PROGRESS REPORT NO. 2 ON THE TESTING OF YOUR SAMPLES OF GOLD TAILING, OUR LOT NO.

By

Kerley Mining Products, Inc.

Prepared by:

R.O. Huch
December 4, 1985

KERLEY INDUSTRIES INC. MINING CHEMICALS DIVISION

December 4, 1985

Your second sample of gold bearing tailing was received at our laboratory on Oct. 30, 1985 and was designated as our Lot No. 354. The head assay for this sample was determined to be 0.086 oz. Au per ton. The average calculated head assay for six tests conducted on this sample was 0.097 oz. Au per ton.

This sample was submitted for the purpose of checking the cyanidation procedures used and results obtained with the Lot No. sample. Sample preparation was similar in that the plus 1/4 inch tramp oversize was removed by screening and was rejected.

The results obtained in the cyanidation testing are summarized as follows:

Sample Washed With Water Before Cyaniding

Test No	% Au Rec.	Time (Hrs)	% NaCN Solution Initial	% NaCN Solution Final	Consumptions* NaCN	Consumptions* CaO	pH
1	91.8	24	0.1	0.049	1.02	27.2	9.8
2	93.2	24	0.5	0.331	3.38	24.2	10.4
3	93.7	24	1.0	0.637	7.26	21.0	10.5
Sample Unwashed Before Cyaniding							
4	84.7	24	0.1	0.051	0.98	35.4	9.6
5	88.2	24	0.5	0.353	2.94	31.5	10.7
6	91.9	24	1.0	0.696	6.08	28.2	10.7

* Pounds per ton
Note: All tests were conducted at 50% solids.

Santo Tomas Rt. Box 73 Sahuarita, Arizona 85629 (602) 791-2940

These test results confirm the observations formed during the testing of the earlier sample. Gold recoveries were high and cyanide consumptions were low when leaching at 0.1% NaCN solution strength. Sample washing appeared to be beneficial regarding gold recovery, but did not reduce NaCN consumption. Lime consumption was slightly lower, but still remained high. Perhaps additional washing would help to reduce lime requirements.

We thank you for the opportunity to do this testwork for you, and look forward to a continuation as further test samples are generated.

Respectfully submitted,

R.O. Huch
Manager

KERLEY INDUSTRIES MINING CHEMICALS

FLOTATION TEST DATA SHEET

Company

Product: Head Sample

Process: 50% solids 0.1 % NaCN, 24 hrs.

Lot No.

Date: 11-5-85

By: DO

Test No.: 1

PRODUCT	Weight	Percent Weight	ASSAY oz/T Au					UNITS Au			% DISTRIBUTION Au				
Preg.	532.7		0.082					44.09			91.8				
Residue	462.3		0.0085					3.93			8.2				
Head (calc)	500		0.096					48.02			100.0				

OPERATION		11-5-85	11-6-85											GRINDING PRODUCT	
		H_2O Leach	OFF			START		OFF		#/T					
TIME		8:30	8:30	12:00	1:00	2:00	4:30	2:00		addition	left	unused			
REAGENTS - LBS. PER TON													MESH	%	%
													+10		
additions (g)	CaO			2.0	4.0		1.0						+14		
	NaCN					0.5g							+20		
													+28		
Titrations (%)	CaO					1.2	0.2	0.034		8.0	0.68	27.2	+35		
	NaCN					0.1		0.049		8.0	0.98	1.02	+48		
													+65		
													+100		
													+150		
MACHINE	ON ROLLS												+200		
R.P.M.		30											+325		
pH					8.0	10.8	10.1	9.8					-325		
% SOLIDS		50%													
TEMPERATURE	ambient														

REMARKS: 500g charge Tare = 1202 + ore + H_2O = 2202

After H_2O Leach = 1790 ore + 412 ml H_2O = 2202

RD-3

KERLEY CHEMICAL CORPORATION
ANALYTICAL DIVISION
SA) TOMAS RT. BOX 73 (602) 791-294C
SAHUARITA, ARIZONA 85629

ANALYTICAL REPORT

11-7-85

SAMPLE ID.	GOLD OZ./TON	IRON mg/L	CALCIUM g/L	COPPER mg/L	ZINC mg/L			
H_2O Leach		0.168	0.201	8.75	0.710			
#1 LL	0.082							
#1 Residue	0.0085							
#2 LL	0.085							
#2 Residue	0.0072							
#3 LL	0.086							
#3 Residue	0.0067							
#4 LL	0.0790							
#4 Residue	0.016							
#5 LL	0.0817							
#5 Residue	0.012							
#6 LL	0.0817							
#6 Residue	0.008							
Head	0.086							

CHARGES $ _____

INVOICE NO. _____

KERLEY INDUSTRIES MINING CHEMICALS

FLOTATION TEST DATA SHEET

Lot No. _____

Date 11-5-85

By DO

Test No. 2

Company _____

Product Head Sample

Process 50% solids 0.5% NaCN, 24 hrs.

PRODUCT	Weight	Percent Weight	ASSAY oz/T Au					UNITS Au			% DISTRIBUTION Au				
Preg.	536.5		0.085					45.60			93.2				
Residue	462.5		0.0072					3.33			6.8				
Head (calc)	500		0.098					48.93			100.0				

OPERATION		11-5-85 4:00 Leach	11-6-85 Off			START		Off		#1 T added	left	unsumed		GRINDING PRODUCT	
TIME		8:30	8:30	12:00	1:00	2:00	4:30	2.00							
REAGENTS - LBS. PER TON													MESH	%	%
													+10		
additions (g)	CaO			2.0	4.0		1.0						+14		
	NaCN					2.5							+20		
													+28		
Titrations (%)	CaO					1.2	0.2	0.188		28.0	3.76	24.54	+35		
	NaCN					0.5		0.331		10.0	6.62	3.38	+48		
													+65		
													+100		
													+150		
MACHINE	JN ROLLS												+200		
R.P.M.		30											+325		
pH					8.0	10.8	10.1	10.4					-325		
% SOLIDS		50%													
TEMPERATURE	ambient														

REMARKS: 500g charge Tare 1204 + ore + H_2O = 2204
after H_2O leach = 1809 ore + 395 ml H_2O = 2203

RD-3

FLOTATION TEST DATA SHEET

KERR INDUSTRIES MINING CHEMICALS

Lot No. _____

Date 11-5-85

By DO

Test No. 3

Company _____

Product Head Sample

Process 50% solids 1.0% NaCN, 24 hrs.

PRODUCT	Weight	Percent Weight	ASSAY (oz/T) Au					UNITS Au			% DISTRIBUTION Au				
Preg.	535.5		0.086					46.05			93.7				
Residue	464.5		0.0067					3.11			6.3				
Head (calc)	1000		0.098					49.16			100.0				

OPERATION	11-5-85 H_2O Leach	11-6-85 OFF			START		OFF		#1T added	1 pt.	reduced		GRINDING PRODUCT	
TIME	8:30	8:30	12:00	1:00	2:00	4:30	2:00							
REAGENTS - LBS. PER TON														
additions (g) CaO			2.0	4.0		1.00						MESH	%	%
NaCN					5.0							+10		
Titrations (%) CaO					1.2	0.2	0.35		28.0	7.00	21.0	+14		
NaCN					1.0		0.637		80.0	12.74	7.26	+20		
MACHINE ON ROLLS												+28		
R.P.M.	30											+35		
pH				8.0	10.8	10.1	10.5					+48		
% SOLIDS	50%											+65		
TEMPERATURE ambient												+100		
												+150		
												+200		
												+325		
												-325		

REMARKS: 500g charge Tare 1203 Tare + H_2O = 2203
after H_2O leach = 1772 + 431 ml H_2O = 2203

RD-3

KERLEY INDUSTRIES MINING CHEMICALS

FLOTATION TEST DATA SHEET

Company

Product Head Sample

Process 50% Solids 0.1% NaCN, 24 hrs.

Lot No.

Date 11-5-85

By DO

Test No. 4

PRODUCT	Weight	Percent Weight	ASSAY oz/T Au					Units Au			% DISTRIBUTION Au				
Preg	526.5		0.0790					41.59			84.7				
Residue	465.5		0.016					7.51			15.3				
Head (calc.)	500		0.098					49.10			100.0				

OPERATION													GRINDING PRODUCT	
	11-5-85													
TIME	START 9:00	9:30	10:30	11:15	Start 12:15	4:30	8:45	OFF 12:15	#1T added	left	Combined			
REAGENTS - LBS. PER TON														
Addition (g) CaO		6.0	1.0		0.50	1.0	0.5					MESH	%	%
NaCN					0.5							+10		
												+14		
												+20		
												+28		
												+35		
Titration (%) CaO					1.5	0.2	0.1	0.028	36.0	0.56	35.44	+48		
NaCN					0.1			0.051	2.0	1.02	0.98	+65		
												+100		
												+150		
MACHINE CN ROLLS												+200		
R.P.M.	30											+325		
pH		5.3	10.0	10.7	10.3	10.0	10.2	9.6				-325		
% SOLIDS	50%													
TEMPERATURE ambient														

REMARKS: 500g charge - bottle 1312g + Charge - 1713 + H_2O = 3208

RD-3

KERLEY INDUSTRIES MINING CHEMICALS

FLOTATION TEST DATA SHEET

Lot No. 1

Company

Date 11-5-85

Product Head Sample

By DO

Process 50% Solids 0.5% NaCN, 24 hrs.

Test No. 5

PRODUCT	Weight	Percent Weight	ASSAY oz/T Au					units Au			% DISTRIBUTION Au				
Preg	519		0.0817					42.40			88.2				
Residue	475.0		0.012					5.66			11.8				
Head (calc.)	500		0.096					48.06			100.0				

OPERATION	11-5-85 START				START		11-6	OFF	#1T				GRINDING PRODUCT	
TIME	9:00	9:30	10:30	11:15	12:15	4:30	8:15	12:15	ADDED	Left	Ground			
REAGENTS - LBS. PER TON												MESH	%	%
												+10		
additions (g) CaO		6.0	1.0		0.50	1.0	0.5					+14		
NaCN					0.5							+20		
												+28		
												+35		
titrations (%) CaO					1.5	0.8	0.1	0.227	36.0	4.54	31.46	+48		
NaCN					0.5			0.353	10.0	7.06	2.94	+65		
												+100		
												+150		
MACHINE CN ROLLS												+200		
R.P.M.	30											+325		
pH		5.0	10.0	10.7	10.3	10.0	10.0	10.7				-325		
% SOLIDS	50%													
TEMPERATURE ambient														

REMARKS: 500g charge – bottle 1874g + charge 1776 + H_2O = 2265

RD-3

KERLEY INDUSTRIES MINING CHEMICALS

FLOTATION TEST DATA SHEET

Lot No. _____

Date 11-5-85

By DO

Test No. 6

Company _____

Product Head Sample

Process 50% Solids 1.0 lb NaCN, 24 hrs.

PRODUCT	Weight	Percent Weight	ASSAY oz/T Au					oz/T Units Au			% DISTRIBUTION Au				
Preg	526.0		0.0817					42.97			91.9				
Residue	472.0		0.008					3.78			8.1				
Head (calc.)	900.0		0.094					46.75			100.0				

OPERATION	11-5-85 START				Start		11-6	Off	#1T				GRINDING PRODUCT	
TIME	9:00	9:30	10:30	11:15	12:15	4:30	8:15	12:15	ADD-20	left	ground			
REAGENTS - LBS. PER TON												MESH	%	%
												+10		
addition (g) CaO		6.0	1.0		0.50	1.0	0.5					+14		
NaCN					5.0							+20		
												+28		
												+35		
titration (%) CaO					1.5	0.2	0.1	0.39	36.0	7.8	28.2	+48		
NaCN					1.0			0.696	20.0	13.92	6.08	+65		
												+100		
												+150		
MACHINE CI ROLLS												+200		
R.P.M.	30											+325		
pH		5.1	10.0	10.7	10.3	10.0	10.0	10.7				-325		
% SOLIDS	50%													
TEMPERATURE ambient														

REMARKS: 500g charge – bottle 1202g + charge 1704 + H_2O = 2200

RD-3