Met Test

IRON DESTRUCTION OF H_2O_2:

BURET DIAMETER 13/16"

1. FILLED BURET w/ Powdered IRON (2 1/2") - CLOGGED - NO FLOW
2. FILLED BURET w/ IRON SHAVINGS (2 1/2") (100 grams)
   A. 76 ml/min - Destroyed H_2O_2
   B. 174 ml/min - No destruction
   C. 58 ml/min - " "
   D. 64 ml/min - " "
   E. 24 ml/min - Slight trace H_2O_2 left

3. 100 grams POWDERED IRON + 100 mls Surge Pond Sol'n
   Mix - Wait 1 min - H_2O_2 destroyed
   Pour off Sol'n - Repeat 5 times - H_2O_2 <u>not</u> destroyed

4. 100 grams IRON SHAVINGS + 100 mls Surge Pond Sol'n
   Mix - Wait 1 min - H_2O_2 destroyed
   Pour off Sol'n - Repeat 5 times - H_2O_2 <u>not</u> destroyed

6-14-89
JKB.

Test to check the effectiveness of steel punchings to remove H_2O_2 from surge pond solution.

1. Obtain 5 gal of surge pond solution and determine the H_2O_2 content.
2. Place about 2" of steel punchings in a 250 ml dispensing buret. Record the weight of the punchings
183 g
3. Pass the surge pond solution through the bed of punchings at 100 ml/min and determine the H_2O_2 content in the solution.
< 1 ppm
4. If the removal of H_2O_2 is effective, increase the flowrate in increments to determine at what flowrate the effectiveness drops.

5 ml / min - No Change

Metallurgical Column Leach - Agglomerated vs. Unagglomerated

~~MOLKO590~~ ACL 110590

Column A - 4#/ton Lime - Agglomerated
Column B - 4#/ton Lime - Unagglomerated

1-Barrel of Ore from Crusher - No Lime
Mixed + Split - Random Shoveling (6 piles)
2 - piles 1 - Column A 2 - Column B
Mixed w/Lime thru Gilson Mass Splitter
Screen Sample Split Out
Screened - Mixed back together
Jaw + Cored - Head Sample Split Out
AB + CD Split Au + Ag 5 @

Not enough ore - Barrel Dumped -
Random Shoveling (3 piles)
2 - piles 1 - Column A 2 - Column B
Mixed Same As Above

Original Screen Sample Used
Original Head Sample Used
% Moisture analyzed for @ split to calculate
total kg ore in Columns

MM

METALLURGICAL COLUMN TEST - LEACH CYCLE
Agglomerated vs Unagglomerated Ore
Project ACL #110590

Sample Collection Date: 11-26 Mon

Column I.D. LAB COLUMN A

Time	7AM	~~11AM~~	~~3PM~~	7PM	~~11PM~~	~~3AM~~
Au oz/ton	.044			.043		
Ag oz/ton	.056			.054		
pH ✓=9.10				8.82		
NaCN lb/ton				.30 #/ton		
Effluent + Tare (grams)	759			573		
Tare Weight (grams)	279			279		
Effluent Weight (grams)	480			294		

Column I.D. LAB COLUMN B

Time	7AM	~~11AM~~	~~3PM~~	7PM	~~11PM~~	~~3AM~~
Au oz/ton	.023			.024		
Ag oz/ton	.033			.032		
pH ✓=9.10				9.53		
NaCN lb/ton				.37 #/ton		
Effluent + Tare (grams)	759			1026		
Tare Weight (grams)	279			279		
Effluent Weight (grams)	480			747		

Assayer(s) VD.

Assay Date 11-27-90