

LAKEFIELD

Jan 18/89

007218

BAD

GOOD

\* Incl. Cu minerals  
po - more → slow flotation

- HIGH CN IN RO & Ch.
- + modified collector A317:3418A
- DS20 organic depressant.
- require Pb Ro & Se conc. → high grade cont.
- rod mill better than ball mill for Pb Ro Rec.
- 90% release @ 40mm grind
- require Total Pb & Zn cons + open circuit clean.

LAKEFIELD

OCT 19/90

CYANIDE AND SILICATE.

Pb. & Ch. cleaner tail  
PK D

MILL CIRCUIT

Cx Cu > 10ppm.

H<sub>2</sub>O SOL. ZN > 10ppm.

TX Cu > 4%

Cu IN CN SOLN > 8.8 ppm

BENCH IN LAS

H<sub>2</sub>O SOL ZN < 1 ppm.

H<sub>2</sub>O SOL Cu ∅

TX Cu < 2

Cu IN CN SOLN < 17 ppm

- plant changes.

LIST MINERALS AT VANGORDA.

PYRITE	25-30%	CHALCOITE
SPHALERITE	8-10%	DIGENITE
GALENA.	4-5%	alkaloid galena
CHALCOPYRITE	~ 1%	sphalerite + galena minor
PIRANOTITE / MARCHSITE	0-100%	Zn and Cu minerals
ARSENOPYRITE	1/2%	
MAGNETITE	4%	
TETRAHEDRITE	TR.	
NATIVE Au / ELECTRUM	10 PARTICLES	
BARITE		
GRAPHITE		
MILAS (MUSCOVITE)		
OXIDES.		
QUARTZ		
CARBONATE		

HARRIS

Nov 21/90.

BAD

Good

- \* alteration distinctness in galena + sphalerite running + galena
- rims of ? anglesite.
- \* galena alters + 2nd Cu (oxide)
- pyrite grains strongly shattered.
- lead core unattained + sphalerite } galena plot. inhibited  
+ tails still contain galena. } sphalerite enhanced
- fresh & altered gal & sphal in both conc. & tails!!

not copper per se.  
cpy in all cases.

Vargorda finer grained than Faro.  
2nd Cu not related to primary Cu  
no limonitization  
Zone of secondary enrichment.

\* IN "POOR" SAMPLES ONLY.