16	0.01	3.8	1.62	4.8	5.58	8.1	7.84	9.0	0.01	9.2	60.05	9.7
106	14.05	0.02	11.8	2.18	10.0	6.93	15.4	9.25	16.4	0.01	14.1	57.16	14.1
75	13.91	0.02	11.7	2.73	12.4	7.59	16.7	9.56	16.8	0.01	13.9	56.35	13.8
53	10.79	0.03	13.6	3.27	11.5	7.53	12.9	9.14	12.4	0.01	10.8	55.71	10.6
20	20.91	0.04	35.1	3.85	26.3	7.01	23.2	7.70	20.3	0.01	20.9	56.98	20.9
<20	26.08	0.02	21.9	3.91	33.3	4.99	20.6	6.45	21.2	0.01	26.1	54.83	25.1
CALC	100.00	0.02	100.0	3.07	100.0	6.31	100.0	7.93	100.0	0.01	100.0	56.97	100.0
ASSAY		0.01		3.11		6.32		7.79		<0.01		57.08	

Burnie RESEARCH LABORATORY
SIZING AND SIZE ANALYSIS REPORT SHEET

PROJECT	T0396
SAMPLE	Westgold
TEST NO	SIZING
DATE	27/07/2008
TECHNICIAN	mw

SIZING

D007 Composite		SIZE um	WEIGHTS		
			gm	(%)	%PASS
P80	119	300	1.73	0.69	99.3
		212	6.77	2.70	96.6
		150	17.41	6.94	89.7
		106	34.04	13.57	76.1
		75	39.39	15.71	60.4
		53	30.36	12.11	48.3
		20	55.42	22.10	26.2
		SUB	65.68	26.19	
		TOTAL	250.80	100.00	



ANALYSES

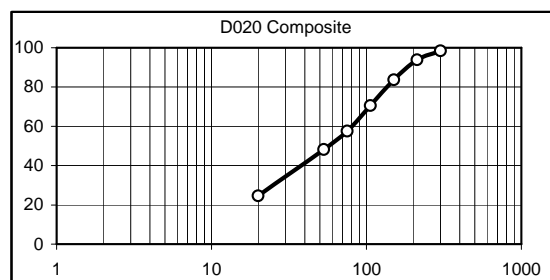
SIZE um	WT %	Cu		Pb		Zn		Fe		As		SiO2	
		%	dist	%	dist	%	dist	ppm	dist	ppm	dist	ppm	dist
212	3.39	0.07	0.7	0.82	0.5	2.63	1.0	6.78	1.8	0.01	3.4	65.80	5.1
150	6.94	0.19	4.0	1.51	1.9	5.58	4.3	9.09	4.8	0.01	6.9	61.64	9.9
106	13.57	0.22	9.1	2.41	6.0	8.50	12.9	13.82	14.4	0.01	13.6	49.53	15.5
75	15.71	0.32	15.4	3.51	10.1	10.20	18.0	17.04	20.5	0.01	15.7	40.30	14.6
53	12.11	0.33	12.2	4.88	10.8	10.56	14.3	16.67	15.5	0.01	12.1	36.60	10.2
20	22.10	0.44	29.7	7.99	32.3	10.37	25.7	12.94	21.9	0.01	22.1	39.55	20.1
<20	26.19	0.36	28.8	8.04	38.5	8.05	23.7	10.46	21.0	0.01	26.2	40.76	24.6
CALC	100.00	0.33	100.0	5.47	100.0	8.91	100.0	13.03	100.0	0.01	100.0	43.41	100.0
ASSAY		0.34		5.20		9.06		13.3		<0.01		42.68	

Burnie RESEARCH LABORATORY
SIZING AND SIZE ANALYSIS REPORT SHEET

PROJECT	T0396
SAMPLE	Westgold
TEST NO	SIZING
DATE	27/07/2008
TECHNICIAN	mw

SIZING

D020 Composite		SIZE um	WEIGHTS		
			gm	(%)	%PASS
P80	138	300	4.04	1.61	98.4
		212	11.41	4.56	93.8
		150	25.36	10.13	83.7
		106	32.88	13.13	70.6
		75	32.58	13.01	57.6
		53	23.34	9.32	48.2
		20	59.20	23.64	24.6
		SUB	61.61	24.60	
		TOTAL	250.42	100.00	



ANALYSES

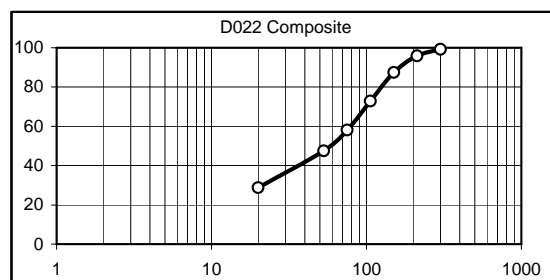
SIZE um	WT %	Cu		Pb		Zn		Fe		As		SiO2	
		%	dist	%	dist	%	dist	ppm	dist	ppm	dist	ppm	dist
212	6.17	0.01	1.1	0.77	1.2	2.50	2.0	3.05	4.1	0.01	6.2	75.89	8.6
150	10.13	0.04	7.1	1.23	3.2	5.09	6.5	3.97	8.8	0.01	10.1	62.78	11.7
106	13.13	0.04	9.1	1.84	6.2	7.28	12.1	5.15	14.8	0.01	13.1	58.17	14.0
75	13.01	0.06	13.6	2.69	9.0	8.69	14.3	5.45	15.6	0.01	13.0	53.30	12.7
53	9.32	0.09	14.6	3.50	8.4	9.30	11.0	5.02	10.3	0.01	9.3	51.90	8.9
20	23.64	0.07	28.8	5.70	34.8	9.57	28.7	3.88	20.1	0.01	23.6	51.43	22.3
<20	24.60	0.06	25.7	5.83	37.0	8.14	25.4	4.85	26.2	0.01	24.6	48.31	21.8
CALC	100.00	0.06	100.0	3.87	100.0	7.89	100.0	4.55	100.0	0.01	100.0	54.49	100.0
ASSAY		0.06		3.61		7.87		4.60		<0.01		54.94	

Burnie RESEARCH LABORATORY
SIZING AND SIZE ANALYSIS REPORT SHEET

PROJECT	T0396
SAMPLE	Westgold
TEST NO	SIZING
DATE	27/07/2008
TECHNICIAN	mw

SIZING

D022 Composite		SIZE um	WEIGHTS		
			gm	(%)	%PASS
P80	128	300	2.07	0.83	99.2
		212	8.31	3.31	95.9
		150	21.04	8.39	87.5
		106	36.70	14.63	72.8
		75	37.08	14.78	58.1
		53	26.56	10.59	47.5
		20	47.02	18.74	28.7
		SUB	72.12	28.74	
		TOTAL	250.90	100.00	



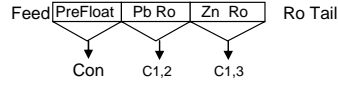
ANALYSES

SIZE um	WT %	Cu		Pb		Zn		Fe		As		SiO2	
		%	dist	%	dist	%	dist	ppm	dist	ppm	dist	ppm	dist
212	4.14	0.01	2.0	0.31	0.9	1.22	1.7	5.73	3.9	0.01	4.1	56.75	6.1
150	8.39	0.01	4.1	0.41	2.5	1.77	4.9	5.54	7.6	0.01	8.4	47.55	10.4
106	14.63	0.02	14.1	0.65	6.9	2.57	12.4	5.38	12.9	0.01	14.6	40.61	15.5
75	14.78	0.02	14.3	0.96	10.4	3.32	16.2	5.41	13.1	0.01	14.8	37.02	14.3
53	10.59	0.03	15.4	1.37	10.6	3.80	13.3	5.41	9.4	0.01	10.6	34.65	9.6
20	18.74	0.04	36.2	2.30	31.5	4.22	26.1	5.46	16.7	0.01	18.7	33.95	16.6
<20	28.74	0.01	13.9	1.77	37.2	2.67	25.4	7.79	36.6	0.01	28.7	36.51	27.4
CALC	100.00	0.02	100.0	1.37	100.0	3.03	100.0	6.12	100.0	0.01	100.0	38.27	100.0
ASSAY		0.01		1.31		3.06		6.25		<0.01		38.51	

APPENDIX C: FLOTATION TESTWORK

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling				
Mill	type	Ms	Ms	
Media	type	Ball	Ball	
Media	kg	12	0.0	
Solids	g	2000	0	
Water	g	1000	0	
Time	min	20	0	
Speed	rpm	50	0	
Lime	g	0.7	0	
End pH	pH	9.62	0	
End p80	µm	92	0	



PROJECT	T0396
TEST NO	1
DATE	24/06/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Standard Sequential Rougher
Pb circuit reagent overdose
Zn circuit reagent overdose

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm

	pH	100 Lime g/t	0.2 SiBX g/t	0.5 NaCN g/t	2.0 CuSO4 g/t	100 IF56 g/t				Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.6									1					
Pre float	9.6	351				30						12.0	12	1500	30
CONDITION	9.7									2					
Pb Rgher C1	9.7		15	100		10				1	4-8	1.0	1.0	160	53
CONDITION	9.7									1					
Pb Rgher C2	9.7					5				1	4-8	2.0	3.0	250	43
CONDITION	10.5	426								2					
Zn Rgher Con1	10.5		10		501	10				1	4-8	1.0	1.0	200	51
CONDITION	10.5									1					
Zn Rgher Con2	10.4					15				1	4-8	1.5	2.5	160	39
CONDITION	10.4									1					
Zn Rgher Con3	10.1					15				1	4-8	1.5	4.0	120	46
REAGENT TOTALS (g/t)		777	25	100	501	85									

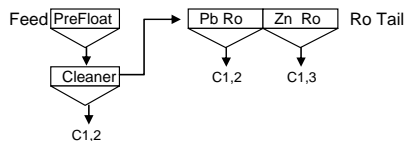
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float	446.6	22.4	0.01 3.0	1.12 8.42	2.40 8.8	5.21 15.1	0.01 12.4	60.71 23.9	19.32 39.1	6 7.3	0.08 6.9
Pb Ro C1	85.0	4.3	0.05 2.9	36.1 51.6	8.69 6.1	4.48 2.5	0.15 35.3	26.7 2.0	8.21 3.2	75 17.3	0.26 4.3
Pb Ro C2	106.3	5.3	0.11 7.9	14.1 25.1	12.8 11.2	7.00 4.8	0.05 14.7	36.3 3.4	11.31 5.5	55 15.9	0.48 9.9
Zn Ro C1	101.0	5.1	0.20 13.6	1.85 3.1	53.2 44.1	3.91 2.6	0.01 2.8	9.79 0.9	2.22 1.0	97 26.6	1.61 31.5
Zn Ro C2	61.6	3.1	0.19 7.9	2.23 2.3	42.7 21.6	5.59 2.2	0.01 1.7	17.2 0.9	3.96 1.1	82 13.7	1.96 23.4
Zn Ro C3	54.7	2.7	0.09 3.3	2.26 2.1	9.55 4.3	11.8 4.2	0.01 1.5	41.4 2.0	10.00 2.5	67 9.9	0.59 6.3
RoTail	1140.4	57.1	0.08 61.4	0.38 7.29	0.42 3.9	9.30 68.7	0.01 31.6	66.7 66.9	9.22 47.7	3 9.3	0.08 17.7
CALC	1995.6	100.0	0.07 100.0	2.98 100.0	6.10 100.0	7.74 100.0	0.02 100.0	56.9 100.0	11.1 100.0	18 100.0	0.26 100.0
ASSAY HEAD	1995.6		0.03	3.11	6.47	7.87	0.01	56.7	11.2	20	

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float	446.6	22.4	0.01 3.01	1.12 8.42	2.40 8.80	5.21 15.1	0.01 12.4	60.7 23.9	19.3 39.1	6 7.3	0.08 6.9
Pb Ro C1	85.0	4.3	0.05 2.9	36.1 51.6	8.69 6.1	4.48 2.5	0.15 35.3	26.7 2.0	8.21 3.2	75 17.3	0.26 4.3
Pb Ro C2	191.3	9.6	0.08 10.7	23.8 76.8	11.0 17.3	5.88 7.3	0.09 50.0	32.0 5.4	9.93 8.6	64 33.2	0.38 14.2
Zn Ro C1	101.0	5.1	0.20 13.6	1.85 3.1	53.2 44.1	3.91 2.6	0.01 2.8	9.79 0.9	2.22 1.0	97 26.6	1.61 31.5
Zn Ro C2	162.6	8.1	0.20 21.5	1.99 5.5	49.2 65.7	4.55 4.8	0.01 4.5	12.6 1.8	2.88 2.1	91 40.3	1.74 54.9
Zn Ro C3	217.3	10.9	0.17 24.8	2.06 7.5	39.2 70.0	6.38 9.0	0.01 6.0	19.8 3.8	4.67 4.6	85 50.3	1.45 61.2
FEED	1995.6	100.0	0.07 100.0	2.98 100.0	6.10 100.0	7.74 100.0	0.02 100.0	56.9 100.0	11.1 100.0	18 100.0	0.26 100.0

Burnie RESEARCH LABORATORY

ROUGHER FLOTATION REPORT SHEET

Milling				
Mill	type	Ms	Ms	
Media	type	Ball	Ball	
Media	kg	12	0.0	
Solids	g	2000	0	
Water	g	1000	0	
Time	min	20	0	
Speed	rpm	50	0	
Lime	g	0.7	0	
End pH	pH	9.62	0	
End p80	µm	92	0	



PROJECT	T0396
TEST NO	2
DATE	24/06/2008
TECHNICIAN	MJR

PRODUCT FLOATED	
Westgold	
D001 Composite	

NOTES	
Pre Float cleaner	
2 stage Pb rougher	
3 stage Zn rougher	

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm

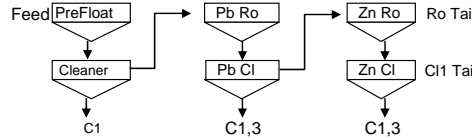
	pH	100 Lime g/t	0.1 SIBX g/t	0.5 NaCN g/t	2.0 CuSO4 g/t	100 IF56 g/t				Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.6	351				25				1					
Pre float1	9.6					5					4-7	14.0	14	800	
Pre float2	9.6					5					4-7	14.0	28	800	
CONDITION	9.7					5				1					
Pre Float C1 Con1	9.3					5					4-7	4.0	4	600	33
Pre Float C1 Con2	9.3					5					4-10	8.0	12	700	26
CONDITION	9.8	20		100		5				2					
CONDITION	9.8		5			5				1	4-8	2.0	2.0	140	49
CONDITION	9.7		3			5				1	4-8	2.0	4.0	240	45
CONDITION	10.5	336			501	10				2					
CONDITION	10.5		5			10				1	4-8	2.5	2.5	250	38
CONDITION	10.4		3			5				1	4-8	2.5	5.0	260	46
CONDITION	10.2		1			10				1	4-8	4.0	9.0	500	34
REAGENT TOTALS (g/t)		706	16	100	501	75									

PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	200.0	10.0	0.04	10.2	0.59	2.00	1.84	3.0	4.96	6.2	0.01	5.8	62.85	11.0	21.21	19.2	10	4.3	0.06	2.1
Pre Float Cl Con2	184.2	9.2	0.01	2.3	0.65	2.02	1.96	3.0	5.24	6.1	0.01	5.3	62.76	10.1	20.38	17.0	22	9.4	0.06	2.0
Pb Ro C1	67.9	3.4	0.06	5.2	41.8	48.0	6.01	3.4	3.80	1.6	0.16	31.5	26.0	1.5	8.41	2.6	80	12.4	0.23	2.8
Pb Ro C2	108.0	5.4	0.07	9.6	16.0	29.3	10.5	9.3	6.75	4.6	0.05	15.7	37.4	3.5	11.94	5.8	58	14.3	1.01	19.5
Zn Ro C1	94.4	4.7	0.12	14.4	3.45	5.5	31.9	24.8	3.32	2.0	0.01	2.7	26.5	2.2	8.24	3.5	75	16.2	1.33	22.5
Zn Ro C2	118.9	6.0	0.17	25.7	1.90	3.8	41.4	40.4	4.98	3.7	0.01	3.4	20.7	2.2	5.82	3.1	74	20.1	1.07	22.8
Zn Ro C3	167.8	8.4	0.09	19.2	1.67	4.7	10.2	14.1	10.6	11.2	0.01	4.9	48.2	7.1	13.33	10.1	29	11.1	0.69	20.7
RoTail	1055.2	52.9	0.01	13.4	0.26	4.64	0.23	2.0	9.74	64.6	0.01	30.6	67.5	62.4	8.04	38.5	5	12.1	0.04	7.6
CALC	1996.4	100.0	0.04	100.0	2.96	100.0	6.09	100.0	7.97	100.0	0.02	100.0	57.2	100.0	11.0	100.0	22	100.0	0.28	100.0
ASSAY HEAD	1996.4		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	200.0	10.0	0.04	10.2	0.59	2.00	1.84	3.03	4.96	6.24	0.01	5.80	62.9	11.0	21.2	19.2	10	4.3	0.06	2.1
Pre Float Cl Con2	384.2	19.2	0.03	12.5	0.62	4.02	1.90	6.00	5.09	12.3	0.01	11.1	62.8	21.1	20.8	36.3	16	13.7	0.06	4.1
Pb Ro C1	67.9	3.4	0.06	5.2	41.8	48.0	6.01	3.4	3.80	1.6	0.16	31.5	26.0	1.5	8.41	2.6	80	12.4	0.23	2.8
Pb Ro C2	175.9	8.8	0.07	14.8	26.0	77.3	8.77	12.7	5.61	6.2	0.09	47.2	33.0	5.1	10.6	8.4	66	26.7	0.71	22.3
Zn Ro C1	94.4	4.7	0.12	14.4	3.45	5.5	31.9	24.8	3.32	2.0	0.01	2.7	26.5	2.2	8.24	3.5	75	16.2	1.33	22.5
Zn Ro C2	213.3	10.7	0.15	40.1	2.59	9.3	37.2	65.2	4.25	5.7	0.01	6.2	23.3	4.3	6.89	6.7	74	36.3	1.19	45.3
Zn Ro C3	381.1	19.1	0.12	59.3	2.18	14.1	25.3	79.3	7.05	16.9	0.01	11.1	34.2	11.4	9.73	16.8	54	47.4	0.97	66.0
FEED	1996.4	100.0	0.04	100.0	2.96	100.0	6.09	100.0	7.97	100.0	0.02	100.0	57.2	100.0	11.0	100.0	22	100.0	0.28	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	390
Water	g	1000	350
Time	min	20	4
Speed	rpm	50	50
Lime	g	0.7	0.5
End pH	pH	9.35	11.3
End p80	µm	92	0



PROJECT	T0396
TEST NO	3
DATE	15/07/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Pre Float cleaner
1 stage Pb Cleaner
1 stage Zn Cleaner

Float Cell	Volume
Rougher	3.5 Litre
Cleaner	1.5 Litre
Speed	500 rpm

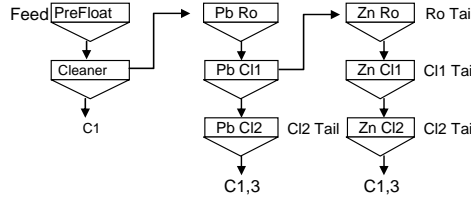
	pH	100 Lime g/t	0.1 SIBX g/t	0.5 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	100 IF56 g/t	Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.4	351					25	1					
Pre float1	9.5								4-7	4.0	4	800	
Pre float2	9.5						5		4-7	6.0	10	1100	
CONDITION	9.2						5	1					
Pre Float Cl Con1	9.2								4-10	12.0	12	1500	28
CONDITION	9.8	30						2					
CONDITION	9.8		5	100			5	1					
Pb Rgher C1	9.8								4-8	3.0	3.0	300	
CONDITION	9.7		4				5	1					
Pb Rgher C2	9.7								4-8	4.0	7.0	550	
Regrind	11.3	251		75				4					
CONDITION	11.5	50	3			38	5	1					
Pb Cl1 C1	11.5		3						2-4	2.0	2.0	100	51
Pb Cl1 C2			0.5						3-5	2.5	4.5	100	41
Pb Cl1 C3			0.5				5		4-8	2.5	7.0	100	35
CONDITION	10.6	451			502			2					
CONDITION	10.6		5				10	1					
Zn Rgher Con1	10.6								4-8	3.5	3.5	500	
CONDITION	10.5		4				5	1					
Zn Rgher Con2	10.5								4-8	5.0	8.5	700	
CONDITION	10.3		1				10	1					
Zn Rgher Con3	10.3								4-8	4.0	12.5	300	
Regrind	11.3	301						5					
CONDITION	11.5	110			50	38	10	1					
CONDITION	11.5		3						2-3	2.0	2.0	200	46
Zn Cl1 Con1	11.5								2-4	3.0	5.0	200	30
Zn Cl1 Con2	11.2								4-8	4.0	9.0	300	20
Zn Cl1 Con3													
REAGENT TOTALS (g/t)	1134	27	176	552	75		90						

PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	412.5	20.7	0.01	4.3	0.57	4.32	2.02	6.9	5.02	13.2	0.01	12.0	62.8	22.7	19.96	37.3	6	7.0	0.07	6.2
Pb Cl1 C1	50.5	2.5	0.06	3.1	61.5	57.0	6.79	2.9	2.32	0.7	0.22	32.4	9.2	0.4	2.89	0.7	109	15.6	0.80	8.6
Pb Cl1 C2	41.1	2.1	0.11	4.7	26.0	19.6	13.8	4.7	5.09	1.3	0.10	12.0	27.3	1.0	8.66	1.6	77	9.0	0.76	6.7
Pb Cl1 C3	35.0	1.8	0.09	3.3	7.19	4.6	11.1	3.2	5.55	1.2	0.01	1.0	45.1	1.4	15.29	2.4	36	3.6	0.40	3.0
Zn Cl1 C1	91.0	4.6	0.24	22.6	1.88	3.1	57.5	43.6	1.95	1.1	0.01	2.7	7.44	0.6	2.09	0.9	99	25.5	1.47	28.6
Zn Cl1 C2	59.1	3.0	0.30	18.3	3.05	3.3	39.3	19.4	3.92	1.5	0.01	1.7	21.5	1.1	6.57	1.8	82	13.7	1.56	19.7
Zn Cl1 C3	61.0	3.1	0.15	9.5	2.27	2.5	12.3	6.3	7.22	2.8	0.01	1.8	46.2	2.5	14.49	4.0	32	5.5	0.46	6.0
Zn Cl1 Tail	202.7	10.2	0.01	2.1	0.25	0.9	0.41	0.7	8.42	10.9	0.01	5.9	61.6	11.0	17.53	16.1	4	2.3	0.03	1.3
RoTail	1040.9	52.2	0.03	32.3	0.24	4.58	1.42	12.3	10.2	67.2	0.01	30.4	65.0	59.3	7.46	35.2	6	17.7	0.09	20.0
CALC	1993.8	100.0	0.05	100.0	2.73	100.0	6.02	100.0	7.88	100.0	0.02	100.0	57.2	100.0	11.1	100.0	18	100.0	0.23	100.0
ASSAY HEAD	1993.8		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	412.5	20.7	0.01	4.3	0.57	4.32	2.02	6.94	5.02	13.2	0.01	12.0	62.8	22.7	20.0	37.3	6	7.0	0.07	6.2
Pb Cl1 C1	50.5	2.5	0.06	3.1	61.5	57.0	6.79	2.9	2.32	0.7	0.22	32.4	9.23	0.4	2.89	0.7	109	15.6	0.80	8.6
Pb Cl1 C2	91.6	4.6	0.08	7.8	45.5	76.6	9.93	7.6	3.56	2.1	0.17	44.4	17.4	1.4	5.47	2.3	95	24.6	0.78	15.3
Pb Cl1 C3	126.6	6.3	0.08	11.1	34.9	81.2	10.3	10.8	4.11	3.3	0.12	45.5	25.0	2.8	8.19	4.7	78	28.2	0.68	18.3
Zn Cl1 C1	91.0	4.6	0.24	22.6	1.88	3.1	57.5	43.6	1.95	1.1	0.01	2.7	7.44	0.6	2.09	0.9	99	25.5	1.47	28.6
Zn Cl1 C2	150.1	7.5	0.26	40.9	2.34	6.4	50.3	63.0	2.73	2.6	0.01	4.4	13.0	1.7	3.85	2.6	92	39.3	1.51	48.3
Zn Cl1 C3	211.1	10.6	0.23	50.3	2.32	9.0	39.3	69.2	4.02	5.4	0.01	6.2	22.6	4.2	6.93	6.6	75	44.8	1.20	54.2
Zn Cl1 Tail	413.8	20.8	0.12	52.4	1.31	9.9	20.3	69.9	6.18	16.3	0.01	12.1	41.7	15.1	12.1	22.7	40	47.1	0.63	55.5
FEED	1993.8	100.0	0.05	100.0	2.73	100.0	6.02	100.0	7.88	100.0	0.02	100.0	57.2	100.0	11.1	100.0	18	100.0	0.23	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Stirred
Media	kg	12	1
Solids	g	2000	400
Water	g	1000	400
Time	min	25	5.0
Speed	rpm	50	60Hz
Lime	g	0.7	1.0
End pH	pH	9.35	11.82
End p80	µm	67	0



PROJECT	T0396
TEST NO	4
DATE	29/07/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Finer Primary Grind
Pre Float cleaner
2 stage Pb Cleaner
2 stage Zn Cleaner

Float Cell	Volume
Rougher	3.5 Litre
Cleaner	1.5 Litre
Speed	500 rpm

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	100 IF56 g/t	Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION Pre float1	9.4	356					25	1					
CONDITION Pre float2	9.5						5		4-6	5.0	5.0	800	
CONDITION Pre Float Cl Con1	9.4						5	1	4-7	9.0	14.0	1100	
CONDITION Pb Rgher C1	10.0	41	5	102			5	2	4-10	12.0	12.0	1500	26
CONDITION Pb Rgher C2	10.0		4				5	1		3.0	3.0	300	
CONDITION Pb Rgher C2	9.8							1	4-8	4.0	7.0	550	
Regrind	11.8	508		152				5					
CONDITION Pb Cl1 Con	11.9	102	25			114	5	1	2-7	6.0	13.0	430	
CONDITION Pb Cl2 C1	11.8	203	15				5	1	2-4	2.0	2.0	100	18
CONDITION Pb Cl2 C2			8			25			3-5	2.5	4.5	130	17
CONDITION Pb Cl2 C3			5			5	5		4-8	4.0	8.5	170	9
CONDITION Zn Rgher C1	10.6	203	5		305		10	2					
CONDITION Zn Rgher C2	10.6		4				5	1	4-8	3.5	3.5	600	
CONDITION Zn Rgher C3	10.5		3				10	1	4-8	4.0	7.5	600	
CONDITION Zn Rgher C3	10.3							1	4-8	4.0	11.5	800	
Regrind	11.4	356						5					
CONDITION Zn Cl1 Con	11.5	152	3		51	51	10	1					
CONDITION Zn Cl2 C1	11.8	305	1				10	1	2-3	8.0	8.0	850	
CONDITION Zn Cl2 C2	11.8		1						2-3	2.0	2.0	250	40
CONDITION Zn Cl2 C3	11.8		1						2-4	2.0	4.0	100	31
CONDITION Zn Cl2 C3	11.8		1						4-8	2.0	6.0	100	10
REAGENT TOTALS (g/t)		2226	78	254	356	201	107						

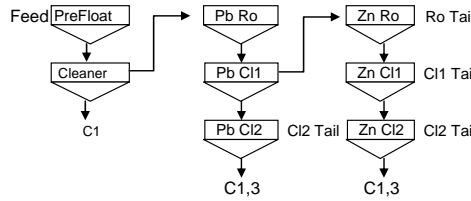
PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	394.0	20.0	0.01	5.1	0.50	3.57	1.53	5.1	4.91	12.6	0.01	12.8	63.1	22.0	20.78	37.6	3	3.8	0.05	5.1
Pb Cl2 C1	17.6	0.9	0.07	1.6	66.6	21.2	12.4	1.9	1.14	0.1	0.24	13.8	1.4	0.0	0.43	0.0	146	8.2	0.29	1.3
Pb Cl2 C2	22.0	1.1	0.16	4.5	47.1	18.8	24.4	4.6	1.75	0.3	0.15	10.7	2.1	0.0	0.63	0.1	143	10.0	1.27	7.2
Pb Cl2 C3	16.0	0.8	0.14	2.9	26.2	7.6	38.7	5.3	2.14	0.2	0.08	4.2	4.1	0.1	1.19	0.1	126	6.4	1.05	4.3
Pb Cl2 Tail	37.0	1.9	0.12	5.7	13.9	9.3	20.7	6.5	4.31	1.0	0.04	4.8	30.5	1.0	8.85	1.5	59	6.9	0.34	3.2
Zn Cl2 C1	100.0	5.1	0.27	34.6	2.12	3.8	63.1	53.6	1.37	0.9	0.01	3.3	2.15	0.2	0.68	0.3	107	34.0	2.16	55.8
Zn Cl2 C2	31.3	1.6	0.32	12.9	3.04	1.7	60.5	16.1	2.46	0.5	0.00	0.0	2.87	0.1	0.75	0.1	98	9.7	0.92	7.4
Zn Cl2 C3	9.8	0.5	0.42	5.3	6.94	1.2	37.0	3.1	10.3	0.7	0.01	0.3	14.1	0.1	2.90	0.1	81	2.5	0.63	1.6
Zn Cl2 Tail	66.3	3.4	0.08	6.8	10.5	12.6	1.53	0.9	6.59	2.8	0.04	8.6	54.0	3.2	16.10	4.9	24	5.1	0.14	2.4
Zn Cl1 Tail	338.5	17.2	0.02	8.7	2.35	14.4	0.43	1.2	10.3	22.7	0.01	11.0	58.9	17.7	15.45	24.0	7	7.5	0.05	4.4
RoTail	935.4	47.5	0.01	12.0	0.34	5.76	0.22	1.8	9.55	58.1	0.01	30.5	67.0	55.6	7.30	31.3	2	5.9	0.03	7.2
CALC	1967.9	100.0	0.04	100.0	2.81	100.0	5.97	100.0	7.81	100.0	0.02	100.0	57.3	100.0	11.1	100.0	16	100.0	0.20	100.0
ASSAY HEAD	1967.9		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	394.0	20.0	0.01	5.1	0.50	3.57	1.53	5.13	4.91	12.6	0.01	12.8	63.1	22.0	20.8	37.6	3	3.8	0.05	5.1
Pb Cl2 C1	17.6	0.9	0.07	1.6	66.6	21.2	12.4	1.9	1.14	0.1	0.24	13.8	1.43	0.0	0.43	0.0	146	8.2	0.29	1.3
Pb Cl2 C2	39.6	2.0	0.12	6.1	55.8	40.0	19.1	6.4	1.48	0.4	0.19	24.5	1.80	0.1	0.54	0.1	144	18.2	0.83	8.5
Pb Cl2 C3	55.6	2.8	0.13	9.0	47.2	47.6	24.7	11.7	1.67	0.6	0.16	28.7	2.45	0.1	0.73	0.2	139	24.6	0.90	12.9
Pb Cl2 Tail	92.6	4.7	0.12	14.7	33.9	56.9	23.1	18.2	2.72	1.6	0.11	33.5	13.7	1.1	3.98	1.7	107	31.5	0.67	16.1
Zn Cl2 C1	100.0	5.1	0.27	34.6	2.12	3.8	63.1	53.6	1.37	0.9	0.01	3.3	2.15	0.2	0.68	0.3	107	34.0	2.16	55.8
Zn Cl2 C2	131.3	6.7	0.28	47.5	2.34	5.6	62.5	69.7	1.63	1.4	0.01	3.3	2.32	0.3	0.70	0.4	105	43.7	1.86	63.2
Zn Cl2 C3	141.1	7.2	0.29	52.8	2.66	6.8	60.7	72.8	2.23	2.1	0.01	3.6	3.14	0.4	0.85	0.5	103	46.2	1.78	64.8
Zn Cl2 Tail	207.4	10.5	0.22	59.6	5.17	19.4	41.8	73.7	3.63	4.9	0.02	12.2	19.4	3.6	5.72	5.4	78	51.3	1.25	67.2
Zn Cl1 Tail	545.9	27.7	0.10	68.3	3.42	33.8	16.1	74.9	7.78	27.6	0.01	23.2	43.9	21.2	11.8	29.4	34	58.8	0.51	71.6
FEED	1967.9	100.0	0.04	100.0	2.81	100.0	5.97	100.0	7.81	100.0	0.02	100.0	57.3	100.0	11.1	100.0	16	100.0	0.20	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Req	Zn Req
Mill	type	Ms	Ms
Media	type	Ball	Stirred
Media	kg	12	1
Solids	g	2000	350
Water	g	1000	500
Time	min	25	6.0
Speed	rpm	50	60Hz
Lime	g	0.7	0.5
End pH	pH	9.46	11.7
End p80	µm	67	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	5
DATE	19/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Finer Primary Grind
Pre Float cleaner
2 stage Pb Cleaner lower pH
2 stage Zn Cleaner

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	100 MIBC g/t	Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.5	348					25	1					
Pre float1	9.5								2-4	3.0	3.0	850	
Pre float2	9.5						5		4-7	9.0	12.0	1100	
CONDITION	9.4						5	1	4-10	11.0	11.0	1500	24
Pre Float Cl Con1	9.5	35		100				2					
CONDITION	9.5		5			25	5	1					
Pb Rgher C1	9.5					12	5		4-8	3.0	3.0	300	
CONDITION	9.7		3				5	1					
Pb Rgher C2	9.7								4-8	4.0	7.0	450	
Regrind	11.7	249		199				6					
CONDITION	11.7		5			50	5	1					
Pb Cl1 Con	11.7		2						2-7	8.0	15.0	500	
CONDITION	11.0						5	1					
Pb Cl2 C1	11.0					12			2-4	2.0	2.0	100	31
Pb Cl2 C2			0			2			3-5	3.0	5.0	140	18
Pb Cl2 C3			1			5	5		4-8	4.0	9.0	140	7
CONDITION	10.3	199			299		10	2					
Zn Rgher C1	10.3		5					1					
CONDITION	10.3		3				5	1	4-8	4.0	4.0	600	
Zn Rgher C2	9.8								4-8	5.0	9.0	600	
CONDITION	9.5		2				10	1					
Zn Rgher C3	9.5								4-8	5.0	14.0	800	
Regrind	11.7	249						6					
CONDITION	11.6				50			1					
Zn Cl1 Con	11.6		2			50	10	1					
CONDITION	11.8	199					10		2-8	8.5	8.5	850	
Zn Cl2 C1	11.8		1					1					
Zn Cl2 C2									2-3	2.0	2.0	250	39
Zn Cl2 C3	11.6		0.5						2-4	2.0	4.0	100	26
			0.5						4-8	2.5	6.5	110	13
REAGENT TOTALS (g/t)		1279	32	299	348	157	105						

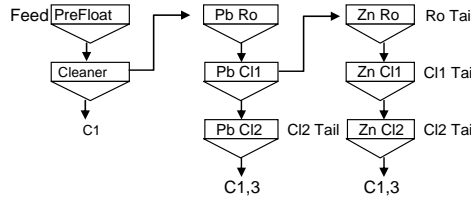
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float Cl Con1	363.8	18.1	0.02 5.2	0.52 3.26	1.57 4.7	4.91 11.3	0.01 11.3	63.0 20.2	21.28 34.4	4 4.0	0.03 2.7
Pb Cl2 C1	31.0	1.5	0.10 2.2	51.3 27.4	22.5 5.7	1.13 0.2	0.17 16.3	1.2 0.0	0.42 0.1	133 11.4	0.73 5.5
Pb Cl2 C2	24.9	1.2	0.13 2.3	44.8 19.2	25.1 5.1	1.84 0.3	0.15 11.6	2.3 0.0	0.72 0.1	128 8.8	0.52 3.2
Pb Cl2 C3	10.2	0.5	0.13 1.0	41.6 7.3	21.9 1.8	3.06 0.2	0.13 4.1	7.2 0.1	2.15 0.1	112 3.2	0.40 1.0
Pb Cl2 Tail	35.4	1.8	0.11 2.8	17.1 10.4	5.60 1.6	5.63 1.3	0.07 7.7	43.8 1.4	14.10 2.2	38 3.7	0.10 0.9
Zn Cl2 C1	96.5	4.8	0.35 24.3	2.23 3.7	61.0 48.2	1.24 0.8	0.01 3.0	3.27 0.3	1.06 0.5	109 29.0	2.39 56.3
Zn Cl2 C2	25.8	1.3	0.34 6.3	3.06 1.4	60.1 12.7	1.51 0.2	0.01 0.8	3.14 0.1	0.97 0.1	108 7.7	1.15 7.2
Zn Cl2 C3	14.4	0.7	0.30 3.1	4.40 1.1	50.6 6.0	2.96 0.3	0.01 0.4	10.3 0.1	3.04 0.2	105 4.2	0.92 3.2
Zn Cl2 Tail	106.6	5.3	0.26 19.9	6.08 11.2	2.62 2.3	6.68 4.5	0.01 4.6	55.6 5.2	17.33 8.2	19 5.6	0.07 1.8
Zn Cl1 Tail	324.6	16.2	0.05 11.7	1.92 10.7	4.04 10.7	9.63 19.7	0.01 10.0	55.4 15.8	15.49 22.3	13 11.7	0.14 11.1
RoTail	976.2	48.6	0.03 21.1	0.26 4.37	0.16 1.3	9.97 61.3	0.01 30.2	66.1 56.8	7.36 31.9	4 10.8	0.03 7.1
CALC	2009.4	100.0	0.07 100.0	2.89 100.0	6.09 100.0	7.90 100.0	0.02 100.0	56.5 100.0	11.2 100.0	18 100.0	0.20 100.0
ASSAY HEAD	2009.4		0.03	3.11	6.47	7.87	0.01	56.7	11.2	20	

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float Cl Con1	363.8	18.1	0.02 5.2	0.52 3.26	1.57 4.67	4.91 11.3	0.01 11.3	63.0 20.2	21.3 34.4	4 4.0	0.03 2.7
Pb Cl2 C1	31.0	1.5	0.10 2.2	51.3 27.4	22.5 5.7	1.13 0.2	0.17 16.3	1.23 0.0	0.42 0.1	133 11.4	0.73 5.5
Pb Cl2 C2	55.9	2.8	0.11 4.6	48.4 46.6	23.6 10.8	1.45 0.5	0.16 27.9	1.69 0.1	0.55 0.1	131 20.2	0.64 8.7
Pb Cl2 C3	66.1	3.3	0.12 5.5	47.3 53.9	23.3 12.6	1.70 0.7	0.16 32.0	2.54 0.1	0.80 0.2	128 23.3	0.60 9.7
Pb Cl2 Tail	101.5	5.1	0.11 8.3	36.8 64.3	17.2 14.2	3.07 2.0	0.13 39.6	16.9 1.5	5.44 2.5	97 27.1	0.43 10.5
Zn Cl2 C1	96.5	4.8	0.35 24.3	2.23 3.7	61.0 48.2	1.24 0.8	0.01 3.0	3.27 0.3	1.06 0.5	109 29.0	2.39 56.3
Zn Cl2 C2	122.3	6.1	0.35 30.6	2.41 5.1	60.8 60.8	1.30 1.0	0.01 3.8	3.24 0.3	1.04 0.6	109 36.7	2.13 63.5
Zn Cl2 C3	136.7	6.8	0.34 33.7	2.62 6.2	59.8 66.8	1.47 1.3	0.01 4.2	3.98 0.5	1.25 0.8	108 40.9	2.00 66.7
Zn Cl2 Tail	243.3	12.1	0.31 53.7	4.13 17.3	34.7 69.1	3.75 5.8	0.01 8.8	26.6 5.7	8.30 9.0	69 46.5	1.16 68.6
Zn Cl1 Tail	567.9	28.3	0.16 65.4	2.87 28.1	17.2 79.8	7.11 25.5	0.01 18.9	43.0 21.5	12.4 31.3	37 58.2	0.57 79.7
FEED	2009.4	100.0	0.07 100.0	2.89 100.0	6.09 100.0	7.90 100.0	0.02 100.0	56.5 100.0	11.2 100.0	18 100.0	0.20 100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	360
Water	g	1000	350
Time	min	25	5.0
Speed	rpm	50	50
Lime	g	0.7	0.5
End pH	pH	9.46	11.8
End p80	µm	67	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	6
DATE	19/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Finer Primary Grind
Pre Float cleaner
2 stage Pb Cleaner lower pH
2 stage Zn Cleaner

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	100 MIBC g/t	Lime g/t	Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.5	348					25		1					
Pre float1	9.5									2-4	3.0	3.0	850	
Pre float2	9.5						5			4-7	9.5	12.5	1100	
CONDITION							5		1					
Pre Float Cl Con1	9.4									4-10	11.5	11.5	1500	30
CONDITION	9.5	15		100			5		2					
CONDITION			5						1					
Pb Rgher C1	9.5									4-8	3.0	3.0	300	
CONDITION			3				5		1					
Pb Rgher C2	9.7									4-8	4.0	7.0	550	
Regrind	11.8	249		149					5					
CONDITION			5			50	5		1					
Pb Cl1 Con	11.8		2							2-7	8.0	15.0	400	
CONDITION	11.8	40					5		1					
Pb Cl2 C1	11.8					2				2-4	2.0	2.0	80	40
Pb Cl2 C2			0.5			2				3-5	3.0	5.0	105	28
Pb Cl2 C3			0.5			2	5			4-8	4.0	9.0	115	14
CONDITION	10.5	299			398		15		2					
CONDITION			5						1					
Zn Rgher C1	10.5									4-8	4.5	4.5	600	
CONDITION			4				5		1					
Zn Rgher C2	10.0									4-8	5.5	10.0	600	
CONDITION			4				10		1					
Zn Rgher C3	9.8									4-8	6.0	16.0	800	
Regrind	11.7	348							5					
CONDITION	11.5				50				1					
CONDITION			4			50	10		1					
Zn Cl1 Con	11.5									2-8	8.5	8.5	950	
CONDITION	11.8	105					10		1					
Zn Cl2 C1	11.8									2-3	2.0	2.0	250	37
Zn Cl2 C2			0.5							2-4	2.0	4.0	100	36
Zn Cl2 C3			0.5							4-8	3.0	7.0	160	12
REAGENT TOTALS (g/t)		1404	35	249	448	107	109							

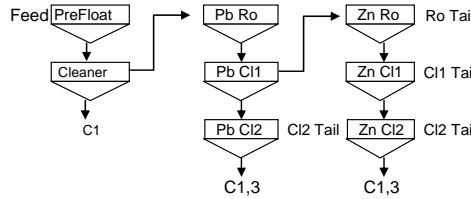
PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	449.0	22.3	0.01	4.9	0.56	4.34	1.77	6.3	4.99	14.0	0.01	12.6	62.3	24.8	20.89	41.4	4	4.9	0.10	8.4
Pb Cl2 C1	32.0	1.6	0.10	3.5	69.3	38.3	7.46	1.9	1.61	0.3	0.25	22.4	3.9	0.1	1.24	0.2	135	11.9	0.64	3.8
Pb Cl2 C2	28.9	1.4	0.15	4.8	54.7	27.3	14.9	3.4	2.97	0.5	0.20	16.2	5.3	0.1	1.59	0.2	127	10.1	0.74	4.0
Pb Cl2 C3	16.5	0.8	0.19	3.4	33.2	9.4	26.5	3.5	4.51	0.5	0.11	5.1	7.7	0.1	2.35	0.2	125	5.7	0.83	2.6
Pb Cl2 Tail	25.3	1.3	0.09	2.5	12.0	5.3	13.1	2.6	5.82	0.9	0.04	2.8	39.2	0.9	12.79	1.4	49	3.4	0.21	1.0
Zn Cl2 C1	92.3	4.6	0.27	27.4	2.23	3.6	60.8	44.6	1.31	0.8	0.01	2.6	4.39	0.4	1.34	0.5	108	27.5	1.75	30.2
Zn Cl2 C2	35.8	1.8	0.35	13.8	3.09	1.9	60.7	17.3	1.51	0.3	0.01	1.0	3.24	0.1	0.99	0.2	106	10.5	1.84	12.3
Zn Cl2 C3	19.6	1.0	0.48	10.4	6.14	2.1	38.8	6.0	4.47	0.5	0.01	0.5	17.2	0.3	4.92	0.4	94	5.1	0.90	3.3
Zn Cl2 Tail	98.1	4.9	0.07	7.6	1.60	2.7	1.26	1.0	7.42	4.5	0.01	2.8	60.0	5.2	18.28	7.9	10	2.7	0.07	1.3
Zn Cl1 Tail	253.3	12.6	0.04	11.1	0.54	2.4	4.16	8.4	9.40	14.9	0.01	7.1	56.9	12.8	15.31	17.1	11	7.7	0.13	6.2
RoTail	958.4	47.7	0.01	10.5	0.17	2.81	0.66	5.0	10.5	62.7	0.01	26.9	65.0	55.2	7.18	30.4	4	10.6	0.15	26.9
CALC	2009.2	100.0	0.05	100.0	2.88	100.0	6.27	100.0	7.97	100.0	0.02	100.0	56.2	100.0	11.3	100.0	18	100.0	0.27	100.0
ASSAY HEAD	2009.2		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	449.0	22.3	0.01	4.9	0.56	4.34	1.77	6.31	4.99	14.0	0.01	12.6	62.3	24.8	20.9	41.4	4	4.9	0.10	8.4
Pb Cl2 C1	32.0	1.6	0.10	3.5	69.3	38.3	7.46	1.9	1.61	0.3	0.25	22.4	3.91	0.1	1.24	0.2	135	11.9	0.64	3.8
Pb Cl2 C2	60.9	3.0	0.12	8.3	62.4	65.5	11.0	5.3	2.26	0.9	0.23	38.6	4.55	0.2	1.41	0.4	131	22.0	0.69	7.8
Pb Cl2 C3	77.4	3.9	0.14	11.7	56.1	75.0	14.3	8.8	2.74	1.3	0.20	43.7	5.21	0.4	1.61	0.5	130	27.7	0.72	10.4
Pb Cl2 Tail	102.7	5.1	0.13	14.2	45.3	80.2	14.0	11.4	3.50	2.2	0.16	46.6	13.6	1.2	4.36	2.0	110	31.1	0.59	11.4
Zn Cl2 C1	92.3	4.6	0.27	27.4	2.23	3.6	60.8	44.6	1.31	0.8	0.01	2.6	4.39	0.4	1.34	0.5	108	27.5	1.75	30.2
Zn Cl2 C2	128.1	6.4	0.29	41.2	2.47	5.5	60.8	61.9	1.37	1.1	0.01	3.6	4.07	0.5	1.24	0.7	107	37.9	1.78	42.6
Zn Cl2 C3	147.7	7.4	0.32	51.6	2.96	7.5	57.9	67.9	1.78	1.6	0.01	4.1	5.82	0.8	1.73	1.1	106	43.0	1.66	45.9
Zn Cl2 Tail	245.8	12.2	0.22	59.1	2.42	10.2	35.3	68.9	4.03	6.2	0.01	6.9	27.4	6.0	8.34	9.1	67	45.7	1.02	47.1
Zn Cl1 Tail	499.1	24.8	0.13	70.3	1.46	12.6	19.5	77.3	6.76	21.1	0.01	14.0	42.4	18.8	11.9	26.2	39	53.4	0.57	53.3
FEED	2009.2	100.0	0.05	100.0	2.88	100.0	6.27	100.0	7.97	100.0	0.02	100.0	56.2	100.0	11.3	100.0	18	100.0	0.27	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	300
Water	g	1000	350
Time	min	25	4.0
Speed	rpm	50	50
Lime	g	0.7	0.3
End pH	pH	9.46	11.4
End p80	µm	67	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	7
DATE	29/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED	
Westgold	
D001 Composite	

NOTES
Finer Primary Grind
Pre Float cleaner
2 stage Pb Cleaner lower pH
2 stage Zn Cleaner

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.5	348						25		1					
Pre float1	9.5										2-4	3.0	3.0	850	
Pre float2	9.5							5			4-7	9.5	12.5	1100	
CONDITION	9.4							5		1	4-10	11.0	11.0	1500	27
Pre Float Cl Con1	9.5						497			2					
CONDITION	9.5	199		99				5		2					
CONDITION	9.5		5					5		1					
Pb Rgher C1	9.5										4-8	3.0	3.0	300	
CONDITION	9.7		2					5		1	4-8	3.0	6.0	350	
Pb Rgher C2	9.7														
Regrind	11.4	149		199						4					
CONDITION	11.8		5			50		5		1					
Pb Cl1 Con	11.8		1								2-7	7.0	13.0	380	
CONDITION	11.8							5		1					
Pb Cl2 C1	11.8					2					2-4	2.0	2.0	70	54
Pb Cl2 C2						2					3-5	2.0	4.0	90	39
Pb Cl2 C3			0.5			2		5			4-8	3.0	7.0	90	13
CONDITION	10.5	249			298					2					
CONDITION	10.5		5					15		1					
Zn Rgher C1	10.5										4-8	5.0	5.0	600	
CONDITION	10.0		5					5		1	4-8	6.0	11.0	750	
Zn Rgher C2	10.0														
CONDITION	9.8		4					10		1	4-8	9.0	20.0	850	
Zn Rgher C3	9.8														
Regrind	11.3	348								5					
CONDITION	11.5				80					1					
CONDITION	11.5	99	5			50		10		1					
Zn Cl1 Con	11.5										2-8	10.0	10.0	1000	
CONDITION	11.8	109	1					10		1					
Zn Cl2 C1	11.8										2-3	2.0	2.0	260	44
Zn Cl2 C2			0.5								2-4	2.0	4.0	110	36
Zn Cl2 C3			0.5								4-8	3.0	7.0	150	12
REAGENT TOTALS (g/t)		1502	35	298	378	107	497	109							

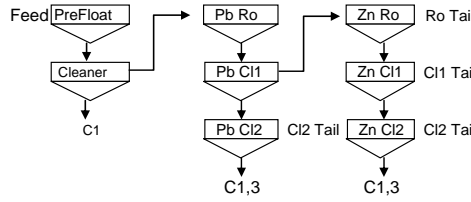
PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	408.4	20.3	0.01	4.9	0.50	3.54	1.53	5.0	4.81	12.7	0.01	11.5	61.3	22.8	21.02	38.6	5	5.8	0.13	12.2
Pb Cl2 C1	38.1	1.9	0.13	6.0	66.3	43.8	11.9	3.6	1.59	0.4	0.23	24.6	1.5	0.1	0.43	0.1	144	15.5	0.58	5.1
Pb Cl2 C2	35.0	1.7	0.18	7.6	46.8	28.4	22.5	6.3	3.14	0.7	0.17	16.7	2.9	0.1	0.89	0.1	130	12.8	0.54	4.3
Pb Cl2 C3	11.4	0.6	0.28	3.8	27.5	5.4	30.6	2.8	5.50	0.4	0.09	2.9	6.9	0.1	1.89	0.1	111	3.6	0.66	1.7
Pb Cl2 Tail	19.9	1.0	0.12	2.9	11.4	3.9	5.27	0.8	6.31	0.8	0.04	2.2	48.1	0.9	15.82	1.4	28	1.6	0.22	1.0
Zn Cl2 C1	115.5	5.7	0.30	41.8	3.18	6.4	60.7	55.6	1.62	1.2	0.01	3.2	2.86	0.3	0.86	0.4	108	35.2	1.69	44.8
Zn Cl2 C2	39.4	2.0	0.26	12.4	4.27	2.9	58.9	18.4	2.83	0.7	0.01	1.1	2.59	0.1	0.66	0.1	106	11.8	1.22	11.0
Zn Cl2 C3	17.6	0.9	0.22	4.7	7.01	2.1	30.3	4.2	14.6	1.7	0.01	0.5	16.1	0.3	3.05	0.2	84	4.2	1.01	4.1
Zn Cl2 Tail	65.4	3.3	0.01	0.8	0.72	0.8	1.14	0.6	8.59	3.6	0.01	1.8	59.7	3.6	17.89	5.3	8	1.5	0.09	1.4
Zn Cl1 Tail	345.1	17.2	0.01	4.2	0.19	1.1	0.57	1.6	8.86	19.7	0.01	9.7	60.9	19.1	17.14	26.6	3	2.9	0.05	4.0
RoTail	914.8	45.5	0.01	11.0	0.10	1.59	0.17	1.2	9.84	58.1	0.01	25.7	63.5	52.8	6.55	27.0	2	5.2	0.05	10.5
CALC	2010.6	100.0	0.04	100.0	2.87	100.0	6.27	100.0	7.71	100.0	0.02	100.0	54.7	100.0	11.1	100.0	18	100.0	0.22	100.0
ASSAY HEAD	2010.6		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	408.4	20.3	0.01	4.9	0.50	3.54	1.53	4.96	4.81	12.7	0.01	11.5	61.3	22.8	21.0	38.6	5	5.8	0.13	12
Pb Cl2 C1	38.1	1.9	0.13	6.0	66.3	43.8	11.9	3.6	1.59	0.4	0.23	24.6	1.46	0.1	0.43	0.1	144	15.5	0.58	5.1
Pb Cl2 C2	73.1	3.6	0.15	13.6	57.0	72.2	17.0	9.9	2.33	1.1	0.20	41.3	2.15	0.1	0.65	0.2	137	28.3	0.56	9.4
Pb Cl2 C3	84.5	4.2	0.17	17.4	53.0	77.6	18.8	12.6	2.76	1.5	0.19	44.2	2.79	0.2	0.82	0.3	134	31.9	0.57	11.1
Pb Cl2 Tail	104.4	5.2	0.16	20.3	45.0	81.5	16.3	13.5	3.44	2.3	0.16	46.5	11.4	1.1	3.68	1.7	114	33.5	0.51	12.1
Zn Cl2 C1	115.5	5.7	0.30	41.8	3.18	6.4	60.7	55.6	1.62	1.2	0.01	3.2	2.86	0.3	0.86	0.4	108	35.2	1.69	44.8
Zn Cl2 C2	154.9	7.7	0.29	54.1	3.46	9.3	60.2	74.0	1.93	1.9	0.01	4.4	2.79	0.4	0.81	0.6	107	47.0	1.57	55.8
Zn Cl2 C3	172.5	8.6	0.28	58.8	3.82	11.4	57.1	78.2	3.22	3.6	0.01	4.8	4.15	0.7	1.04	0.8	105	51.2	1.51	59.9
Zn Cl2 Tail	237.9	11.8	0.21	59.6	2.97	12.2	41.8	78.8	4.70	7.2	0.01	6.7	19.4	4.2	5.67	6.1	78	52.7	1.12	61.2
Zn Cl1 Tail	583.0	29.0	0.09	63.7	1.32	13.4	17.4	80.3	7.16	26.9	0.01	16.4	44.0	23.3	12.5	32.7	34	55.6	0.49	65.2
FEED	2010.6	100.0	0.04	100.0	2.87	100.0	6.27	100.0	7.71	100.0	0.02	100.0	54.7	100.0	11.1	100.0	18	100.0	0.22	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary		Pb Reg		Zn Reg	
Mill	type	Ms	Ms	Ms	Ms	Ms
Media	type	Ball	Ball	Ball	Stirred	
Media	kg	12	10			1
Solids	g	2000	390	740		
Water	g	1000	350	400		
Time	min	28	4.0	5		
Speed	rpm	50	50	60Hz		
Lime	g	0.5	0.4	0.7		
End pH	pH	9.1	11.7	11.6		
End p80	µm	64	0	0		

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	8
DATE	29/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED	
Westgold	
D007 Composite	

NOTES	
Pre Float cleaner	
2 stage Pb Cleaner	
2 stage Zn Cleaner	

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.1	255						26		1					
Pre float1	9.1										2-4	3.0	3.0	700	
Pre float2	9.1							5			4-7	3.0	6.0	300	
CONDITION	9.0							5		1					
Pre Float Cl Con1	9.0										4-10	4.0	4.0	500	31
CONDITION	9.5	306					511			2					
CONDITION	9.5			102						2					
CONDITION	9.5		5					5		1					
Pb Rgher C1	9.5										4-8	3.0	3.0	300	
CONDITION	9.4		3					5		1					
Pb Rgher C2	9.4										4-8	4.0	7.0	500	
Regrind	11.7	204		204						4					
CONDITION	11.7		5			51		10		1					
Pb Cl1 Con	11.7		3								2-7	9.0	16.0	420	
CONDITION	10.7							5		1					
Pb Cl2 C1	10.7					3					2-4	2.0	2.0	90	53
Pb Cl2 C2	10.4					3					3-5	2.0	4.0	100	45
Pb Cl2 C3	10.4					3		5			4-8	4.0	8.0	150	21
CONDITION	10.5	306			306					2					
CONDITION	10.5		8					15		1					
Zn Rgher C1	10.5										4-8	6.0	6.0	600	
CONDITION	10.0		5					5		1					
Zn Rgher C2	10.0										4-8	8.0	14.0	750	
CONDITION	9.8		4					10		1					
Zn Rgher C3	9.8										4-8	9.0	23.0	850	
Regrind	11.6	357								5					
CONDITION	11.5				82					1					
CONDITION	11.5	102	6			51		10		1					
Zn Cl1 Con	11.5										2-8	14.0	14.0	1200	
CONDITION	11.8	133	1					10		1					
Zn Cl2 C1	11.8										2-3	2.0	2.0	260	43
Zn Cl2 C2			0.5								2-4	2.0	4.0	150	40
Zn Cl2 C3			0.5								4-8	3.0	7.0	200	28
REAGENT TOTALS (g/t)		1665	40	306	388	110	511	117							

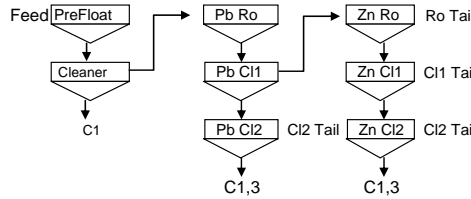
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float Cl Con1	153.8	7.9	0.04 1.0	1.01 1.58	3.34 2.9	5.11 3.0	0.01 3.4	60.4 10.8	20.31 19.7	7 1.6	0.24 1.9
Pb Cl2 C1	47.8	2.4	0.23 1.7	67.0 32.6	8.83 2.4	1.94 0.4	0.25 26.3	3.3 0.2	0.99 0.3	188 13.6	1.20 3.0
Pb Cl2 C2	45.0	2.3	0.27 1.9	58.5 26.8	13.6 3.5	2.82 0.5	0.21 20.8	3.3 0.2	1.02 0.3	152 10.4	1.31 3.1
Pb Cl2 C3	31.3	1.6	0.49 2.4	38.9 12.4	22.1 3.9	5.34 0.6	0.13 8.9	6.6 0.2	2.00 0.4	129 6.1	1.36 2.2
Pb Cl2 Tail	34.2	1.7	0.45 2.4	16.0 5.6	10.5 2.0	7.59 1.0	0.06 4.5	35.8 1.4	11.44 2.5	57 3.0	0.55 1.0
Zn Cl2 C1	112.5	5.7	3.67 64.0	1.44 1.6	55.4 35.6	4.99 2.1	0.01 2.5	1.59 0.2	0.52 0.4	141 24.0	8.36 48.8
Zn Cl2 C2	60.0	3.1	1.13 10.5	1.47 0.9	61.0 20.9	3.10 0.7	0.01 1.3	1.30 0.1	0.42 0.2	114 10.4	2.21 6.9
Zn Cl2 C3	55.0	2.8	0.63 5.4	2.10 1.2	57.9 18.2	3.99 0.8	0.01 1.2	2.83 0.2	0.75 0.3	112 9.3	1.95 5.6
Zn Cl2 Tail	68.3	3.5	0.29 3.1	5.62 3.9	10.1 4.0	8.71 2.3	0.01 1.5	43.3 3.4	13.66 5.9	43 4.4	0.80 2.8
Zn Cl1 Tail	305.3	15.6	0.06 2.8	3.30 10.3	2.98 5.2	16.2 18.9	0.01 6.7	45.3 16.1	12.30 23.6	20 9.2	1.02 16.1
RoTail	1045.2	53.4	0.03 4.9	0.30 3.19	0.24 1.4	17.4 69.6	0.01 23.0	55.1 67.1	7.09 46.6	5 7.9	0.16 8.7
CALC	1958.4	100.0	0.33 100.0	5.02 100.0	8.95 100.0	13.3 100.0	0.02 100.0	43.8 100.0	8.12 100.0	34 100.0	0.98 100.0
ASSAY HEAD	1958.4		0.31	5.14	8.94	13.6	0.01	40.3	7.98	37	1.67

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float Cl Con1	153.8	7.9	0.04 1.0	1.01 1.58	3.34 2.93	5.11 3.01	0.01 3.38	60.4 10.8	20.3 19.7	7 1.6	0.24 1.9
Pb Cl2 C1	47.8	2.4	0.23 1.7	67.0 32.6	8.83 2.4	1.94 0.4	0.25 26.3	3.25 0.2	0.99 0.3	188 13.6	1.20 3.0
Pb Cl2 C2	92.8	4.7	0.25 3.6	62.9 59.4	11.1 5.9	2.37 0.8	0.23 47.0	3.27 0.4	1.00 0.6	171 24.0	1.25 6.0
Pb Cl2 C3	124.1	6.3	0.31 6.0	56.8 71.8	13.9 9.8	3.12 1.5	0.21 55.9	4.10 0.6	1.26 1.0	160 30.1	1.28 8.2
Pb Cl2 Tail	158.3	8.1	0.34 8.4	48.0 77.3	13.2 11.9	4.08 2.5	0.17 60.5	11.0 2.0	3.46 3.4	138 33.0	1.12 9.2
Zn Cl2 C1	112.5	5.7	3.67 64.0	1.44 1.6	55.4 35.6	4.99 2.1	0.01 2.5	1.59 0.2	0.52 0.4	141 24.0	8.36 48.8
Zn Cl2 C2	172.5	8.8	2.79 74.5	1.45 2.5	57.4 56.5	4.33 2.9	0.01 3.8	1.49 0.3	0.49 0.5	132 34.4	6.22 55.7
Zn Cl2 C3	227.5	11.6	2.27 79.9	1.61 3.7	57.5 74.6	4.25 3.7	0.01 5.0	1.81 0.5	0.55 0.8	127 43.7	5.19 61.2
Zn Cl2 Tail	295.8	15.1	1.81 83.0	2.53 7.6	46.6 78.6	5.28 6.0	0.01 6.5	11.4 3.9	3.58 6.7	108 48.2	4.18 64.0
Zn Cl1 Tail	601.1	30.7	0.92 85.8	2.92 17.9	24.4 83.8	10.8 24.9	0.01 13.2	28.6 20.0	8.01 30.3	63 57.4	2.57 80.2
FEED	1958.4	100.0	0.33 100.0	5.02 100.0	8.95 100.0	13.3 100.0	0.02 100.0	43.8 100.0	8.12 100.0	34 100.0	0.98 100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary		Pb Reg		Zn Reg	
Mill	type	Ms	Ms	Ms	Ms	Ms
Media	type	Ball	Ball	Stirred		
Media	kg	12	10		1	
Solids	g	2000	300		550	
Water	g	1000	350		400	
Time	min	35	5.0		5	
Speed	rpm	50	50		60Hz	
Lime	g	0.7	0.5		0.7	
End pH	pH	9.8	12.0		11.5	
End p80	µm	62	0		0	

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	9
DATE	4/09/2008
TECHNICIAN	MJR

PRODUCT FLOATED	
Westgold	
D020 Composite	

NOTES	
Pre Float cleaner	
2 stage Pb Cleaner	
2 stage Zn Cleaner	

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.8	349						25		1					
Pre float1	9.8										2-4	3.0	3.0	600	
Pre float2	9.8							5			4-7	5.0	8.0	550	
CONDITION										1					
Pre Float Cl Con1	9.6						499				4-10	7.0	7.0	600	30
CONDITION	9.7	130		100						2					
CONDITION	9.7		2					5		2					
Pb Rgher C1	9.7		1					5		1	4-8	3.0	3.0	300	
CONDITION	9.6										4-8	3.0	6.0	300	
Pb Rgher C2	9.6														
Regrind	12.0	249		200						5					
CONDITION	11.7		10			50	249	10		1					
Pb Cl1 Con	11.7		3								2-7	9.0	15.0	400	
CONDITION	10.9							5		1					
Pb Cl2 C1	10.9					2					2-4	2.0	2.0	80	41
Pb Cl2 C2	10.5					2					3-5	2.0	4.0	90	23
Pb Cl2 C3	10.5					2		5			4-8	4.0	8.0	100	5
CONDITION	10.5	269			299					2					
CONDITION	10.5		7					15		1	4-8	6.0	6.0	500	
Zn Rgher C1	10.5														
CONDITION	10.0		5					5		1	4-8	7.0	13.0	600	
Zn Rgher C2	10.0														
CONDITION	9.8		4					10		1	4-8	8.0	21.0	600	
Zn Rgher C3	9.8														
Regrind	11.5	349								5					
CONDITION	11.5				80					1					
CONDITION	11.5	75	6			50		10		1					
Zn Cl1 Con	11.5										2-8	14.0	14.0	1200	
CONDITION	11.8	130	1					10		1					
Zn Cl2 C1	11.8										2-3	2.0	2.0	180	42
Zn Cl2 C2			0.5								2-4	2.0	4.0	150	37
Zn Cl2 C3			0.5								4-8	3.0	7.0	200	26
REAGENT TOTALS (g/t)		1551	41	299	379	107	748	115							

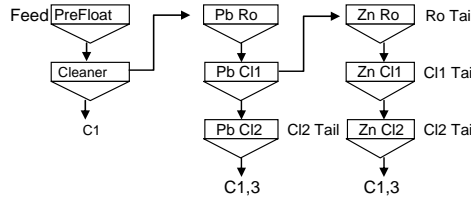
PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con1	177.6	8.9	0.01	1.2	0.31	0.84	1.82	2.1	4.58	8.5	0.01	5.2	60.3	9.5	21.33	26.6	6	1.6	0.01	0.9
Pb Cl2 C1	32.7	1.6	0.09	2.0	73.9	37.1	7.03	1.5	0.67	0.2	0.27	25.8	1.6	0.0	0.57	0.1	165	7.9	0.14	2.2
Pb Cl2 C2	20.3	1.0	0.15	2.1	60.1	18.7	13.4	1.8	1.44	0.3	0.22	13.0	3.6	0.1	1.18	0.2	158	4.7	0.20	2.0
Pb Cl2 C3	4.9	0.2	0.18	0.6	41.4	3.1	15.8	0.5	3.87	0.2	0.14	2.0	12.3	0.1	3.91	0.1	123	0.9	0.18	0.4
Pb Cl2 Tail	16.5	0.8	0.06	0.7	17.4	4.4	6.58	0.7	4.63	0.8	0.06	2.9	41.3	0.6	13.85	1.6	45	1.1	0.09	0.7
Zn Cl2 C1	74.7	3.7	0.86	44.0	4.86	5.6	60.5	29.2	1.56	1.2	0.01	2.2	1.15	0.1	0.39	0.2	348	38.1	1.11	40.6
Zn Cl2 C2	55.0	2.7	0.41	15.5	4.94	4.2	61.5	21.9	1.39	0.8	0.01	1.6	1.06	0.1	0.35	0.1	196	15.8	0.59	15.9
Zn Cl2 C3	51.0	2.5	0.29	10.1	4.49	3.5	60.0	19.8	1.72	0.9	0.01	1.5	2.19	0.1	0.65	0.2	143	10.7	0.55	13.7
Zn Cl2 Tail	57.3	2.9	0.14	5.5	8.81	7.7	21.5	7.9	6.14	3.7	0.01	1.7	31.2	1.6	9.01	3.6	63	5.3	0.29	8.1
Zn Cl1 Tail	230.3	11.5	0.06	9.5	3.32	11.7	8.87	13.2	7.91	19.0	0.01	6.7	47.3	9.7	11.38	18.4	25	8.4	0.08	9.0
RoTail	1284.3	64.1	0.01	8.8	0.16	3.15	0.18	1.5	4.80	64.4	0.01	37.5	68.4	78.2	5.42	48.8	3	5.6	0.01	6.3
CALC	2004.6	100.0	0.07	100.0	3.25	100.0	7.72	100.0	4.78	100.0	0.02	100.0	56.0	100.0	7.11	100.0	34	100.0	0.10	100.0
ASSAY HEAD	2004.6		0.05		3.52		7.73		4.56		0.01		52.9		7.06		40		0.10	

CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con1	177.6	8.9	0.01	1.2	0.31	0.84	1.82	2.09	4.58	8.49	0.01	5.18	60.3	9.54	21.3	26.6	6	1.6	0.01	0.9
Pb Cl2 C1	32.7	1.6	0.09	2.0	73.9	37.1	7.03	1.5	0.67	0.2	0.27	25.8	1.59	0.0	0.57	0.1	165	7.9	0.14	2.2
Pb Cl2 C2	53.0	2.6	0.11	4.1	68.6	55.8	9.45	3.2	0.96	0.5	0.25	38.8	2.34	0.1	0.80	0.3	162	12.6	0.16	4.2
Pb Cl2 C3	57.9	2.9	0.12	4.7	66.3	58.9	9.99	3.7	1.21	0.7	0.24	40.8	3.19	0.2	1.07	0.4	159	13.5	0.16	4.7
Pb Cl2 Tail	74.4	3.7	0.11	5.4	55.5	63.3	9.23	4.4	1.97	1.5	0.20	43.7	11.6	0.8	3.90	2.0	134	14.6	0.15	5.4
Zn Cl2 C1	74.7	3.7	0.86	44.0	4.86	5.6	60.5	29.2	1.56	1.2	0.01	2.2	1.15	0.1	0.39	0.2	348	38.1	1.11	40.6
Zn Cl2 C2	129.7	6.5	0.67	59.5	4.89	9.7	60.9	51.1	1.49	2.0	0.01	3.8	1.11	0.1	0.37	0.3	284	53.8	0.89	56.5
Zn Cl2 C3	180.7	9.0	0.56	69.6	4.78	13.2	60.6	70.8	1.55	2.9	0.01	5.3	1.42	0.2	0.45	0.6	244	64.5	0.79	70.3
Zn Cl2 Tail	238.0	11.9	0.46	75.1	5.75	21.0	51.2	78.8	2.66	6.6	0.01	6.9	8.58	1.8	2.51	4.2	200	69.8	0.67	78.4
Zn Cl1 Tail	468.3	23.4	0.26	84.6	4.56	32.7	30.4	92.0	5.24	25.6	0.01	13.7	27.6	11.5	6.87	22.6	114	78.2	0.38	87.4
FEED	2004.6	100.0	0.07	100.0	3.25	100.0	7.72	100.0	4.78	100.0	0.02	100.0	56.0	100.0	7.11	100.0	34	100.0	0.10	100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	390
Water	g	1000	130
Time	min	30	3.0
Speed	rpm	50	50
Lime	g	0.7	0.3
End pH	pH	9.53	11.7
End p80	µm	62	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	10
DATE	4/09/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D022 Composite

NOTES
Pre Float cleaner
2 stage Pb Cleaner
2 stage Zn Cleaner

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.5	350						25		1					
Pre float1	9.5										2-4	4.0	4.0	600	
Pre float2	9.5							5			4-7	3.0	7.0	350	
CONDITION	9.4							5		1	4-10	4.0	4.0	500	28
Pre Float Cl Con1	9.7						499			2					
CONDITION	9.7	150		100						2					
CONDITION	9.7		2					5		2					
Pb Rgher C1	9.7							5		1	4-8	3.0	3.0	200	
CONDITION	9.5		0					5		1	4-8	2.0	5.0	150	
Pb Rgher C2	11.7	150		200						3					
Regrind	11.4		5			50	250	10		1					
CONDITION	11.4		4								2-7	6.0	11.0	300	
Pb Cl1 Con	10.7							5		1					
CONDITION	10.7					2					2-4	2.0	2.0	50	27
Pb Cl2 C1	10.5					5					3-5	2.0	4.0	100	8
Pb Cl2 C2	10.5	300			300					2					
CONDITION	10.5		5					15		1					
CONDITION	10.5							5		1	4-8	3.0	3.0	300	
Zn Rgher C1	10.1		2					10		1	4-8	4.0	7.0	450	
CONDITION	9.7		2					10		1	4-8	5.0	12.0	450	
Zn Rgher C3	11.7	250								4					
Regrind	11.5				80					1					
CONDITION	11.5		5			37		10		1					
CONDITION	11.5										2-8	7.0	7.0	600	
Zn Cl1 Con	11.8	130						10		1					
CONDITION	11.8		1												
Zn Cl2 C1											2-3	1.5	1.5	150	40
Zn Cl2 C2			0.5								2-4	2.0	3.5	100	25
Zn Cl2 C3			0.5								4-8	3.0	6.5	100	6
REAGENT TOTALS (g/t)		1328	29	300	380	95	749	110							

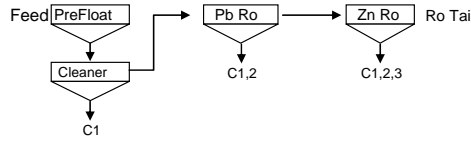
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float Cl Con1	138.8	6.9	0.01 1.9	0.16 1.02	0.85 2.0	5.07 5.2	0.01 5.5	46.2 7.3	21.12 10.3	3 3.0	0.04 3.2
Pb Cl2 C1	13.3	0.7	0.16 2.8	69.4 42.3	9.54 2.2	1.34 0.1	0.25 13.1	1.6 0.0	0.74 0.0	71 6.9	0.28 2.2
Pb Cl2 C2	8.0	0.4	0.28 3.0	56.5 20.7	13.5 1.9	2.37 0.1	0.20 6.3	4.1 0.0	1.90 0.1	70 4.1	0.30 1.4
Pb Cl2 Tail	7.9	0.4	0.11 1.2	22.1 8.0	7.22 1.0	5.54 0.3	0.08 2.5	29.0 0.3	12.24 0.3	30 1.7	0.14 0.6
Zn Cl2 C1	59.9	3.0	0.62 49.5	5.20 14.3	59.9 61.5	1.33 0.6	0.01 2.4	1.59 0.1	0.79 0.2	87 38.1	1.52 52.7
Zn Cl2 C2	25.4	1.3	0.44 14.9	7.28 8.5	55.8 24.3	1.74 0.3	0.01 1.0	2.50 0.1	1.20 0.1	88 16.3	1.07 15.7
Zn Cl2 C3	6.1	0.3	0.34 2.8	8.45 2.4	24.4 2.5	7.12 0.3	0.01 0.2	17.1 0.1	7.16 0.2	47 2.1	0.43 1.5
Zn Cl2 Tail	50.8	2.5	0.02 1.4	0.51 1.2	0.84 0.7	7.48 2.8	0.01 2.0	40.2 2.3	17.33 3.1	5 1.9	0.04 1.2
Zn Cl1 Tail	158.4	7.9	0.01 2.1	0.13 0.9	0.46 1.2	6.88 8.1	0.01 6.3	40.1 7.2	16.47 9.1	3 3.5	0.04 3.7
RoTail	1533.8	76.6	0.01 20.5	0.01 0.70	0.10 2.6	7.23 82.1	0.01 60.7	47.2 82.5	14.3 76.6	2 22.4	0.02 17.8
CALC	2002.4	100.00	0.04 100.0	1.09 100.0	2.91 100.0	6.75 100.0	0.01 100.0	43.8 100.0	14.2 100.0	7 100.0	0.09 100.0
ASSAY HEAD	2002.4		0.04	1.33	3.07	6.28	0.01	37.3	7.89	8.0	0.14

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float Cl Con1	138.8	6.9	0.01 1.9	0.16 1.02	0.85 2.02	5.07 5.21	0.01 5.49	46.2 7.31	21.1 10.3	3 3.0	0.04 3.2
Pb Cl2 C1	13.3	0.7	0.16 2.8	69.4 42.3	9.54 2.2	1.34 0.1	0.25 13.1	1.63 0.0	0.74 0.0	71 6.9	0.28 2.2
Pb Cl2 C2	21.3	1.1	0.21 5.8	64.6 63.0	11.0 4.0	1.73 0.3	0.23 19.5	2.57 0.1	1.18 0.1	71 11.0	0.29 3.5
Pb Cl2 Tail	29.2	1.5	0.18 7.0	53.1 71.0	10.0 5.0	2.76 0.6	0.19 22.0	9.71 0.3	4.17 0.4	60 12.7	0.25 4.2
Zn Cl2 C1	59.9	3.0	0.62 49.5	5.20 14.3	59.9 61.5	1.33 0.6	0.01 2.4	1.59 0.1	0.79 0.2	87 38.1	1.52 52.7
Zn Cl2 C2	85.3	4.3	0.57 64.5	5.82 22.8	58.7 85.8	1.45 0.9	0.01 3.4	1.86 0.2	0.91 0.3	87 54.4	1.39 68.5
Zn Cl2 C3	91.4	4.6	0.55 67.2	5.99 25.1	56.4 88.4	1.83 1.2	0.01 3.6	2.88 0.3	1.33 0.4	85 56.5	1.32 70.0
Zn Cl2 Tail	142.2	7.1	0.36 68.6	4.04 26.3	36.6 89.1	3.85 4.1	0.01 5.6	16.2 2.6	7.05 3.5	56 58.4	0.86 71.2
Zn Cl1 Tail	300.6	15.0	0.18 70.7	1.98 27.2	17.5 90.3	5.45 12.1	0.01 11.9	28.8 9.9	12.0 12.7	28 61.8	0.43 74.8
FEED	2002.4	100.00	0.04 100.0	1.09 100.0	2.91 100.0	6.75 100.0	0.01 100.0	43.8 100.0	14.2 100.0	6.8 100.0	0.09 100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	300
Water	g	1000	350
Time	min	25	4.0
Speed	rpm	50	50
Lime	g	0.7	0.3
End pH	pH	9.46	11.4
End p80	µm	67	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	11
DATE	19/09/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Pre Float cleaner
Pb Rougher For Mineralogy
Zn Rougher For Size

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION	9.5	352						25		1					
Pre float1	9.5										2-4	3.0	3.0	850	
Pre float2	9.5							5			4-7	9.5	12.5	1100	
CONDITION	9.4							5		1	4-10	11.0	11.0	1500	27
Pre Float Cl Con1	9.5						502			2					
CONDITION	9.5	201		201						2					
CONDITION	9.5		5					5		1					
Pb Rgher C1	9.5										4-8	3.0	3.0	300	
CONDITION	9.7		3					5		1	4-8	3.0	6.0	350	33
Pb Rgher C2	9.7														
Regrind	11.4									4					
CONDITION	10.5	251			301					2					
CONDITION	10.5		5					15		1					
Zn Rgher C1	10.5										4-8	5.0	5.0	500	
CONDITION	10.0		5					5		1	4-8	6.0	11.0	500	
Zn Rgher C2	10.0														
CONDITION	9.8		4					10		1	4-8	9.0	20.0	500	22
Zn Rgher C3	9.8														
Regrind	11.3	352								3					
REAGENT TOTALS (g/t)		1155	22	201	301		502	75							

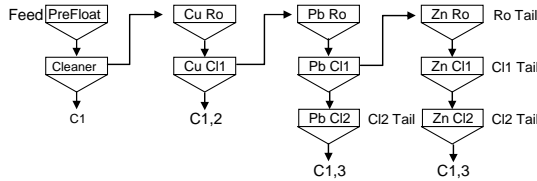
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float Cl Con1	411.0	20.6	0.01 7.7	0.47 3.25	1.66 5.4	4.99 12.7	0.01 20.6	62.9 22.7	21.20 38.9	4 4.7	0.06 5.5
Pb Ro Con	212.0	10.6	0.06 23.9	24.0 85.7	7.14 12.0	5.84 7.7	0.01 10.6	36.1 6.7	11.84 11.2	46 27.6	0.18 8.5
Zn Ro Con	324.7	16.3	0.08 48.8	1.54 8.4	7.08 18.2	7.27 14.6	0.01 16.3	55.0 15.7	16.06 23.3	32 29.4	0.87 62.8
RoTail	1043.3	52.4	0.01 19.6	0.15 2.63	7.79 64.4	10.0 64.9	0.01 52.4	59.9 54.9	5.71 26.6	13 38.4	0.10 23.2
CALC	1991.0	100.0	0.03 100.0	2.98 100.0	6.34 100.0	8.09 100.0	0.01 100.0	57.2 100.0	11.2 100.0	18 100.0	0.23 100.0
ASSAY HEAD	1991.0		0.03	3.11	6.47	7.87	0.01	56.7	11.2	20	

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float Cl Con1	411.0	20.6	0.01 7.7	0.47 3.25	1.66 5.41	4.99 12.7	0.01 20.6	62.9 22.7	21.2 38.9	4 4.7	0.06 5.5
Pb Ro Con	212.0	10.6	0.06 23.9	24.0 85.7	7.14 12.0	5.84 7.7	0.01 10.6	36.1 6.7	11.8 11.2	46 27.6	0.18 8.5
Zn Ro Con	324.7	16.3	0.08 48.8	1.54 8.4	7.08 18.2	7.27 14.6	0.01 16.3	55.0 15.7	16.1 23.3	32 29.4	0.87 62.8
FEED	1991.0	100.0	0.03 100.0	2.98 100.0	6.34 100.0	8.09 100.0	0.01 100.0	57.2 100.0	11.2 100.0	18 100.0	0.23 100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill type	Ms	Ms	Ms
Media type	Ball	Ball	Stirred
Media kg	12	10	1
Solids g	2000	390	740
Water g	1000	350	400
Time min	28	6.0	6
Speed rpm	50	50	60Hz
Lime g	0.5	0.5	0.7
End pH	pH 9.35	11.5	11.3
End p80	µm 64	0	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	12
DATE	29/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED	
Westgold	
D007 Composite	

NOTES	
Pre Float cleaner	
1 Stage Cu Cleaner	
2 stage Pb Cleaner	
2 stage Zn Cleaner	

	pH	100 Lime g/t	100 X23 g/t	0.1 SIBX g/t	1.0 NaCN g/t	2 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t	Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION Pre float1	9.4	247							25	1		5.0	5.0	700	
CONDITION Pre float2	9.4								5		2-4	3.0	8.0	300	
CONDITION Pre float2	9.3								5	1	4-7	3.0	8.0	300	
CONDITION Pre Float Cl Con1	9.3								5	1	4-10	4.0	4.0	550	30
CONDITION Cu Rgher C1	8.6		7					247	5	2					
CONDITION Cu Rgher C1	8.6		3						5	1	4-8	3.0	3.0	300	
CONDITION Cu Rgher C2	8.8								5	1	4-8	4.0	7.0	350	
CONDITION Cu Cl C1	8.8						12				2-5	1.0	1.0	40	47
CONDITION Cu Cl C2	8.8										3-6	2.0	3.0	85	7
CONDITION Pb Rgher C1	9.5	296		4	148			494	5	2					
CONDITION Pb Rgher C1	9.5			1					5	2	4-8	4.0	4.0	350	
CONDITION Pb Rgher C2	9.4								5	1	4-8	5.0	9.0	480	
Regrind	11.5	247			197					6					
CONDITION Pb Cl1 Con	11.8	148		7			49	370	10	1					
CONDITION Pb Cl1 Con	11.8			3					1		2-7	10.0	19.0	460	
CONDITION Pb Cl2 C1	10.7								5	1					
CONDITION Pb Cl2 C2	10.7										2-4	2.0	2.0	100	56
CONDITION Pb Cl2 C3	10.4								5		3-5	2.5	4.5	100	43
CONDITION Zn Rgher C1	10.5	346		7		346					4-8	2.5	7.0	100	19
CONDITION Zn Rgher C1	10.5			7					10	2					
CONDITION Zn Rgher C2	10.0			4					5	1	4-8	6.0	6.0	600	
CONDITION Zn Rgher C3	9.8								10	1	4-8	7.0	13.0	750	
Regrind	11.3	346								6	4-8	10.0	23.0	900	
CONDITION Zn Cl1 Con	11.5	148		7		79	49		10	1					
CONDITION Zn Cl1 Con	11.6								1		2-8	14.0	14.0	1300	
CONDITION Zn Cl2 C1	11.8	128		1						1					
CONDITION Zn Cl2 C2	11.8										2-3	2.0	2.0	300	41
CONDITION Zn Cl2 C3	11.8										2-4	2.0	4.0	200	32
REAGENT TOTALS (g/t)		1905	10	43	346	425	136	1111	114		4-8	4.0	8.0	200	32

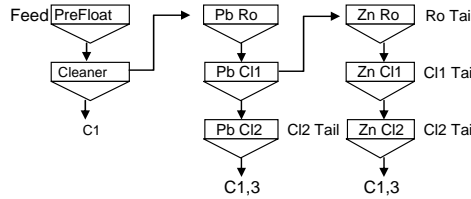
PRODUCTS	WT g	WT %	Cu % DIST	Pb % DIST	Zn % DIST	Fe % DIST	As % DIST	SiO2 % DIST	MgO % DIST	Ag ppm DIST	Au ppm DIST
Pre Float Cl Con1	166.5	8.2	0.04 1.0	0.92 1.53	3.51 3.2	5.25 3.2	0.01 3.5	60.8 11.3	20.02 20.0	9 2.0	0.16 1.3
Cu Cl1 C1	18.6	0.9	19.8 57.5	3.01 0.6	2.62 0.3	27.5 1.9	0.01 0.4	9.7 0.2	2.74 0.3	324 8.0	24.80 23.0
Cu Cl1 C2	5.9	0.3	8.49 7.8	2.94 0.2	2.98 0.1	21.2 0.5	0.01 0.1	26.2 0.2	8.34 0.3	205 1.6	23.60 6.9
Pb Cl2 C1	55.5	2.7	0.12 1.0	71.4 39.5	6.18 1.9	1.90 0.4	0.27 31.3	3.5 0.2	1.08 0.4	168 12.3	0.62 1.7
Pb Cl2 C2	42.9	2.1	0.17 1.1	54.0 23.1	13.3 3.2	4.20 0.7	0.20 17.9	6.1 0.3	1.87 0.5	153 8.7	0.59 1.3
Pb Cl2 C3	18.8	0.9	0.21 0.6	39.1 7.3	17.5 1.8	6.56 0.4	0.14 5.5	9.6 0.2	2.83 0.3	140 3.5	0.58 0.5
Pb Cl2 Tail	26.1	1.3	0.20 0.8	30.6 8.0	11.3 1.6	7.03 0.7	0.11 6.0	24.1 0.7	7.63 1.2	101 3.5	0.33 0.4
Zn Cl2 C1	124.4	6.1	0.89 17.3	4.90 6.1	58.3 40.2	2.61 1.2	0.01 2.6	2.08 0.3	0.70 0.5	142 23.3	5.52 34.3
Zn Cl2 C2	63.4	3.1	0.57 5.6	5.95 3.8	57.3 20.1	2.58 0.6	0.01 1.3	2.30 0.2	0.74 0.3	132 11.0	1.35 4.3
Zn Cl2 C3	64.5	3.2	0.25 2.5	4.38 2.8	55.5 19.8	4.43 1.0	0.01 1.3	2.39 0.2	0.66 0.3	113 9.6	0.99 3.2
Zn Cl2 Tail	67.1	3.3	0.10 1.0	3.41 2.3	10.9 4.1	10.2 2.5	0.01 1.4	42.4 3.2	13.48 5.4	38 3.4	1.64 5.5
Zn Cl1 Tail	294.4	14.5	0.04 1.8	0.86 2.5	1.46 2.4	16.0 17.0	0.01 6.1	50.7 16.6	13.46 23.8	12 4.7	0.61 9.0
RoTail	1077.8	53.2	0.01 1.7	0.21 2.26	0.22 1.3	17.9 70.1	0.01 22.5	55.5 66.5	7.22 46.7	6 8.5	0.16 8.6
CALC	2025.9	100.0	0.32 100.0	4.94 100.0	8.91 100.0	13.6 100.0	0.02 100.0	44.3 100.0	8.22 100.0	37 100.0	0.99 100.0
ASSAY HEAD	2025.9		0.31	5.14	8.94	13.6	0.01	40.3	7.98	37	1.67

CUM PRODUCTS	CUM Wt	WT %	Cu % CUM	Pb % CUM	Zn % CUM	Fe % CUM	As % CUM	SiO2 % CUM	MgO % CUM	Ag ppm CUM	Au ppm CUM
Pre Float Cl Con1	166.5	8.2	0.04 1.0	0.92 1.5	3.51 3.2	5.25 3.2	0.01 3.5	60.8 11.3	20.0 20.0	9 2.0	0.16 1.3
Cu Cl1 C1	18.6	0.9	19.8 57.5	3.01 0.6	2.62 0.3	27.5 1.9	0.01 0.4	9.69 0.2	2.74 0.3	324 8.0	24.8 23.0
Cu Cl1 C2	24.5	1.2	17.1 65.3	2.99 0.7	2.71 0.4	26.0 2.3	0.01 0.5	13.7 0.4	4.09 0.6	295 9.6	24.5 30.0
Pb Cl2 C1	55.5	2.7	0.12 1.0	71.4 39.5	6.18 1.9	1.90 0.4	0.27 31.3	3.47 0.2	1.08 0.4	168 12.3	0.62 1.7
Pb Cl2 C2	98.4	4.9	0.14 2.2	63.8 62.7	9.26 5.1	2.90 1.0	0.24 49.2	4.63 0.5	1.42 0.8	161 21.0	0.61 3.0
Pb Cl2 C3	117.2	5.8	0.15 2.8	59.8 70.0	10.6 6.9	3.49 1.5	0.22 54.7	5.44 0.7	1.65 1.2	158 24.4	0.60 3.5
Pb Cl2 Tail	143.3	7.1	0.16 3.6	54.5 78.0	10.7 8.5	4.13 2.1	0.20 60.7	8.83 1.4	2.74 2.4	148 27.9	0.55 4.0
Zn Cl2 C1	124.4	6.1	0.89 17.3	4.90 6.1	58.3 40.2	2.61 1.2	0.01 2.6	2.08 0.3	0.70 0.5	142 23.3	5.52 34.3
Zn Cl2 C2	187.8	9.3	0.78 22.9	5.25 9.9	57.9 60.3	2.60 1.8	0.01 3.9	2.15 0.5	0.71 0.8	139 34.4	4.11 38.5
Zn Cl2 C3	252.3	12.5	0.65 25.4	5.03 12.7	57.3 80.1	3.07 2.8	0.01 5.3	2.21 0.6	0.70 1.1	132 44.0	3.31 41.7
Zn Cl2 Tail	319.4	15.8	0.53 26.5	4.69 15.0	47.6 84.2	4.56 5.3	0.01 6.7	10.7 3.8	3.38 6.5	112 47.3	2.96 47.2
Zn Cl1 Tail	613.8	30.3	0.30 28.3	2.85 17.5	25.5 86.6	10.0 22.3	0.01 12.8	29.9 20.4	8.22 30.3	64.2 52.0	1.83 56.2
FEED	2025.9	100.0	0.32 100.0	4.94 100.0	8.91 100.0	13.6 100.0	0.02 100.0	44.3 100.0	8.22 100.0	37.4 100.0	0.99 100.0

Burnie RESEARCH LABORATORY
ROUGHER FLOTATION REPORT SHEET

Milling	Primary	Pb Reg	Zn Reg
Mill	type	Ms	Ms
Media	type	Ball	Ball
Media	kg	12	10
Solids	g	2000	300
Water	g	1000	350
Time	min	25	6.0
Speed	rpm	50	50
Lime	g	0.7	0.5
End pH	pH	9.7	12.0
End p80	µm	67	0

Float Cell Volume		
Rougher	3.5	Litre
Cleaner	1.5	Litre
Speed	500	rpm



PROJECT	T0396
TEST NO	13
DATE	29/08/2008
TECHNICIAN	MJR

PRODUCT FLOATED
Westgold
D001 Composite

NOTES
Finer Primary Grind
Pre Float cleaner
2 stage Pb Cleaner
2 stage Zn Cleaner

	pH	100 Lime g/t	0.1 SIBX g/t	1 NaCN g/t	2.0 CuSO4 g/t	0.5 RTD1406 g/t	5 ZnSO4 g/t	100 MIBC g/t		Cond Time min	Air L/min	Float Time min	Cum Float Time	Wet Wt g	Con % Solids
CONDITION Pre float1	9.7	352						25		1					
CONDITION Pre float2	9.7							5			2-4	3.0	3.0	850	
CONDITION Pre Float Cl Con	9.6							5		1	4-7	9.5	12.5	1100	
CONDITION Pre Float Cl Con	9.6						628				4-10	11.0	11.0	1500	27
CONDITION Pb Rgher C1	9.8	201		151				5		2					
CONDITION Pb Rgher C1	9.8		4					5		2					
CONDITION Pb Rgher C2	9.7		1					5		1	4-8	3.0	3.0	300	
CONDITION Pb Rgher C2	9.7							5		1	4-8	3.0	6.0	350	
Regrind	12.0	251		201						6					
CONDITION Pb Cl1 Con	11.6	100	8			50		5		2					
CONDITION Pb Cl1 Con	11.6		5					5		1	2-7	7.0	13.0	400	
CONDITION Pb Cl2 C1	11.8							5		1					
CONDITION Pb Cl2 C2	11.8							5			2-4	2.0	2.0	70	40
CONDITION Pb Cl2 C3	11.8							5			3-5	2.0	4.0	70	27
CONDITION Pb Cl2 C3	11.8							5			4-8	3.0	7.0	100	8
CONDITION Zn Rgher C1	10.5	201	8		352			15		2					
CONDITION Zn Rgher C1	10.5							15		1	4-8	5.0	5.0	400	
CONDITION Zn Rgher C2	10.0							5		1	4-8	6.0	11.0	750	
CONDITION Zn Rgher C3	9.8							10		1	4-8	9.0	20.0	850	
Regrind	11.4	352								6					
CONDITION Zn Cl1 Con	11.5	70	8		80			10		1					
CONDITION Zn Cl1 Con	11.5							10		1	2-8	10.0	10.0	1200	
CONDITION Zn Cl2 C1	11.8	111	1					10		1					
CONDITION Zn Cl2 C1	11.8							10			2-3	2.0	2.0	240	48
CONDITION Zn Cl2 C2	11.8		0.5								2-4	2.0	4.0	120	38
CONDITION Zn Cl2 C3	11.8		0.5								4-8	3.0	7.0	150	12
REAGENT TOTALS (g/t)		1638	46	352	432	100	1256	116							

PRODUCTS	WT g	WT %	Cu %	DIST	Pb %	DIST	Zn %	DIST	Fe %	DIST	As %	DIST	SiO2 %	DIST	MgO %	DIST	Ag ppm	DIST	Au ppm	DIST
Pre Float Cl Con	408.7	20.5	0.01	5.1	0.41	3.07	1.45	4.9	4.77	12.5	0.01	12.2	62.6	23.0	20.95	38.5	5	5.3	0.04	4.5
Pb Cl2 C1	27.9	1.4	0.09	3.1	73.1	37.4	7.00	1.6	1.33	0.2	0.26	21.6	2.0	0.1	0.67	0.1	149	10.9	0.33	2.6
Pb Cl2 C2	18.8	0.9	0.13	3.1	60.7	20.9	12.0	1.9	2.48	0.3	0.22	12.3	3.8	0.1	1.17	0.1	135	6.6	0.40	2.1
Pb Cl2 C3	8.0	0.4	0.19	1.9	46.0	6.7	16.3	1.1	4.05	0.2	0.17	4.1	8.9	0.1	2.72	0.1	127	2.7	0.30	0.7
Pb Cl2 Tail	15.6	0.8	0.08	1.6	23.0	6.6	8.65	1.1	5.85	0.6	0.09	4.2	34.5	0.5	11.47	0.8	68	2.8	0.16	0.7
Zn Cl2 C1	114.4	5.7	0.34	48.5	4.99	10.5	61.0	58.0	1.25	0.9	0.01	3.4	1.41	0.1	0.47	0.2	127	38.0	2.26	71.8
Zn Cl2 C2	45.2	2.3	0.25	14.1	7.04	5.8	57.7	21.7	1.88	0.5	0.01	1.3	1.70	0.1	0.48	0.1	116	13.7	0.74	9.3
Zn Cl2 C3	18.0	0.9	0.23	5.2	12.2	4.0	38.4	5.7	7.58	0.9	0.02	1.1	10.5	0.2	2.38	0.2	114	5.4	0.67	3.4
Zn Cl2 Tail	64.4	3.2	0.02	1.6	0.91	1.1	1.64	0.9	7.49	3.1	0.01	1.9	58.7	3.4	17.96	5.2	13	2.2	0.08	1.4
Zn Cl1 Tail	318.6	16.0	0.01	4.0	0.37	2.2	0.74	2.0	10.6	21.6	0.01	9.5	58.9	16.9	16.21	23.2	6	5.0	0.01	0.9
RoTail	950.8	47.8	0.01	11.9	0.10	1.74	0.15	1.2	9.69	59.1	0.01	28.4	65.2	55.7	7.34	31.4	3	7.5	0.01	2.6
CALC	1990.4	100.0	0.04	100.0	2.74	100.0	6.05	100.0	7.83	100.0	0.02	100.0	55.9	100.0	11.2	100.0	19	100.0	0.18	100.0
ASSAY HEAD	1990.4		0.03		3.11		6.47		7.87		0.01		56.7		11.2		20			
CUM PRODUCTS	CUM Wt	WT %	Cu %	CUM	Pb %	CUM	Zn %	CUM	Fe %	CUM	As %	CUM	SiO2 %	CUM	MgO %	CUM	Ag ppm	CUM	Au ppm	CUM
Pre Float Cl Con	408.7	20.5	0.01	5.1	0.41	3.07	1.45	4.92	4.77	12.5	0.01	12.2	62.6	23.0	21.0	38.5	5	5.3	0.04	4.5
Pb Cl2 C1	27.9	1.4	0.09	3.1	73.1	37.4	7.00	1.6	1.33	0.2	0.26	21.6	2.03	0.1	0.67	0.1	149	10.9	0.33	2.6
Pb Cl2 C2	46.7	2.3	0.11	6.2	68.1	58.3	9.03	3.5	1.79	0.5	0.24	34.0	2.74	0.1	0.87	0.2	143	17.5	0.36	4.6
Pb Cl2 C3	54.7	2.7	0.12	8.1	64.8	65.0	10.1	4.6	2.12	0.7	0.23	38.0	3.64	0.2	1.14	0.3	141	20.2	0.35	5.3
Pb Cl2 Tail	70.3	3.5	0.11	9.6	55.6	71.6	9.78	5.7	2.95	1.3	0.20	42.2	10.5	0.7	3.43	1.1	125	22.9	0.31	6.0
Zn Cl2 C1	114.4	5.7	0.34	48.5	4.99	10.5	61.0	58.0	1.25	0.9	0.01	3.4	1.41	0.1	0.47	0.2	127	38.0	2.26	71.8
Zn Cl2 C2	159.6	8.0	0.31	62.6	5.57	16.3	60.1	79.6	1.43	1.5	0.01	4.8	1.49	0.2	0.47	0.3	124	51.7	1.83	81.1
Zn Cl2 C3	177.6	8.9	0.31	67.8	6.25	20.3	57.9	85.4	2.05	2.3	0.01	5.8	2.41	0.4	0.67	0.5	123	57.1	1.71	84.5
Zn Cl2 Tail	242.0	12.2	0.23	69.4	4.83	21.4	42.9	86.2	3.50	5.4	0.01	7.8	17.4	3.8	5.27	5.7	94	59.3	1.28	85.9
Zn Cl1 Tail	560.6	28.2	0.10	73.4	2.29	23.6	19.0	88.2	7.52	27.0	0.01	17.3	41.0	20.7	11.5	29.0	44	64.3	0.56	86.8
FEED	1990.4	100.0	0.04	100.0	2.74	100.0	6.05	100.0	7.83	100.0	0.02	100.0	55.9	100.0	11.2	100.0	19	100.0	0.18	100.0

APPENDIX D: CORE LIST

HOLE NUMBER	SAMPLE NUMBER	SAMPLE TYPE	FROM (m)	TO (m)	Pb %	Zn %	Pb+Zn (%)	Historical Sample
NR108D001	WG14244	1/4 CORE	282	283	1.02	0.68	1.70	548320
NR108D001	WG14245	1/4 CORE	283	284	1.03	1.25	2.28	548321
NR108D001	WG14246	1/4 CORE	284	285	2.66	3.91	6.57	548322
NR108D001	WG14247	1/4 CORE	285	286	2.95	6.93	9.88	548323
NR108D001	WG14248	1/4 CORE	286	287	2.17	6.15	8.32	548324
NR108D001	WG14249	1/4 CORE	287	288	2.14	5.41	7.55	548326
NR108D001	WG14250	1/4 CORE	288	289	1.72	3.75	5.47	548327
NR108D001	WG14251	1/4 CORE	289	290	5.20	12.20	17.40	548328
NR108D001	WG14252	1/4 CORE	290	291	3.82	7.73	11.55	548329
NR108D001	WG14253	1/4 CORE	291	292	3.13	3.46	6.59	548330
NR108D001	WG14254	1/4 CORE	292	293	2.48	1.11	3.59	548331
NR108D001	WG14255	1/4 CORE	293	294	2.20	0.66	2.86	548332
NR108D001	WG14256	1/4 CORE	294	295	1.21	2.40	3.61	548333
NR108D001	WG14257	1/4 CORE	295	296	0.50	0.26	0.76	548334
NR108D001	WG14258	1/4 CORE	296	297	3.70	7.77	11.47	548335
NR108D001	WG14259	1/4 CORE	297	298	3.51	8.99	12.49	548336
NR108D001	WG14260	1/4 CORE	298	299	1.41	4.48	5.89	548337
NR108D001	WG14261	1/4 CORE	299	300	1.41	4.34	5.75	548338
NR108D001	WG14262	1/4 CORE	300	301	1.63	2.42	4.05	548339
NR108D001	WG14263	1/4 CORE	301	302	8.06	18.10	26.16	548340
NR108D001	WG14264	1/4 CORE	302	303	9.06	20.10	29.16	548341
NR108D001	WG14265	1/4 CORE	303	304	4.67	11.48	16.15	548342
NR108D001	WG14266	1/4 CORE	304	305	1.93	5.90	7.83	548343
NR108D001	WG14267	1/4 CORE	305	306	0.69	1.02	1.70	548344
NR108D001	WG14268	1/4 CORE	306	307	2.94	6.30	9.24	548345
NR108D001	WG14269	1/4 CORE	307	308	2.75	3.34	6.09	548346
NR108D001	WG14270	1/4 CORE	308	309	5.37	13.20	18.57	548347
NR108D001	WG14271	1/4 CORE	309	310	2.44	7.28	9.72	548348
NR108D001	WG14272	1/4 CORE	310	311	1.68	7.81	9.49	548349
NR108D001	WG14273	1/4 CORE	311	312	1.10	4.81	5.91	548351
NR108D001	WG14274	1/4 CORE	312	313	2.06	5.96	8.02	548352
NR108D001	WG14275	1/4 CORE	313	314	2.42	6.66	9.08	548353
NR108D001	WG14276	1/4 CORE	314	315	1.52	3.78	5.30	548354
NR108D001	WG14277	1/4 CORE	315	316	1.63	5.62	7.25	548355
NR108D001	WG14278	1/4 CORE	316	317	2.26	5.06	7.32	548356
NR108D001	WG14279	1/4 CORE	317	318	3.45	7.82	11.27	548357
NR108D001	WG14280	1/4 CORE	318	319	2.91	4.23	7.14	548358
NR108D001	WG14281	1/4 CORE	319	320	1.84	3.84	5.68	548359
NR108D001	WG14282	1/4 CORE	320	321	1.33	3.83	5.16	548360
NR108D001	WG14283	1/4 CORE	321	322	0.97	1.19	2.16	548361
NR108D001	WG14284	1/4 CORE	322	323	2.68	6.50	9.18	548362
NR108D001	WG14285	1/4 CORE	323	324	3.35	6.82	10.17	548363
NR108D001	WG14286	1/4 CORE	324	325	1.80	3.98	5.78	548364
NR108D001	WG14287	1/4 CORE	325	326	1.71	1.72	3.43	548365
NR108D001	WG14288	1/4 CORE	326	327	1.71	4.06	5.77	548366
NR108D001	WG14289	1/4 CORE	327	328	1.42	4.21	5.63	548367
NR108D001	WG14290	1/4 CORE	328	329	8.97	12.15	21.12	548368
NR108D001	WG14291	1/4 CORE	329	330	0.53	0.43	0.96	548369
NR108D001	WG14292	1/4 CORE	330	331	2.92	5.57	8.49	548370
NR108D001	WG14293	1/4 CORE	331	332	1.03	2.43	3.46	548371
NR108D001	WG14294	1/4 CORE	332	333	0.51	0.33	0.84	548372
NR108D001	WG14295	1/4 CORE	333	334	1.09	0.56	1.65	548373
NR108D001	WG14296	1/4 CORE	334	335	2.17	0.77	2.94	548374
NR108D001	WG14297	1/4 CORE	335	336	1.88	6.16	8.04	548376
NR108D001	WG14298	1/4 CORE	336	337	2.47	5.13	7.60	548377
NR108D001	WG14299	1/4 CORE	337	338	1.24	1.90	3.14	548378
NR108D001	WG14300	1/4 CORE	338	339	1.35	1.73	3.08	548379
NR108D001	WG14301	1/4 CORE	339	340	3.34	1.64	4.98	548380
NR108D001	WG14302	1/4 CORE	340	341	3.10	5.84	8.94	548381
NR108D001	WG14303	1/4 CORE	341	342	3.09	7.90	10.99	548382
NR108D001	WG14304	1/4 CORE	342	343	5.03	13.18	18.21	548383
NR108D001	WG14305	1/4 CORE	343	344	4.16	10.50	14.66	548384
NR108D001	WG14306	1/4 CORE	344	345	4.62	7.85	12.47	548385
NR108D001	WG14307	1/4 CORE	345	346	3.76	5.02	8.78	548386
NR108D001	WG14308	1/4 CORE	346	347	2.04	3.40	5.44	548387
NR108D001	WG14309	1/4 CORE	347	348	3.06	4.37	7.43	548388
NR108D001	WG14310	1/4 CORE	348	349	4.15	5.19	9.34	548389
NR108D001	WG14311	1/4 CORE	349	350	2.09	4.98	7.07	548390
NR108D001	WG14312	1/4 CORE	350	351	7.77	7.80	15.57	548391
NR108D001	WG14313	1/4 CORE	351	352	1.73	4.42	6.15	548392
AVERAGE					2.71	5.40	8.11	

HOLE NUMBER	SAMPLE NUMBER	SAMPLE TYPE	FROM (m)	TO (m)	Pb %	Zn %	Pb+Zn (%)	Historical Sample
NR108D007	WG14314	1/4 CORE	313	314	5.11	5.62	10.73	347236
NR108D007	WG14315	1/4 CORE	314	315	2.52	1.41	3.93	347237
NR108D007	WG14316	1/4 CORE	315	316	6.23	4.09	10.32	347238
NR108D007	WG14317	1/4 CORE	316	317	2.81	0.96	3.77	347239
NR108D007	WG14318	1/4 CORE	317	318	4.27	6.67	10.94	347240
NR108D007	WG14319	1/4 CORE	318	319	2.93	7.73	10.66	347241
NR108D007	WG14320	1/4 CORE	319	320	3.67	8.43	12.10	347242
NR108D007	WG14321	1/4 CORE	320	321	4.42	11.50	15.92	347243
NR108D007	WG14322	1/4 CORE	321	322	5.48	14.95	20.43	347244
NR108D007	WG14323	1/4 CORE	322	323	5.72	16.05	21.77	347245
NR108D007	WG14324	1/4 CORE	323	324	6.46	19.00	25.46	347246
NR108D007	WG14325	1/4 CORE	324	325	9.72	18.40	28.12	347247
NR108D007	WG14326	1/4 CORE	325	326	3.85	4.23	8.08	347248
NR108D007	WG14327	1/4 CORE	326	327	2.90	5.18	8.08	347249
AVERAGE					4.72	8.87	13.59	

HOLE NUMBER	SAMPLE NUMBER	SAMPLE TYPE	FROM (m)	TO (m)	Pb %	Zn %	Pb+Zn (%)	Historical Sample
NR108D020	WG14328	1/4 CORE	379	380	4.45	6.57	11.02	WG9403
NR108D020	WG14329	1/4 CORE	380	381	3.53	9.43	12.96	WG9404
NR108D020	WG14330	1/4 CORE	381	382	4.28	11.00	15.28	WG9405
NR108D020	WG14331	1/4 CORE	382	383	5.45	12.70	18.15	WG9406
NR108D020	WG14332	1/4 CORE	383	384	2.28	4.21	6.49	WG9407
NR108D020	WG14333	1/4 CORE	384	385	2.65	5.04	7.69	WG9408
NR108D020	WG14334	1/4 CORE	385	386	3.89	8.01	11.90	WG9409
NR108D020	WG14335	1/4 CORE	386	387	2.08	4.36	6.44	WG9410
AVERAGE					3.58	7.67	11.24	

HOLE NUMBER	SAMPLE NUMBER	SAMPLE TYPE	FROM (m)	TO (m)	Pb %	Zn %	Pb+Zn (%)	Historical Sample
NR108D022	WG14336	1/4 CORE	425	426	1.06	3.58	4.64	WG6958
NR108D022	WG14337	1/4 CORE	426	427	0.30	0.77	1.06	WG6959
NR108D022	WG14338	1/4 CORE	427	428	1.31	1.99	3.30	WG6960
NR108D022	WG14339	1/4 CORE	428	429	1.07	2.19	3.26	WG6961
NR108D022	WG14340	1/4 CORE	429	430	2.14	4.42	6.56	WG6962
NR108D022	WG14341	1/4 CORE	430	431	1.32	3.66	4.98	WG6963
NR108D022	WG14342	1/4 CORE	431	432	0.53	0.64	1.17	WG6964
NR108D022	WG14343	1/4 CORE	432	433	2.47	6.66	9.13	WG6965
NR108D022	WG14344	1/4 CORE	433	434	1.34	3.90	5.24	WG6966
NR108D022	WG14345	1/4 CORE	434	435	2.52	6.26	8.78	WG6967
NR108D022	WG14346	1/4 CORE	435	436	0.16	0.30	0.46	WG6968
NR108D022	WG14347	1/4 CORE	436	437	1.96	1.72	3.68	WG6969
NR108D022	WG14348	1/4 CORE	437	438	3.01	2.16	5.17	WG6970
NR108D022	WG14349	1/4 CORE	438	439	1.92	3.10	5.02	WG6971
AVERAGE					1.51	2.95	4.46	

APPENDIX E: MINERALOGY (MODA)