



Project No. 2922

**Frontier Resources Ltd
Stormont Ore Testwork**

June 2009

AMDEL MINERAL LABORATORIES

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EXECUTIVE SUMMARY

Amdel Mineral Laboratories was requested by Mr David Swain on behalf of Frontier Resources Ltd to conduct metallurgical testwork on samples of Stormont ore.

The aim of the testwork was to assess the ore's response to gravity separation and cyanidation of the products at varying grind sizes.

The results of the testwork program are summarised as follows:

Head Grades

Element	Head Grades	
	Assay	Calculated
Gold (g/t)	9.19	10.3
Silver (g/t)	2.5	3.0
Bismuth (g/t)	1830	1986
Arsenic (g/t)	9	-
Copper (g/t)	14	-
Manganese (%)	2.16	-
Iron (%)	17.1	-
Sulphur (g/t)	800	-

Head Sample Size by Size Assay Determination

Product (µm)	Mass (%)	Gold		Silver		Bismuth	
		Grade (ppm)	Dist. (%)	Grade (ppm)	Dist. (%)	Grade (ppm)	Dist. (%)
+2360	15.5	10.6	17.0	2.5	14.3	1740	14.3
+1180	29.1	10.3	31.0	2.8	29.7	1600	24.7
+600	15.6	8.20	13.3	2.0	11.6	1370	11.4
+300	8.8	9.39	8.6	2.5	8.2	1780	8.4
+150	5.8	8.33	5.0	2.0	4.3	1990	6.2
+75	4.6	8.61	4.1	3.0	5.1	1750	4.3
+75	20.5	9.85	20.9	3.5	26.6	2830	30.8
Calc. Head	100.0	9.65	100.0	2.7	100.0	1883	100.0

Gravity Separation and Product Leaching

Test No	Grind P ₈₀ (µm)	Mass Distribution (%)		Gold Distribution (%)		Leach Recovery wrt Product (%)		Total Au Recovery (%)
		Pan Conc.	Gravity Tails	Pan Conc.	Gravity Tails	Pan Conc.	Gravity Tails	
1	150	4.33	95.67	22.1	77.9	90.4	79.0	81.6
2	106	4.07	95.93	23.5	76.5	71.8	79.9	78.0
3	75	3.52	96.48	29.0	71.0	92.3	81.5	84.7

1.0 INTRODUCTION

Amdel Mineral Laboratories was requested by Mr David Swain on behalf of Frontier Resources Ltd to conduct metallurgical testwork on samples of Stormont ore.

The aim of the testwork was to assess the ore's response to gravity separation and cyanidation of the products at varying grind sizes.

Testwork generally comprised:

- Head assay and ICP scan;
- Size by size assay distribution;
- Gravity separation; and
- Gravity separation products cyanide leaching.

The following sections describe the samples used for the testwork program, the procedures used to carry out the testwork and a discussion of the results obtained. Further details of the general testwork program are provided in the Flowsheet in Appendix 1.

2.0 SAMPLES

Table 2.1 summarises the samples submitted for testing. Further details are given in the Sample Receipt form in Appendix 2.

TABLE 2.1 – SAMPLES

Received	Description	Sample Mass (kg)
23 rd April 2009	Ground Ore	43.13
5 th May 2009	¼ Core	31.50

3.0 RESULTS AND DISCUSSIONS

3.1 1ST ORE SHIPMENT - GROUND ORE SIZING

The sample of ground ore received on the 23rd April 2009 was sized and found to be too fine (P_{80} 56 μ m) for the required testwork program. No further work was conducted on this sample.

3.2 2ND ORE SHIPMENT - TESTWORK

31.5kg of ¼ core was received for testing on the 5th May 2009. The sample was staged crushed to 100% -3.35mm, mixed thoroughly and sub-samples split for subsequent testing.

3.2.1 Head Grades

A representative sub-sample of the Stormont Ore was split and assayed for gold, silver, bismuth and a comprehensive ICP scan.

Table 3.1 compares the composite gold, silver and bismuth calculated and assay head grades, additional details are attached in Appendix 3.

TABLE 3.1 – ASSAYED & CALCULATED HEAD GRADES

Element	Head Grades	
	Assay	Calculated
Gold (g/t)	9.19	10.3
Silver (g/t)	2.5	3.0
Bismuth (g/t)	1830	1986
Arsenic (g/t)	9	-
Copper (g/t)	14	-
Manganese (%)	2.16	-
Iron (%)	17.1	-
Sulphur (g/t)	800	-

The calculated head grades are derived from an average of the size by size assay and the gravity separation and product leaching testwork.

The results of a size by size assay determination conducted on a representative sub-sample of the composite after crushing to 100% passing 3.35mm is presented in Table 3.2.

TABLE 3.2 – SIZE BY SIZE ASSAY DETERMINATION

Product (μm)	Mass (%)	Gold		Silver		Bismuth	
		Grade (ppm)	Dist. (%)	Grade (ppm)	Dist. (%)	Grade (ppm)	Dist. (%)
+2360	15.5	10.6	17.0	2.5	14.3	1740	14.3
+1180	29.1	10.3	31.0	2.8	29.7	1600	24.7
+600	15.6	8.20	13.3	2.0	11.6	1370	11.4
+300	8.8	9.39	8.6	2.5	8.2	1780	8.4
+150	5.8	8.33	5.0	2.0	4.3	1990	6.2
+75	4.6	8.61	4.1	3.0	5.1	1750	4.3
+75	20.5	9.85	20.9	3.5	26.6	2830	30.8
Calc. Head	100.0	9.65	100.0	2.7	100.0	1883	100.0

The results of the size by size assay determination show no significant upgrading of the gold into any particular size fraction.

3.2.2 Gravity Separation and Product Leaching

Representative two kilogram sub-samples of composite were ground in a laboratory rod mill to P₈₀ 150 μm , 106 μm and 75 μm and passed through a Knelson Concentrator to produce a gravity concentrate and gravity tailings. The gravity concentrates were then subjected to intensive cyanide leaching in a 2% cyanide solution for 24 hours and the leached solutions and tailings assayed for gold, silver and bismuth.

The gravity tailings were leached in a cyanide solution maintained at 300-500ppm and pH 10.0-10.5 for 48 hours. The 48 hour leach solutions and residues were assayed for gold, silver and bismuth.

The results of this testwork is summarised in Table 3.3, additional details are attached in Appendix 4.

TABLE 3.3 – GRAVITY CONCENTRATE + TAILINGS LEACHING GOLD RESULTS SUMMARY

Test No	Grind P ₈₀ (μm)	Mass Distribution (%)		Gold Distribution (%)		Leach Recovery wrt Product (%)		Total Au Recovery (%)
		Pan Conc.	Gravity Tails	Pan Conc.	Gravity Tails	Pan Conc.	Gravity Tails	
1	150	4.33	95.67	22.1	77.9	90.4	79.0	81.6
2	106	4.07	95.93	23.5	76.5	71.8	79.9	78.0
3	75	3.52	96.48	29.0	71.0	92.3	81.5	84.7

The results in Table 3.3 show that overall gold recoveries ranged from 78% to 85% and increased with finer grinding.

Gold recovery to the gravity concentrate ranged from 22% to 29% again increasing with finer grinding.

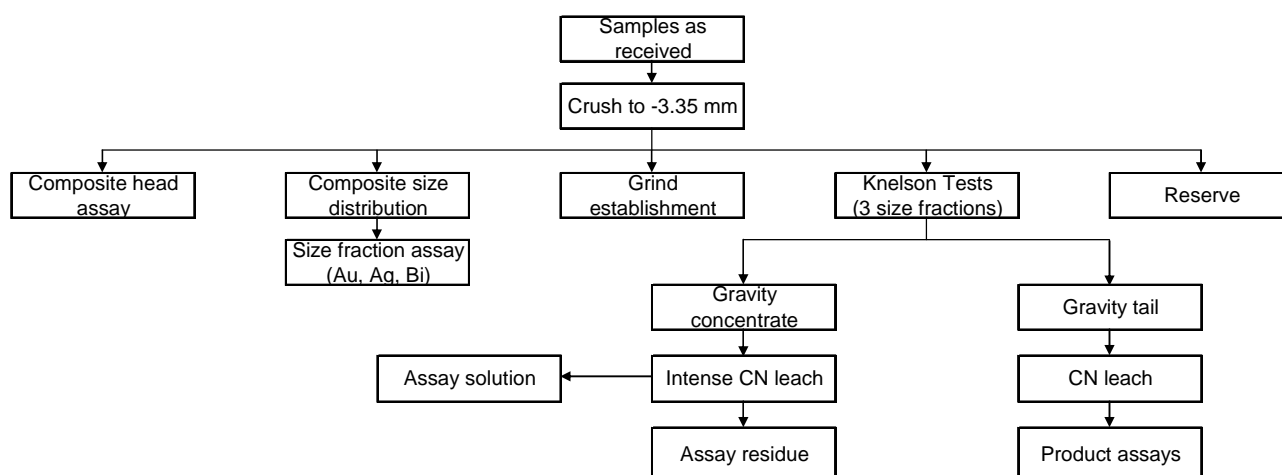
Gold leach recoveries of the gravity tailings ranged from 79% to 81.5% again increasing with finer grinding. The leaching curves from these tests show the gold to be present in two distinct phases i.e. a non-refractory phase with 80-90% of leachable gold recovered in the first two hours of the test and a second refractory gold phase with extremely slow leach kinetics showing leaching still continuing up to 48 hours.

Additional testwork i.e. diagnostic and/or mineralogy would be required to identify the nature of this slow leaching gold component.

APPENDIX 1 – GENERAL TESTWORK PROGRAM

AMDEL MINERAL LABORATORIES TESTWORK FLOWSHEET

Client: Frontier Resources Ltd
Project: Stormont Ore Testwork
Project No: 2922



APPENDIX 2 – SAMPLE RECEIPT FORM

Phone +61 8 9451 8477 Fa x +61 8 9451 4576

Client:	Frontier Resources	Date:	23-Apr-09
Testwork Title:	Gravity Sep & Leaching	Project No:	2922
Page:	1	AQIS Paper Req'd:	No
		Forwarding agent :	N/A

Received By:	Gus Lawson	Date:	23-Apr-09
Approved By:	Gus Lawson	Date:	23-Apr-09

Amdel Mineral Laboratories WA, Project No. 2922

Phone +61 8 9451 8477 Fax +61 8 9451 4576

Client:	Frontier Resources	Date:	05-May-09
Testwork Title:	Gravity Sep & Leaching	Project No:	2922
Page:	1	AQIS Paper Req'd:	No
		Forwarding agent :	N/A

Received By:	Gus Lawson	Date:	05-May-09
Approved By:	Gus Lawson	Date:	05-May-09

[illegible]

APPENDIX 3 – COMPOSITE HEAD ASSAY AND ICP SCAN

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Client: Project: Project No: Composite:	Frontier Minerals Stormont Deposit 2922 Master Composite @ P ₈₀ 150µm
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RECONCILIATION - GRAVITY CONCENTRATE + GRAVITY TAILINGS LEACHING

Sample	Mass		Gold				Silver			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	86.7	4.33	55.3	22.1	90.4	20.0	7.1	12.3	78.9	9.7
Gravity Tailings	1913.32	95.67	8.82	77.9	79.0	61.6	2.3	87.7	56.6	49.6
Calculated Head Grade	2000.0	100.00	10.8	100.0		81.6	3.1	100.0		59.3
Assay Head Grade			9.19				2.5			

Sample	Mass		Bismuth			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	86.7	4.33	6060	12.8	0.0	0.0
Gravity Tailings	1913.32	95.67	1870	87.2	0.0	0.0
Calculated Head Grade	2000.0	100.00	2052	100.0		0.0
Assay Head Grade			1830			

Frontier Resources Ltd

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CYANIDE LEACH TEST REPORT


Client: Project: Amdel Project No: Date: Metallurgist: Test Description: Test No:	Frontier Resources Stormont Deposit 2922 12-May-09 ASL Intensive Cyanide Leach 1A	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Master Composite Gravity Conc 87 P ₈₀ 150µm	Target Operating Conditions Pulp Density: 20 Water Type: Perth Tap Water NaCN (initial): 20000 NaCN (test): pH: 10.0 - 10.5 Dissolved Oxygen: >4ppm
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TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions			Cum. Reagent Usage		Notes
			pH Found	Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)		NaCN (kg/t)	Lime (kg/t)	
Leaching	0	20.0										
	24	20.0	11.31									

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)					Solids Assays (g/t)					Extracted Grade (g/t)					Recovery (%)				
	Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi		
0																				
24	12.50	1.4	0.04								50	6	0			90.4	78.9	0.003		
Residue Assays						5.3	1.5	6060												
Calculated Head Grades						55.3	7.1	6060												

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CYANIDE LEACH TEST REPORT

Client: Project: Project No: Date: Metallurgist: Test Description: Test No:	Frontier Resources Stormont Deposit 2922 11-May-09 GL Cyanide Leach Test 1B	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Gravity Tailings Master Composite 1913 P ₈₀ ~ 150µm	Target Operating Conditions	
				Pulp Density:	50% solids
				Water Type:	Perth Tap Water
				NaCN (initial):	500
				NaCN (test):	300
				pH:	10-10.5
				Dissolved Oxygen:	>4

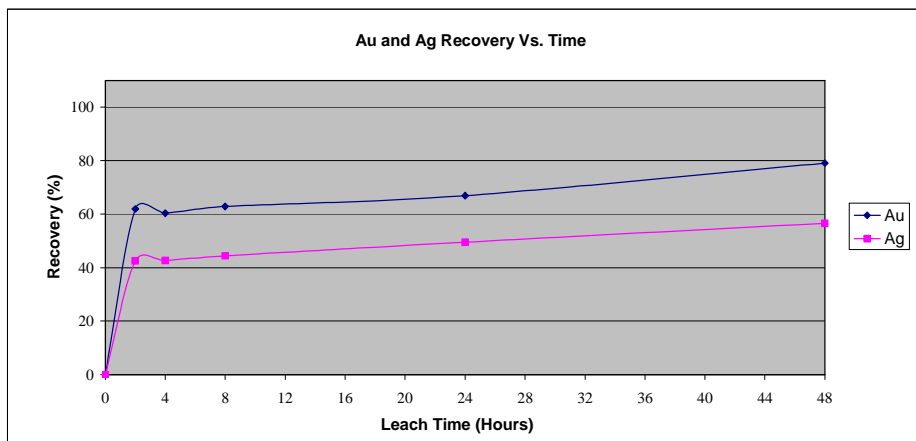
TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements			Reagent Additions			Cum. Reagent Usage		Notes	
			Found	Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)	Other	NaCN (kg/t)		Lime (kg/t)
Leaching	0	50.0	8.20	10.48	6.2		1.00	2.10			1.10	Test carried out using Perth tap water
	2	50.0	10.00	10.29	7.3	360	0.27	0.36		0.16	1.29	~50mls of slurry removed at each sampling time
	4	50.0	10.10	10.44	7.4	387		0.38		0.27	1.48	Solids returned & top-up solution added back in
	8	50.0	10.09	10.55	6.7	324	0.34	0.40		0.33	1.69	
	24	50.0	10.16	10.62	6.2	208	0.56	0.37		0.62	1.89	
	48	50.0	10.14		7.3	150				0.97	1.89	

Total NaCN add	2.17 gms
Nett added	2.14 gms (less NaCN in solution samples)

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)				Solids Assays (g/t)				Extracted Grade (g/t)				Recovery (%)			
	Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi	
0													0.0	0.0		
2	5.47	0.98							5.47	0.98	0		62.0	42.6		
4	5.26	0.97							5.33	0.98	0		60.4	42.7		
8	5.48	1.01							5.55	1.02	0		62.9	44.4		
24	5.69	1.10							5.91	1.14	0		66.9	49.5		
48	6.69	1.25	0.06						6.97	1.30	0		79.0	56.6	0.003	
Residue Assays					1.85	1.0	1870									
Calculated Head Grades					8.82	2.3	1870									



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Client:	Frontier Minerals
Project:	Stormont Deposit
Project No:	2922
Composite:	Master Composite @ P ₈₀ 106µm

RECONCILIATION - GRAVITY CONCENTRATE + GRAVITY TAILINGS LEACHING

Sample	Mass		Gold				Silver			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	81.4	4.07	61.3	23.5	71.8	16.8	8.2	13.4	75.5	10.1
Gravity Tailings	1918.57	95.93	8.49	76.5	79.9	61.1	2.2	86.6	55.4	48.0
Calculated Head Grade	2000.0	100.00	10.6	100.0		78.0	3.2	100.0		58.1
Assay Head Grade			9.19				2.5			

Sample	Mass		Bismuth			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	81.4	4.07	6531	13.8	0.0	0.0
Gravity Tailings	1918.57	95.93	1730	86.2	0.0	0.0
Calculated Head Grade	2000.0	100.00	1926	100.0		0.0
Assay Head Grade			1830			

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CYANIDE LEACH TEST REPORT


Client: Project: Amdel Project No: Date: Metallurgist: Test Description: Test No:	Frontier Resources Stormont Deposit 2922 12-May-09 ASL Intensive Cyanide Leach 2A	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Master Composite Gravity Conc 81 P ₈₀ 106µm	Target Operating Conditions Pulp Density: Water Type: NaCN (initial): NaCN (test): pH: Dissolved Oxygen:
				20 Perth Tap Water 20000 10.0 - 10.5 >4ppm

TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions			Cum. Reagent Usage		Notes
			pH	DO	NaCN	NaCN	Lime		NaCN	Lime		
			Found	Left	(ppm)	(ppm)	(g)	(g)		(kg/t)	(kg/t)	
Leaching	0	20.0										
	24	20.0	11.25									

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)					Solids Assays (g/t)					Extracted Grade (g/t)					Recovery (%)				
	Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi		
0																				
24	11.00	1.5	0.21								44	6	1			71.8	75.5	0.01		
Residue Assays						17.3	2.0	6530												
Calculated Head Grades						61.3	8.2	6531												

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CYANIDE LEACH TEST REPORT

Client: Frontier Resources Project: Stormont Deposit Project No: 2922 Date: 11-May-09 Metallurgist: GL Test Description: Cyanide Leach Test Test No: 2B	Sample Description: Gravity Tailings Sample Ref: Master Composite Sample Weight (g): 1919 Grind Size: P ₈₀ ~ 106µm	Target Operating Conditions Pulp Density: 50% solids Water Type: Perth Tap Water NaCN (initial): 500 NaCN (test): 300 pH: 10-10.5 Dissolved Oxygen: >4
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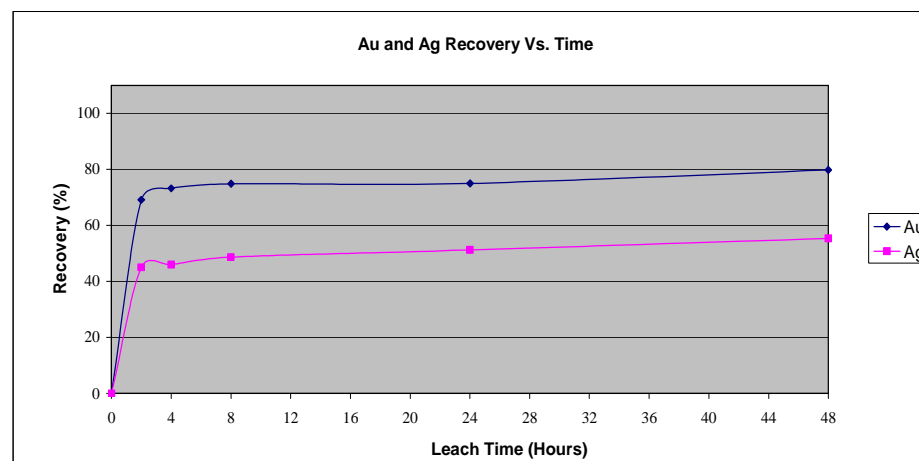
TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions			Cum. Reagent Usage		Notes
			pH Found	pH Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)	Other	NaCN (kg/t)	Lime (kg/t)	
Leaching	0	50.0	8.21	10.53	6.0		1.00	2.21			1.15	Test carried out using Perth tap water ~50mls of slurry removed at each sampling time Solids returned & top-up solution added back in
	2	50.0	10.08	10.31	7.0	377	0.23	0.29		0.14	1.30	
	4	50.0	10.15	10.53	7.0	406		0.43		0.23	1.53	
	8	50.0	10.20	10.51	6.4	329	0.34	0.25		0.30	1.66	
	24	50.0	10.27	10.58	6.1	232	0.51	0.43		0.57	1.88	
	48	50.0	10.32		7.1	132				0.94	1.88	

Total NaCN added	2.08 gms
Nett added	2.05 gms (less NaCN in solution samples)

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)				Solids Assays (g/t)				Extracted Grade (g/t)			Recovery (%)			
	Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi	Au	Ag	Bi	
0												0.0	0.0		
2	5.87	1.01							5.87	1.01	0	69.2	45.1		
4	6.15	1.02							6.22	1.03	0	73.3	46.0		
8	6.29	1.08							6.36	1.09	0	74.9	48.7		
24	6.14	1.11							6.37	1.15	0	75.0	51.2		
48	6.48	1.19	0.05						6.78	1.24	0	79.9	55.4	0.003	
Residue Assays					1.71	1.0	1730								
Calculated Head Grades					8.49	2.2	1730								



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Client:	Frontier Minerals
Project:	Stormont Deposit
Project No:	2922
Composite:	Master Composite @ P ₈₀ 75µm

RECONCILIATION - GRAVITY CONCENTRATE + GRAVITY TAILINGS LEACHING

Sample	Mass		Gold				Silver			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	70.5	3.52	85	29.0	92.3	26.8	10.2	14.7	80.5	11.8
Gravity Tailings	1929.55	96.48	7.57	71.0	81.5	57.8	2.2	85.3	54.1	46.1
Calculated Head Grade	2000.0	100.00	10.3	100.0		84.7	2.9	100.0		57.9
Assay Head Grade			9.19				2.5			

Sample	Mass		Bismuth			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	70.5	3.52	8471	14.3	0.0	0.0
Gravity Tailings	1929.55	96.48	1850	85.7	0.0	0.0
Calculated Head Grade	2000.0	100.00	2083	100.0		0.0
Assay Head Grade			1830			

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CYANIDE LEACH TEST REPORT

Client: Project: Amdel Project No: Date: Metallurgist: Test Description: Test No:	Frontier Resources Stormont Deposit 2922 12-May-09 ASL Intensive Cyanide Leach 3A	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Master Composite Gravity Conc 70 P ₈₀ 75µm	Target Operating Conditions Pulp Density: 20 Water Type: Perth Tap Water NaCN (initial): 20000 NaCN (test): pH: 10.0 - 10.5 Dissolved Oxygen: >4ppm
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TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions			Cum. Reagent Usage		Notes
			Found	pH Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)		NaCN (kg/t)	Lime (kg/t)	
Leaching	0	20.0										
	24	20.0	11.45									

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)					Solids Assays (g/t)					Extracted Grade (g/t)					Recovery (%)			
	Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi	
0																			
24	19.6	2.06	0.19								78	8	1			92.3	80.5	0.01	
Residue Assays						6.5	2.0	8470											
Calculated Head Grades						84.9	10.2	8471	0	0									



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CYANIDE LEACH TEST REPORT

Client:	Frontier Resources	Sample Description:	Gravity Tailings	Target Operating Conditions	
Project:	Stormont Deposit	Sample Ref:	Master Composite	Pulp Density:	50% solids
Project No:	2922	Sample Weight (g):	1930	Water Type:	Perth Tap Water
Date:	11-May-09	Grind Size:	P ₈₀ - 75µm	NaCN (initial):	500
Metallurgist:	GL			NaCN (test):	300
Test Description:	Cyanide Leach Test			pH:	10-10.5
Test No:	3B			Dissolved Oxygen:	>4

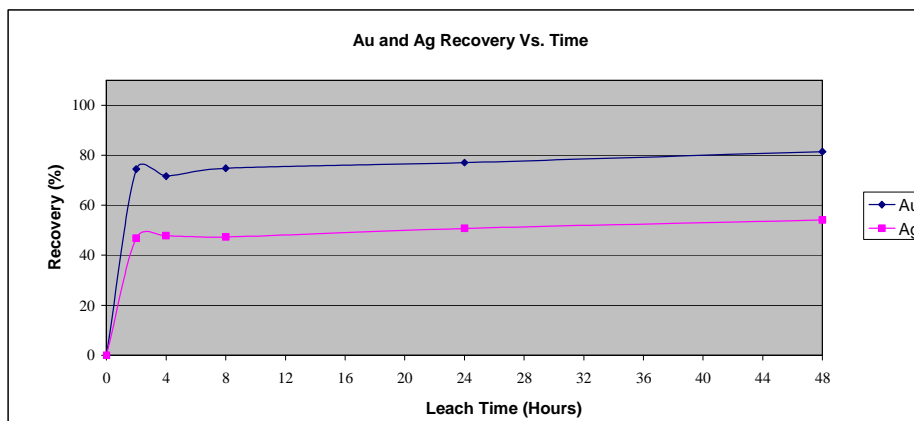
TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions				Cum. Reagent Usage		Notes
			pH	Found	Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)	Other	NaCN (kg/t)	Lime (kg/t)	
Leaching	0	50.0	8.29	10.49	4.7			1.00	2.72			1.41	Test carried out using Perth tap water ~50mls of slurry removed at each sampling time Solids returned & top-up solution added back in
	2	50.0	10.23	10.37	6.5	357	0.27	0.22	0.22		0.16	1.52	
	4	50.0	10.23	10.51	6.6	406		0.30	0.30		0.24	1.68	
	8	50.0	10.22	10.50	6.1	347	0.29	0.35	0.35		0.30	1.86	
	24	50.0	10.32	10.53	6.0	197	0.58	0.37			0.60	2.05	
	48	50.0	10.31		7.0	173					0.92	2.05	

Total NaCN added	2.14 gms
Nett added	2.11 gms (less NaCN in solution samples)

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)				Solids Assays (g/t)				Extracted Grade (g/t)				Recovery (%)			
	Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi	
0													0.0	0.0		
2	5.64	1.02							5.64	1.02	0		74.5	46.9		
4	5.37	1.03							5.43	1.04	0		71.7	47.8		
8	5.61	1.02							5.67	1.03	0		74.8	47.3		
24	5.65	1.07							5.84	1.10	0		77.1	50.7		
48	5.92	1.13	0.14						6.17	1.18	0		81.5	54.1	0.01	
Residue Assays					1.40	1.0	1850									
Calculated Head Grades					7.57	2.2	1850									



APPENDIX 4 – GRAVITY CONCENTRATE & TAILINGS LEACH TEST DATA SHEETS

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Client: Project: Project No: Composite:	Frontier Minerals Stormont Deposit 2922 Master Composite @ P ₈₀ 150µm
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RECONCILIATION - GRAVITY CONCENTRATE + GRAVITY TAILINGS LEACHING

Sample	Mass		Gold				Silver			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	86.7	4.33	55.3	22.1	90.4	20.0	7.1	12.3	78.9	9.7
Gravity Tailings	1913.32	95.67	8.82	77.9	79.0	61.6	2.3	87.7	56.6	49.6
Calculated Head Grade	2000.0	100.00	10.8	100.0		81.6	3.1	100.0		59.3
Assay Head Grade			9.19				2.5			

Sample	Mass		Bismuth			
	(grams)	Dist (%)	Calc Head (g/t) wrt Product	Dist (%)	Leach Rec (%) wrt Product	Leach Rec (%) wrt Feed
Pan Conc	86.7	4.33	6060	12.8	0.0	0.0
Gravity Tailings	1913.32	95.67	1870	87.2	0.0	0.0
Calculated Head Grade	2000.0	100.00	2052	100.0		0.0
Assay Head Grade			1830			

Frontier Resources Ltd

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CYANIDE LEACH TEST REPORT

Client: Project: Amdel Project No: Date: Metallurgist: Test Description: Test No:	Frontier Resources Stormont Deposit 2922 12-May-09 ASL Intensive Cyanide Leach 1A	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Master Composite Gravity Conc 87 P ₈₀ 150µm	Target Operating Conditions Pulp Density: 20 Water Type: Perth Tap Water NaCN (initial): 20000 NaCN (test): pH: 10.0 - 10.5 Dissolved Oxygen: >4ppm
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TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements				Reagent Additions			Cum. Reagent Usage		Notes
			pH Found	Left	DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)		NaCN (kg/t)	Lime (kg/t)	
Leaching	0	20.0										
	24	20.0	11.31									

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)					Solids Assays (g/t)					Extracted Grade (g/t)					Recovery (%)				
	Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi			Au	Ag	Bi		
0																				
24	12.50	1.4	0.04								50	6	0			90.4	78.9	0.003		
Residue Assays						5.3	1.5	6060												
Calculated Head Grades						55.3	7.1	6060												

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CYANIDE LEACH TEST REPORT

Client:	Frontier Resources	Sample Description: Sample Ref: Sample Weight (g): Grind Size:	Gravity Tailings Master Composite 1913 P ₉₀ - 150µm	Target Operating Conditions	
Project:	Stormont Deposit			Pulp Density:	50% solids
Project No:	2922			Water Type:	Perth Tap Water
Date:	11-May-09			NaCN (initial):	500
Metallurgist:	GL			NaCN (test):	300
Test Description:	Cyanide Leach Test			pH:	10-10.5
Test No:	1B			Dissolved Oxygen:	>4

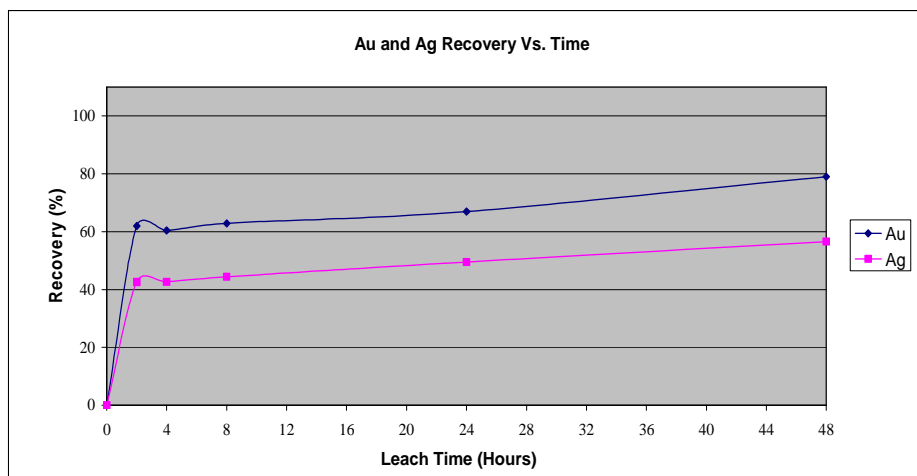
TEST CONDITIONS

Stage	Time (Hrs)	% Solids (w/w)	Pulp Measurements			Reagent Additions				Cum. Reagent Usage		Notes
			pH		DO (ppm)	NaCN (ppm)	NaCN (g)	Lime (g)	Other	NaCN (kg/t)	Lime (kg/t)	
Leaching	0	50.0	8.20	10.48	6.2	360	1.00	2.10			1.10	Test carried out using Perth tap water ~50mls of slurry removed at each sampling time Solids returned & top-up solution added back in
	2	50.0	10.00	10.29	7.3	360	0.27	0.36		0.16	1.29	
	4	50.0	10.10	10.44	7.4	387		0.38		0.27	1.48	
	8	50.0	10.09	10.55	6.7	324	0.34	0.40		0.33	1.69	
	24	50.0	10.16	10.62	6.2	208	0.56	0.37		0.62	1.89	
	48	50.0	10.14		7.3	150				0.97	1.89	

Total NaCN add:	2.17 gms
Nett added	2.14 gms (less NaCN in solution samples)

TEST RESULTS

Time (hrs)	Solution Assays (mg/l)				Solids Assays (g/t)				Extracted Grade (g/t)				Recovery (%)			
	Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi		Au	Ag	Bi	
0													0.0	0.0		
2	5.47	0.98							5.47	0.98	0		62.0	42.6		
4	5.26	0.97							5.33	0.98	0		60.4	42.7		
8	5.48	1.01							5.55	1.02	0		62.9	44.4		
24	5.69	1.10							5.91	1.14	0		66.9	49.5		
48	6.69	1.25	0.06						6.97	1.30	0		79.0	56.6	0.003	
Residue Assays					1.85	1.0	1870									
Calculated Head Grades					8.82	2.3	1870									



APPENDIX 5 – SAMPLE STORAGE POLICY

AMDEL MINERAL LABORATORIES **SAMPLE STORAGE POLICY**

1.0 FREE STORAGE PERIOD

Unused samples, residues and solutions will be stored free of charge for a period of 1 month after the date of issue of the Testwork Report. At the end of this period the samples will, at the option of the client, either be discarded or stored for a further period subject to the payment of a storage fee.

2.0 NOTIFICATION

The onus is placed on the client to notify in writing (by completing the "Sample Disposal Advice", PMPF007 Sample Disposal Advice – attached) its storage requirements as soon as possible after the receipt of the report to ensure storage instructions are implemented prior to the expiry of the free storage period.

If no instructions are received by the end of the free storage period, storage fees will accumulate and be charged automatically on the assumption that continued storage is required.

3.0 STORAGE FEES

3.1 General Storage

A storage fee of \$20.00 per month per 0.1m³ of sample volume or part thereof, will be charged and invoiced monthly. The minimum storage fee will be \$20.00 per month.

3.2 Cold Storage

Limited sample storage is available for low temperature storage to prevent oxidation of reactive samples.

A storage fee of \$50.00 per month per 0.1m³ of sample volume or part thereof, will be charged and invoiced monthly. The minimum storage fee will be \$50.00 per month.

3.3 Quarantine Storage

Amdel Mineral Laboratories facilities are Quarantine Registered and we can provide a limited amount of quarantine sample storage.

A storage fee of \$50.00 per month per 0.1m³ of sample volume or part thereof, will be charged and invoiced monthly. The minimum storage fee will be \$50.00 per month. Any freight and / or quarantine fees associated with the disposal of these samples will be charged on an 'at cost' basis.

4.0 DISPOSAL

Samples will be disposed of at the end of the nominated (by the client) paid storage period by Amdel at a cost of \$20 per 0.1m³ for general samples and \$50 per 0.1m³ for quarantine samples.

A minimum disposal cost of \$20 per sample applies.

If samples are to be transferred to an alternate storage facility, Amdel will arrange this and charge the client at cost.

Craig Kenna
Manager
Mineral Processing WA

APPENDIX 6 – INDEMNITY STATEMENT

INDEMNITY STATEMENT

This report has been prepared for **Frontier Resources Ltd** by Amdel Mineral Laboratories. Other parties, at the discretion of **Frontier Resources Ltd** may be given access to the report or receive copies of the report, but only in full including this page, the title page and appendices.

While Amdel Mineral Laboratories has taken all reasonable care to ensure that the facts and opinions expressed in this report are accurate it does not accept any legal responsibility for any loss or damage suffered resulting from use of this report howsoever caused and whether by breach of contract, negligence or otherwise.

The results presented in this report pertain only to the sample received for testing.