

Nagrom Metallurgical Report

Territory Resources Pty Ltd

23 Ventnor Ave, West Perth

Frances Creek Project

T799

Bulk DMS Testwork

December 20 2011



HEMATITE



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Metallurgical Testing – Assay Laboratory – Pilot Plant Fabrication – Mineral Processing



Nagrom Report Summary

Reference: T799

Dated: December 20 2011

Findings:

- Analysis of the Miller core via magnetic separation did not reveal any particular characteristics in relation to Fe deportment.
- Silica concentrations were shown to be quite low (<4%) in comparison to the initial bulk testwork study and manganese concentrations were increasing as the size fractions decreased.

Territory Resources Pty Ltd		Miller Core Investigation																				Report Date: December 20 2011																															
SAMPLE	Weight	Fe	SiO2	Al2O3	TiO2	Mn	Mg	Ca	V2O5	K2O	Na2O	P	S	LOI ₁₀₀₀	ZrO2	SrO	Sb2O3	PbO	NiO	CuO	ZnO	Cl	CoO	Cr2O3	BaO	As2O3	STAGE Department																										
	g	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	Yield	Fe	SiO2	Mn																						
Millers Core	628.5																																																				
Received Core staged crush via jaws crusher to obtain -6.3mm fraction																																																					
Millers Core Particle Size Distribution post crush																																																					
Calc. Head	605.50	51.055	3.418	0.873	0.055	8.149	0.110	0.082	0.009	0.263	0.046	0.140	0.043	9.818	0.007	0.071	0.004	0.012	0.054	0.002	0.207	0.018	0.018	0.011	0.098	0.024	—	100.00%	100.00%	100.00%	100.00%																						
Sizing mm																																																					
+6.3	5.1	57.209	2.938	0.580	0.027	2.231	0.093	0.043	0.007	0.106	0.024	0.147	0.034	10.520	0.003	0.027	0.005	0.014	0.045	0.001	0.172	0.017	0.014	0.009	0.024	0.024	—	0.84%	0.94%	0.72%	0.23%																						
-6.3+4	145.7	52.532	3.361	0.783	0.090	6.745	0.104	0.068	0.014	0.220	0.045	0.140	0.040	9.903	0.007	0.060	0.007	0.012	0.051	0.002	0.199	0.022	0.019	0.017	0.077	0.022	—	24.06%	24.76%	23.66%	19.92%																						
-4+2	193.8	51.400	3.107	0.758	0.033	8.025	0.104	0.072	0.006	0.230	0.037	0.139	0.041	9.983	0.006	0.067	0.002	0.012	0.053	0.001	0.205	0.015	0.019	0.009	0.091	0.023	—	32.01%	32.22%	29.09%	31.52%																						
-2+1	91.5	49.903	3.115	0.831	0.037	9.373	0.114	0.095	0.008	0.283	0.052	0.141	0.042	9.960	0.008	0.085	0.004	0.012	0.059	0.002	0.226	0.018	0.019	0.008	0.128	0.028	—	15.11%	14.77%	13.77%	17.38%																						
-1	169.4	49.827	4.002	1.113	0.061	9.015	0.121	0.100	0.009	0.332	0.053	0.141	0.047	9.458	0.007	0.081	0.002	0.013	0.056	0.002	0.205	0.016	0.017	0.008	0.109	0.024	—	27.98%	27.30%	32.76%	30.95%																						
Received Millers Core									+6.3mm particle									+4mm particles									+2mm particles																										
Dry Belt Magnet Separation of -4+2mm fraction																																																					
Calc. Head	#####	51.40	3.107	0.758	0.033	8.025	0.104	0.072	0.006	0.230	0.037	0.139	0.041	9.983	0.006	0.067	0.002	0.012	0.053	0.001	0.205	0.015	0.019	0.009	0.091	0.023	—	100.00%	100.00%	100.00%	100.00%																						
Gauss																																																					
1000	0.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.00%	0.00%	0.00%	0.00%																						
2000	0.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.00%	0.00%	0.00%	0.00%																						
4000	0.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.00%	0.00%	0.00%	0.00%																						
6000	0.2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.10%	0.00%	0.00%	0.00%																						
8000	147.1	51.150	3.019	0.783	0.034	8.417	0.106	0.074	0.006	0.243	0.038	0.138	0.042	9.935	0.006	0.069	0.002	0.011	0.054	0.0001	0.208	0.015	0.019	0.009	0.095	0.023	—	75.79%	75.42%	73.65%	79.48%																						
Non-Mags	46.8	52.406	3.395	0.682	0.030	6.829	0.098	0.066	0.006	0.191	0.036	0.142	0.038	10.178	0.006	0.058	0.004	0.014	0.051	0.003	0.197	0.016	0.018	0.010	0.077	0.022	—	24.11%	24.58%	26.35%	20.52%																						
Dry Belt Magnet Separation of -2+1mm fraction																																																					
Calc. Head	90.400	49.903	3.115	0.831	0.037	9.373	0.114	0.095	0.008	0.283	0.052	0.141	0.042	9.960	0.008	0.085	0.004	0.012	0.059	0.002	0.226	0.018	0.019	0.008	0.128	0.028	—	100.00%	100.00%	100.00%	100.00%																						
Gauss																																																					
1000	0.1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.11%	0.00%	0.00%	0.00%																						
2000	0.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.00%	0.00%	0.00%	0.00%																						
4000	8.7	50.437	3.077	1.022	0.048	9.578	0.117	0.105	0.009	0.339	0.061	0.129	0.062	8.790	0.009	0.099	0.005	0.012	0.060	0.003	0.216	0.018	0.018	0.007	0.144	0.018	—	9.62%	9.73%	9.51%	9.83%																						
6000	25.9	50.385	2.928	0.902	0.042	9.382	0.117	0.098	0.010	0.301	0.051	0.139	0.051	9.446	0.008	0.091	0.005	0.014	0.060	0.002	0.226	0.019	0.018	0.008	0.133	0.025	—	28.65%	28.93%	26.93%	28.68%																						
8000	47.7	49.566	3.026	0.782	0.034	9.621	0.112	0.091	0.007	0.276	0.053	0.145	0.036	10.346	0.008	0.082	0.003	0.012	0.059	0.002	0.231	0.018	0.020	0.008	0.128	0.032	—	52.77%	52.41%	51.26%	54.16%																						
Non-Mags	8.0	50.394	4.333	0.699	0.026	7.760	0.109	0.099	0.007	0.210	0.045	0.141	0.029	10.725	0.006	0.064	0.005	0.013	0.056	0.001	0.212	0.020	0.018	0.007	0.093	0.026	—	8.85%	8.94%	12.31%	7.33%																						



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Nagrom Capabilities

Metallurgical Testing and Mineral Beneficiation

(Laboratory to Pilot scale)

- Crushing and grinding - jaw and rolls crushing, rod and ball milling
- Custom drying
- Size separation
- Gravity separation- Spiral, Tables, Jigs and Hydrosizer
- Dense Media cyclone and Cone
- Full transmission x-ray ore sorting
- Magnetic Separation
- Electrostatic Separation
- Flotation Separation
- Gold Recovery and Leaching Program

Mineral Process Plant -Design, Fabrication and Operation

Nagrom has in-house fabrication ability to assist with:

- Process circuit design, construction, deployment and operation.
- Custom mineral processing to specifications
- Sourcing, supplying and commissioning specified equipment
- Facilitate superintended export of blended final product

Mine site Services - Contract Staffing

- On site processing/consulting
- Short/Long term coverage of contract staff

Equipment Hire

- A range of Pilot scale equipment available for hire

Mineral Processing - Metallurgical Testing - Circuitry Design - Equipment Supply



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Nagrom Statement of Certification

Sample Preparation and Analysis:

The testwork is conducted by experienced personnel at Nagrom's Kelmscott metallurgical laboratory under the supervision of a senior metallurgist.

Process solids are assayed in-house using fused bead/XRF methods where applicable otherwise acid/fusion dilution followed by ICP-MS methods are used.

Process solutions are assayed in-house using ICP-OES and ICP-MS techniques.

Ultratrace Laboratories are used to augment our services and provide external reference.

The reports will be signed on behalf of the General Manager and Executive Director of Nagrom (the Mineral Processors).

Dr Slobodanka Vukcevic

For further information, contact:

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Information in the report relating to the metallurgical interpretation, analysis, mineral distribution and recommendations has been compiled and checked by the Senior Metallurgist of Nagrom. Dr Slobodanka Vukcevic has sufficient experience and expertise relevant to this type of test-work through her job experiences and education and she qualifies as a competent person in the field of metallurgy.

The Nagrom team including Slobodanka Vukcevic, Rick Murphy and Tony Wilkinson has a wide range of metallurgical experiences in comminution, gravity separation, flotation, leaching, SX, IX, precipitation, and settling from bench testing scale through to pilot plant scale for the development of flow-sheets or for solving process problems.

Mineral Processing - Metallurgical Testing - Circuitry Design - Equipment Supply