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Wednesday, 23rd April 2008

To Andrew Mortimer, Ashley Hood, Andrew Johnstone

Company name Proto Resources and Investments Limited

Copy to Tony Treasure, Mike Gunn

From Peter Kunst – Manager, Project 344

Subject Update on Barnes Hill Column Leach Tests

Summary of Progress

HRL Testing are currently conducting a test work programme on behalf of Proto Resources and Investments Limited to broadly evaluate the application of heap leaching to nickel recovery from laterite ores from the Barnes Hill project area in Tasmania. Five ore samples were supplied for the test program in the form of drill core intervals, to address the issue of ore variability in general terms. Only selected intervals from the supplied drill core were used to prepare composite samples for testing, as designated by the drill hole number. All test work has been carried out at HRL Testing, with assays carried out internally by ICP methods.

The following memorandum summarises the work completed to date and advises the current status of work in progress. Work completed includes sample receipt and preparation, sample characterisation, acid consumption and agglomerate stability testing. Work in progress consists of four column leach tests and the status of each is summarised as follows:

Test	344.31	344.32	344.39	344.65
Days under irrigation	5	5	5	5
Acid consumption, kg/t	62	62	82	77
Ni extraction, %w/w	16.3	20.0	14.2	11.6
Co extraction, %w/w	4.2	10.7	4.9	7.2

1.0 Introduction

All test work described in this update memorandum was conducted by HRL Testing between November 2007 and April 2008, at HRL Testing's laboratory in Albion, Queensland. The test work programme was in response to a request from Mr Mike Gunn on behalf of Proto Resources and Investments Ltd (Proto), to conduct testing on the application of heap leaching to nickel recovery from laterite ores from the Barnes Hill area.

Five lateritic nickel ore samples were received by HRL Testing in November 2007 for heap leaching evaluation, to address the issue of ore variability in general terms. The ore samples were received as intervals from a drilling programme undertaken by Proto within the Barnes Hill project area. It was understood that the ore was primarily saprolite with low manganese and magnesium levels and moderate iron levels. The received intervals are outlined in Figure 1.1.

Only selected intervals of the supplied drill core were used to prepare the composite samples for testing, as specified by Mike Gunn.

Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m
31	1	32	1	39	1	65	1	74	1
31	2	32	2	39	2	65	2	74	2
31	3	32	3	39	3	65	3	74	3
31	4	32	4	39	4	65	4	74	4
31	5	32	5	39	5	65	5	74	5
31	6	32	6	39	6	65	6	74	6
31	7	32	7	39	7	65	7	74	7
31	8	32	8	39	8	65	8	74	8
31	9	32	9	39	9	65	9	74	9
31	10	32	10					74	10
31	11	32	11					74	11
31	12	32	12						
31	13	32	13						
31	14	32	14						
31	15	32	15						
31	16	32	16						

Figure 1.1 Samples Received for Barnes Hill Heap Leaching Evaluation

2.0 Scope of Work

The test work programme has followed a scope of work outlined in HRL Testing Quotation No. P1007042. The scope of work for the programme was understood to be as follows:

2.1 Sample Preparation

- Receive approximately 320kg of drill core sample taken from six holes around the project area. Each hole was to represent a different ore sample for heap leach testwork.
- Crush each ore sample to 100% passing 25mm, and split into eight representative sub-samples using a rotary splitter.
- Split out around 1kg from one of the sub-samples of each ore sample and set aside for sample characterisation work including moisture content, bulk density, ore density, size distribution and head grade analysis.

2.2 Agglomerate Stability

- Conduct an acid consumption test on a composite sample of all six ore samples.
- Conduct sighter agglomeration tests on each ore sample at four acid additions and visually assess agglomerate stability.
- Agglomerate around 20kg of each ore sample at an acid addition determined from sighter agglomeration tests and cure ahead of column leach testing.

2.3 Column Leach Tests

- Install six 2m x 100mm diameter acrylic columns for column leach testing in open circuit, including leachate and PLS reservoirs, pumps and reticulation.
- Agglomerate around 20kg of each ore sample at an acid addition determined from sighter agglomeration tests and cure ahead of column leach testing.
- Conduct six column leach tests with a leachate of around 50g/L sulphuric acid at an irrigation rate of approximately 10-15L/m^2/h for a period of around 120 days.
- Rinse the columns with water until the discharge pH is greater than 4.
- Dismantle and unload column tailings and prepare for analysis.
- Report the results in a HRL Technical Memorandum.

3.0 Description of Test Methods

3.1 Sample Preparation

The drill core was received in plastic bags inside 20L buckets and was stored in the Corunna Street Laboratory at ambient temperature ahead of the testwork. Each core bag and/or bucket weight was recorded. It was presumed that the sample would be relatively dry, however, the moisture content of the samples was such that some drying was required prior to crushing work.

Selected intervals, as specified by Mike Gunn, were blended into composite samples for column leach testing according to their drill-hole number. The selected intervals are outlined in Figure 3.1 with the remaining material stored at HRL Testing.

Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m	Drill Hole	Interval, m
31	3	32	5	39	2	65	2	74	6
31	4	32	6	39	3	65	3	74	7
31	5	32	7	39	4	65	4	74	8
31	6	32	8	39	5	65	5	74	9
31	7	32	9	39	6	65	6	74	10
31	8	32	10	39	7			74	11
31	9	32	11						
31	10								
31	11								
31	12								
31	13								
31	14								

Figure 3.1. Barnes Hill Intervals Selected Drill Hole Composite Samples

Each drill hole composite (ore sample) was crushed to 100% passing 25mm using a 12-inch by 7-inch Jaques single toggle jaw crusher. The crushed sample was screened using a Kason vibrating screen stack with the oversize recycled back to the crusher and the undersize retained for testing.

The crushed samples were then blended using a rotary sample divider and split into equivalent sub-samples. One of the sub-samples was then further split using the rotary divider and then a riffle splitter to provide a representative sample for characterisation including moisture content, bulk density, ore density, head analysis and particle size distribution.

3.2 Agglomeration of Sample

3.2.1 Acid Consumption Test

A grab sample from each of the ore samples was composited together and pulverised to 80% passing 410 microns in a disc pulveriser. Around 500-600g of this pulverised sample was slurried with approximately 2000mL of water in a baffled glass reactor. The slurry was agitated by an axial impeller using an overhead stirrer. Sulphuric acid was added to maintain the background acidity at 100g/L acid for a period of ten days.

The test was sampled regularly for analysis of acidity. On completion of the test, the final slurry was filtered and the filter cake dried and submitted for tails analysis by digest-ICP method. The final pregnant liquor solution (PLS) was also sampled to determine acid consumption and submitted for analysis by ICP.

3.2.2 Sighter Agglomeration Work

Samples of crushed ore were agglomerated by rolling in a 15L plastic bucket with three lifters to ensure good contact between the wetted materials. The bucket was fitted inside a cement mixer to allow constant and consistent rotation of the sample at around 30rpm.

The ore was initially added to the mixer and wetted with concentrated sulphuric acid before adding water on a visual basis until the agglomerates were observed to be well formed and competent. Each test was conducted for around 10 minutes. Following agglomeration, the agglomerates were allowed to cure at ambient conditions for a period of up to 48 hours and visually assessed for any breakdown in the agglomerate structure.

3.2.3 Bulk Agglomeration

Agglomeration was conducted in a cement mixer fitted with three lifters to ensure good contact between the wetted materials and consistent rotation at around 30rpm. The ore was initially added to the mixer and wetted with the required amount of concentrated sulphuric acid with water added on a visual basis until the agglomerates are observed to be well formed and competent. Each batch was agglomerated for around 10 minutes.

Following agglomeration, the agglomerates were loaded into 80mm diameter columns and allowed to cure in-situ at ambient conditions for a period of at least 72 hours prior column leaching.

3.3 Column Leach Tests

Column leach tests have been commenced for four of the five ore samples that were characterised. The tests are being conducted in acrylic columns with an inner diameter of 80mm and a height of up to 2000mm for a period of up to 120 days. Each column contains approximately 10kg of ore in total, depending on the bulk density of the crushed and agglomerated material.

Each column was initially loaded with crushed quartz, to a height of around 50mm, to act as a screen. The agglomerated ore was then loaded into the column followed by a further 50mm of crushed quartz was added to the top of the column to act as a dispersing media for the incoming leachate.

The columns are being operated in an open hydraulic circuit, with leachate entering at the top of the column, percolating through the agglomerate bed and exiting at the base of the column. The irrigation rate to each column will be maintained at approximately 10-15L/m^2/h and the initial leachate acidity would be in the order of 25g/L.

PLS from each column is being collected with samples taken regularly for mass balance and analysis. All solution weights are being logged regularly (twice each week) and specific gravity data recorded. The first 200L of PLS from all the column tests will be blended and stored after data collection and sampling. Excess PLS after the first 200L will be neutralised and discarded.

On completion of the leaching tests, the columns will be rinsed with Brisbane City tap water, unloaded and the tailings dried. The dried column tailings will be sub-sampled and submitted for tails analysis.

The analyses carried out during the column leach test will be:

Head solids	Digest - ICP Multi element scan - on commissioning
Tail solids	Digest - ICP Multi element scan - on completion
Leachate(s)	Acid, SG – whenever replenished
PLS(s)	Ni, Co, Fe, Mg, Cr, pH, acid, Eh, SG – twice weekly

4.0 Progress Results and Discussion

4.1 Sample Characterisation

Samples of Barnes Hill ore were received as drill core intervals in sealed plastic bags and crushed to 100% passing 25mm. Selected intervals from each drill hole received were blended together to yield a drill hole composite. Each drill hole composite was crushed to 100% passing 25mm and characterised, as shown in Figure 4.1.1. The particle size distributions of the crushed samples are shown in Figure 4.1.2 and head analyses of the drill hole composites are listed in Figures 4.1.3 and 4.1.4.

The received samples were generally very moist with excess water contained in some bags. Hole 74 was the exception; it was relatively dry, appeared less coarse and was a light grey colour rather than the brown commonly associated with lateritic ore. The moisture content was measured after some drying of the sample at ambient conditions to remove excess surface moisture.

Hole No.	31	32	39	65	74
Bulk density, t/m^3	0.837	0.857	0.760	0.900	1.247
Ore SG	2.178	2.403	2.582	2.471	2.261
Moisture, %w/w	24.99	25.20	21.72	10.99	5.66

Figure 4.1.1. Ore Characterisation of Drill Hole Composite Samples

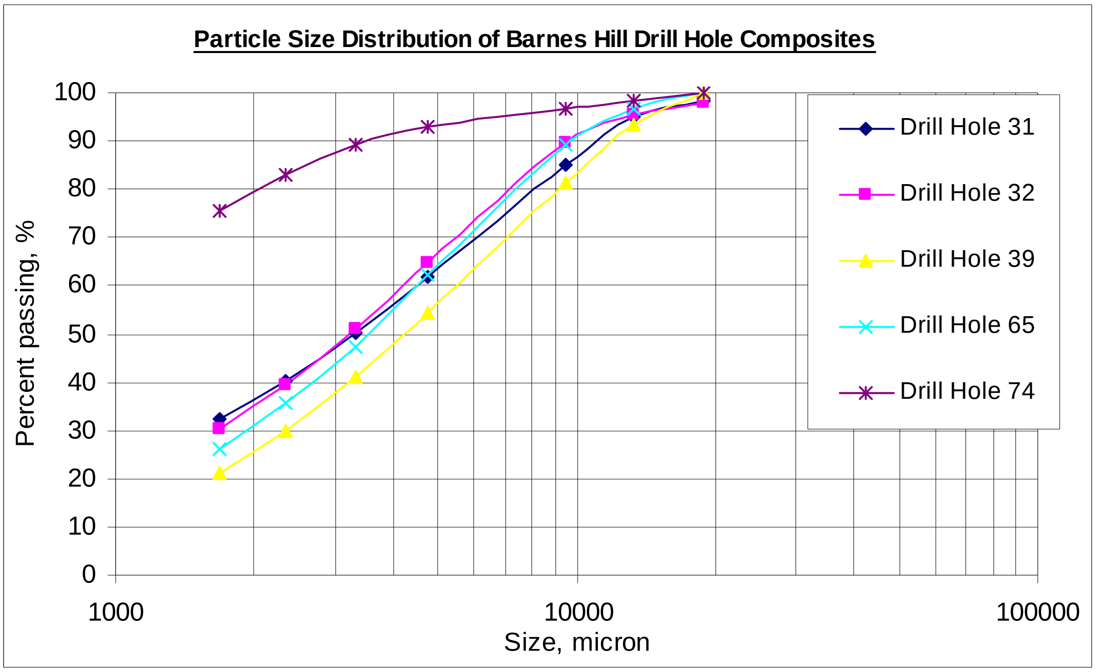

Figure 4.1.2 Particle Size Distribution Curve for Crushed Drill Hole Composites

Element	Ni	Co	Fe	Mg	Al	Cr	Si	Mn	Ca
Units	%	%	%	%	%	%	%	%	%
Hole 31	0.600	0.063	19.60	7.65	3.65	0.822	0.86	0.387	0.651
Hole 32	0.708	0.021	18.38	4.05	9.90	0.372	2.55	0.185	0.771
Hole 39	0.976	0.066	18.93	10.45	6.76	0.205	1.94	0.690	0.448
Hole 65	0.468	0.125	30.37	3.46	8.14	0.671	1.95	0.382	0.883
Hole 74	0.207	0.011	4.62	24.14	0.19	0.014	0.53	0.072	0.082

Figure 4.1.3. Head Assays for Drill Hole Composite Samples - Summarised

Element	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Hole 31	36498	<10	169	<2	30	6511	<2	632	8216	15	195961	724	76536
Hole 32	98976	44	1165	<2	<20	7712	<2	209	3716	13	183827	5796	40526
Hole 39	67575	14	389	<2	<20	4476	<2	655	2048	15	189300	1467	104459
Hole 65	81403	41	690	<2	28	8830	<2	1251	6712	51	303735	4406	34640
Hole 74	1858	<10	121	<2	<20	823	<2	106	136	15	46196	540	241364

Element	Mn	Mo	Na	Ni	Pb	S	Sb	Si	Sr	Ti	U	V	Zn
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Hole 31	3870	<10	1016	5998	<20	365	<10	8556	10	301	713	37	1425
Hole 32	1852	<10	5224	7079	<20	354	<10	25518	79	2714	651	107	1119
Hole 39	6904	<10	1548	9759	32	281	<10	19442	15	637	670	53	1536
Hole 65	3816	<10	2552	4682	24	370	<10	19460	32	1622	1125	67	1216
Hole 74	718	<10	682	2069	<20	957	<10	5268	6	43	<100	<2	1130

Figure 4.1.4 Head Assays for Drill Hole Composite Ore Samples - Extended

Grab samples from each of the crushed drill hole samples were blended together to yield a Barnes Hill blended composite sample for the acid consumption test. The head analysis for this sample is listed in Figure 4.1.5.

Element	Ni	Co	Fe	Mg	Al	Cr	Si	Mn	Ca
Units	%	%	%	%	%	%	%	%	%
Barnes Hill Comp.	0.596	0.067	17.76	7.78	4.72	0.509	1.57	0.368	0.271

Figure 4.1.5. Head Assay for Barnes Hill Blended Composite Head Assay

4.2 Acid Consumption Test

The acid consumption for the Barnes Hill blended composite sample pulverised to around 80 micron was 662kg/t after 18 days of agitated leaching. The nickel recovered to the leach solution was 3.63kg per tonne of ore, equivalent to a nickel extraction of around 67.10%w/w. Approximately 9.39%w/w of the sample was consumed during the leach. The test results are shown in Figure 4.2.1.

Client:	Proto Resources and Investments Ltd
Test Description:	Agitated Leach, 100g/L acid
Sample:	Barnes Hill Composite
Test:	344.01

Test Conditions

p100, mm:	Pulverised
Temperature, oC:	ambient
Acidity set-point, g/L:	100
Duration, days:	18

Notes

Grab samples taken from Holes 31, 32, 39, 65, 74 composites.
Grab samples blended together for acid consumption test.

Samples / **Assay**

Solids		Ni, %	Co, %	Fe, %	Mg, %	Al, %
Sample weight, g:	496.33	0.596	0.067	17.76	7.78	4.72
Tails weight, g:	449.71	0.216	0.027	12.96	2.45	3.34

Solutions		Acid, g/L	Ni, ppm	Co, ppm	Fe, ppm	Mg, ppm	Al, ppm
Leachate, mL	1800	111.81	0	0	0	0	0
PLS, mL	1590	90.72	1089	105.9	12625	20794	2966
Wash, mL	252	23.05	286	29.2	3621	4943	821

Balances

Acid		**Nickel**	
Acid added	478.95 g	Nickel in Ore	2.96 g
Acid remaining	150.05 g	Nickel in Tail	0.97 g
Acid consumed	328.90 g	Nickel in PLS	1.73 g
Acid consumption,	662.66 kg/t	Nickel in Wash	0.07 g
		Nickel recovery	3.63 kg/t
		Nickel extraction	67.10 %w/w
		Mass Balance	93.90 %

Figure 4.2.1. Acid Consumption Test Results – Barnes Hill Blended Composite

4.3 Agglomeration Tests

Tests were conducted at 15kg/t, 30kg/t, 60kg/t and 90-kg/t acid additions. These agglomerates were cured at ambient conditions for approximately 10 hours. A summary of the test results are shown in Figures 4.3.1 – 4.3.5.

Project:	344
Client:	Proto Resources and Investments Ltd
Ore Sample:	Hole 31 Composite
Test Description:	Agglomeration Stability

Agglomeration Test						
Test reference	31.a	31.b	31.c	31.d		
Acid addition, kg/t	15	30	60	90		
Fresh sample weight, g	1188	1240	1197	1297		
Voidage, %	61.57	61.57	61.57	61.57		
Agglomeration Results						
Moisture content (water only),%	26.77	26.73	26.42	25.87		
Visual estimate of size: min, mm	2	2	1	2		
Visual estimate of size: max, mm	35	33	44	33		
Visual estimate of size: avg, mm	6	6	6	6		
Cure time, hr	24	24	24	24		
Bulk density, t/m3	0.776	0.787	0.820	0.845		
Voidage, %	64.39	63.85	62.36	61.21		
Stability Assessment	Excellent	Excellent	Excellent	Excellent		

Figure 4.3.1 Agglomeration Tests of Hole 31 Composite

hrltesting						
Project:	344					
Client:	Proto Resources and Investments Ltd					
Ore Sample:	Hole 32 Composite					
Test Description:	Agglomeration Stability					
Agglomeration Test						
Test reference	32.a	32.b	32.c	32.d		
Acid addition, kg/t	15	30	60	90		
Fresh sample weight, g	1117	1065	1077	1046		
Voidage, %	64.34	64.34	64.34	64.34		
Agglomeration Results						
Moisture content (water only),%	27.37	26.63	25.87	25.98		
Visual estimate of size: min, mm	2	2	2	2		
Visual estimate of size: max, mm	20	20	30	30		
Visual estimate of size: avg, mm	5	4	4	4		
Cure time, hr	24	24	24	24		
Bulk density, t/m3	0.851	0.870	0.872	0.863		
Voidage, %	64.59	63.78	63.70	64.07		
Stability Assessment	Good	Good	Good	Good		

Figure 4.3.2 Agglomeration Tests of Hole 32 Composite

hrltesting						
Project:	344					
Client:	Proto Resources and Investments Ltd					
Ore Sample:	Hole 39 Composite					
Test Description:	Agglomeration Stability					
Agglomeration Test						
Test reference	39.a	39.b	39.c	39.d		
Acid addition, kg/t	15	30	60	90		
Fresh sample weight, g	1209	1232	1228	1167		
Voidage, %	70.57	70.57	70.57	70.57		
Agglomeration Results						
Moisture content (water only),%	23.66	23.88	23.09	23.31		
Visual estimate of size: min, mm	1	1	1	1		
Visual estimate of size: max, mm	31	34	36	35		
Visual estimate of size: avg, mm	5	6	7	6		
Cure time, hr	18	18	18	18		
Bulk density, t/m3	0.964	0.920	0.986	0.954		
Voidage, %	62.67	64.38	61.81	63.04		
Stability Assessment	Excellent	Excellent	Excellent	Excellent		

Figure 4.3.3 Agglomeration Tests of Hole 39 Composite

hrltesting	**Project:** 344					
	Client: Proto Resources and Investments Ltd					
	Ore Sample: Hole 65 Composite					
	Test Description: Agglomeration Stability					
Agglomeration Test						
Test reference	65.a	65.b	65.c	65.d		
Acid addition, kg/t	15	30	60	90		
Fresh sample weight, g	1187	1164	1164	1150		
Voidage, %	62.48	62.48	62.48	62.48		
Agglomeration Results						
Moisture content (water only),%	20.72	20.55	18.92	18.21		
Visual estimate of size: min, mm	1.5	1.5	1.5	1.5		
Visual estimate of size: max, mm	25	20	35	35		
Visual estimate of size: avg, mm	4	4	5	4		
Cure time, hr	24	24	24	24		
Bulk density, t/m3	0.968	0.953	1.006	1.013		
Voidage, %	60.83	61.43	59.30	58.99		
Stability Assessment	Excellent	Excellent	Excellent	Excellent		

Figure 4.3.4 Agglomeration Tests of Hole 65 Composite

hrltesting	**Project:** 344					
	Client: Proto Resources and Investments Ltd					
	Ore Sample: Hole 74 Composite					
	Test Description: Agglomeration Stability					
Agglomeration Test						
Test reference	74.a	74.b	74.c	74.d		
Acid addition, kg/t	15	30	60	90		
Fresh sample weight, g	1233	1222	1212	1239		
Voidage, %	44.85	44.85	44.85	44.85		
Agglomeration Results						
Moisture content (water only),%	14.30	14.49	13.09	12.74		
Visual estimate of size: min, mm	2	2	1	1		
Visual estimate of size: max, mm	37	35	30	38		
Visual estimate of size: avg, mm	5	5	5	5		
Cure time, hr	24	24	24	24		
Bulk density, t/m3	1.209	1.127	1.007	0.877		
Voidage, %	46.51	50.14	55.46	61.19		
Stability Assessment	Poor	V. Poor	V. Poor	V. Poor		

Figure 4.3.5 Agglomeration Tests of Hole 74 Composite

It was observed that the Hole 65 composite sample was somewhat agglomerated prior to the test proper. This was due to receiving the sample with excessive moisture and the requirement to partially dry the sample prior to preparation. As the sample was dried, it tended to form lumps that were very difficult to break down ahead of the agglomeration testing. Indeed, these dried lumps of ore had the appearance of agglomerates.

Stability of the formed agglomerates from each of the composites tested was generally excellent, with only minor break down in the agglomerate structure observed. The exception was Hole 74 which did not agglomerate under the test conditions. This particular sample was much finer than the others, with very little coarse material for which the fines to bind and agglomerate onto. This sample was also much drier than the others.

As a result, it was decided to adopt 60kg/t as the acid addition for agglomeration of drill hole composites 31, 32, 39 and 65 and exclude drill hole 74 for column leach testing. This acid addition figure was consistent with previous work programmes on other lateritic ore samples.

4.4 Column Leach Tests

Progress results of column leach tests are summarised in Figure 4.4.1. Figures 4.4.2 – 4.4.5 show the leach cycle kinetics based on PLS analysis at HRL Testing. Figure 4.4.6 shows the nickel recovery versus acid consumption for the leach tests.

Samples of the Barnes Hill drill hole composites 31, 32, 39 and 65 were agglomerated with 60kg/t acid addition and loaded into four 80mm diameter columns, each to a height of 1.7m. Each column is being irrigated at an average of 11.6L/m^2.h using a leachate of around 25g/L in an open circuit manner.

It has been five days since leachate was first applied to the tests and the cumulative solution flux to date has been around 0.76kL/t. Acid consumption for column 344.31, 344.32, 344.39 and 344.65 has been 62kg/t, 62kg/t, 82kg/t and 77kg/t, respectively, and nickel recovery (based on PLS assay) has been 16.3%w/w, 20.0%w/w, 14.2%w/w and 11.6%w/w, respectively.

Column Leach No.	**344.31**	**344.32**	**344.39**	**344.65**	
Cumulative Days Operating	4.85	4.85	4.85	4.85	days
Acid Consumption	62.33	61.94	81.94	77.13	kg/t
Extraction Data					
Nickel	16.30	20.03	14.19	11.59	%w/w
Cobalt	4.19	10.72	4.89	7.17	%w/w
Iron	1.78	2.77	1.67	1.14	%w/w
Magnesium	10.88	18.22	7.63	16.09	%w/w
Chromium	1.50	3.27	3.25	1.70	%w/w
Physical Performance					
Ore column Height	1670	1670	1755	1750	mm
Ore slump	4.30	5.65	1.40	1.13	%
Leachate Data					
Current Leachate irrigation rate	10.92	11.98	11.79	11.61	L/m^2.h
Current Leachate acid level	25.37	25.21	25.01	25.50	g/L
PLS Data					
Cumulative leachate flux	0.79	0.82	0.77	0.66	kL/t
Current PLS acid level	0.49	4.90	0.00	6.00	g/L
Current PLS nickel tenor	713.2	874.0	970.1	374.3	mg/L
Current PLS cobalt tenor	22.6	18.1	25.3	77.5	mg/L
Current PLS iron tenor	3727.3	4626.6	2828.2	3721.4	mg/L
Current PLS magnesium tenor	7601.6	5448.7	6642.0	4394.6	mg/L
Current PLS chromium tenor	106.2	85.6	50.3	88.1	mg/L
Average PLS acid level	0.32	3.33	0.00	3.97	g/L
Average PLS nickel tenor	1.23	1.73	1.81	0.82	g/L
Average PLS cobalt tenor	0.03	0.03	0.04	0.14	g/L
Average PLS iron tenor	4.39	6.21	4.11	5.24	g/L
Average PLS magnesium tenor	10.48	9.01	10.39	8.39	g/L
Average PLS chromium tenor	0.15	0.15	0.09	0.17	g/L

Figure 4.4.1 Barnes Hill Column Leaches – Progress Summary

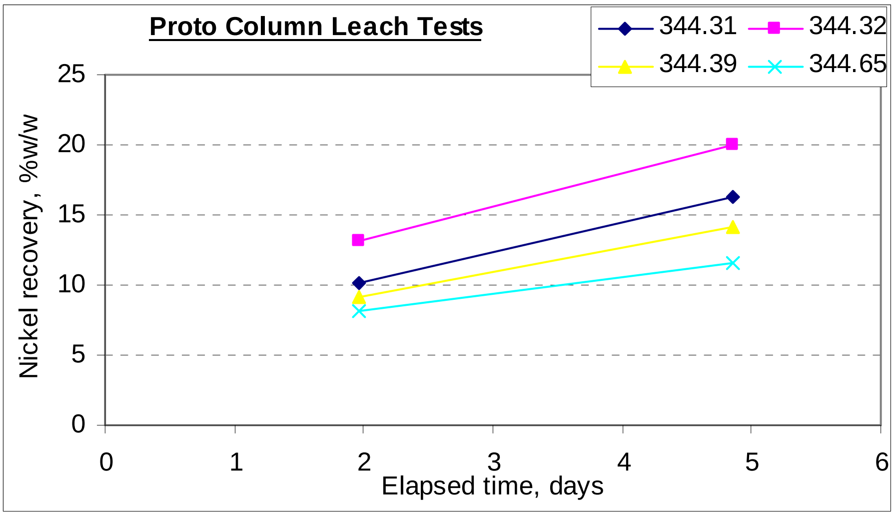

Figure 4.4.2 Barnes Hill Column Leaches – Nickel Recovery vs Time
PLS based recovery

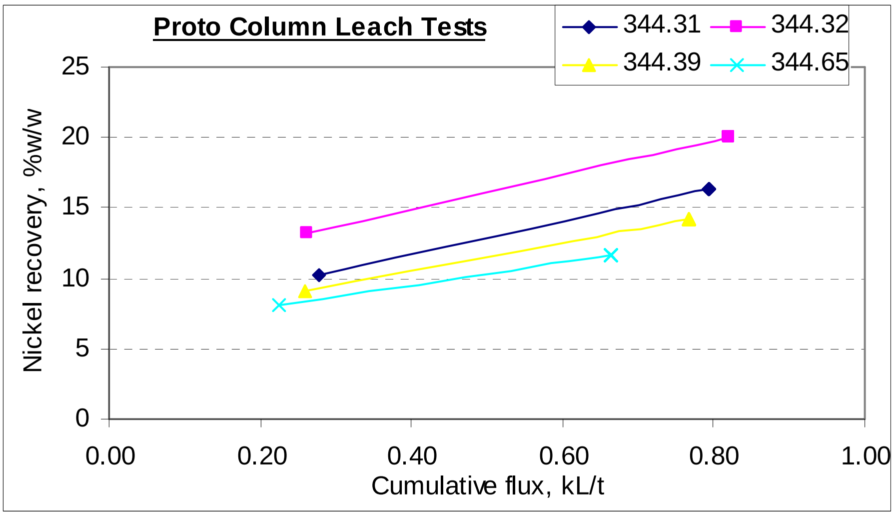

Figure 4.4.3 Barnes Hill Column Leaches – Nickel Recovery vs Flux
PLS based recovery

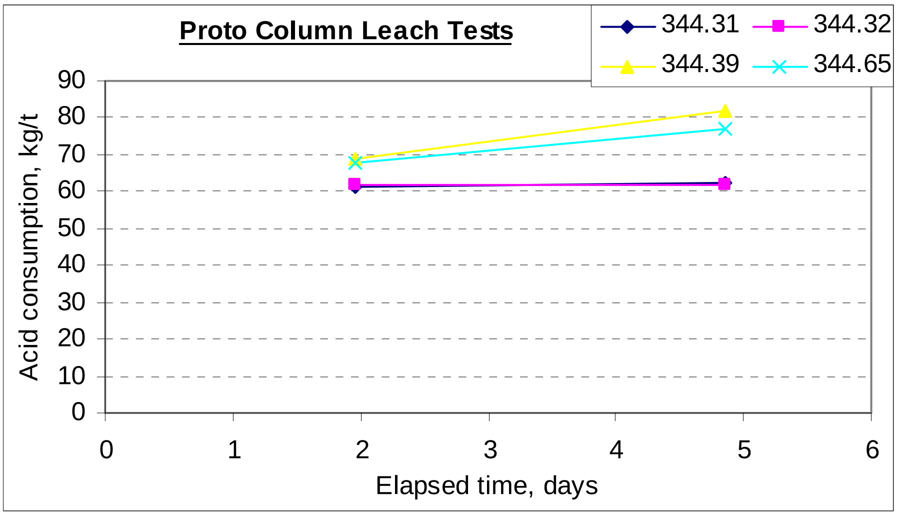

Figure 4.4.4 Barnes Hill Column Leaches – Acid Consumption vs Time

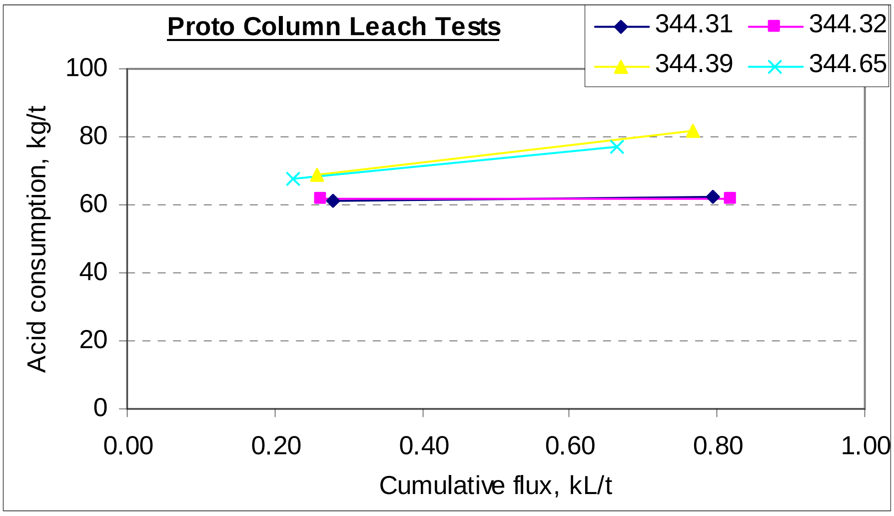

Figure 4.4.5 Barnes Hill Column Leaches – Acid Consumption vs Flux

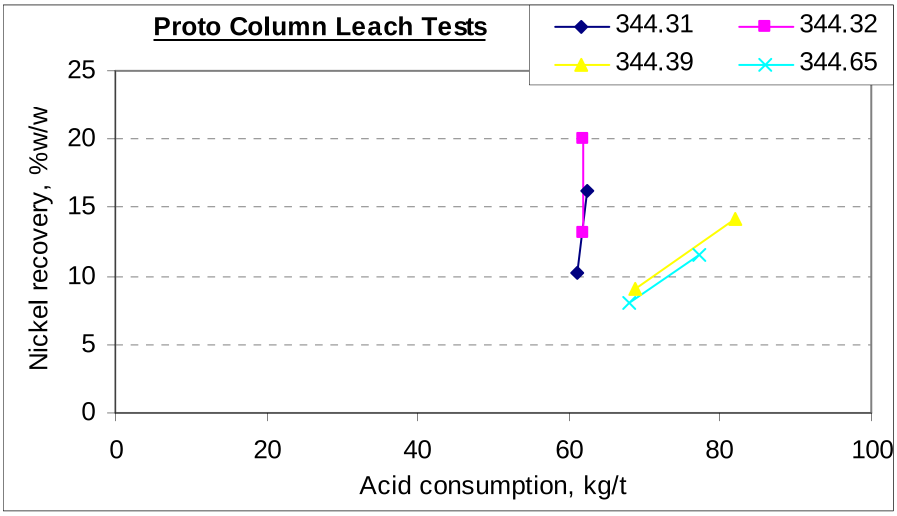

Figure 4.4.6 Barnes Hill Column Leaches – Ni Recovery vs Acid Consumption
PLS based recovery