



18-Nov-18 11:55:48

Rev.	No.	Date	Revisions	FC	GB	JB
3	18-nov-19	ISSUED APPROVED FOR DESIGN		FC	GB	JB
2	30-aug-19	ISSUED APPROVED FOR DESIGN		FC	CA	JB
1	24-aug-18	ISSUED APPROVED FOR DESIGN		FC	CA	JB
0	24-aug-17	ISSUED APPROVED FOR DESIGN		FC	CG	JB
0B	01-aug-17	ISSUED FOR COMPANY APPROVAL		FC	CG	JB
0A	21-jul-17	ISSUED FOR COMPANY APPROVAL		FC	CG	JB

DIS.	REV.	D.L.	BHP	REFERENCE DOCUMENTS	BHP N°
					4-V-2020-PR-05-00001

1.- LIME CONSUMPTION IS BASED ON A FEED RATE OF 95 000 t/d OF COARSE ORE TO DETAILS SEE PROCESS DESIGN CRITERIA.
2.- LIME SLAKING IS SCHEDULED FOR 12 HOURS PER DAY.
3.- LIME DISTRIBUTION IS SCHEDULED FOR 24 HOURS PER DAY, 365 DAYS PER YEAR.
4.- MILK OF LIME TO REGRIND WILL BE ADDED ON THE ROUGHER CONCENTRATE LAUNDERS.

SCALE	DATE	DESIGNED BY	CHECKED BY
		F. CORNEJO	F. BARRERA
		C. ARIAS	C. LEGGETT

SGO PROJECT	CONTRACT NO.	BHP PROJECT NO.
REAGENTS FACILITIES LIME PLANT PROCESS FLOW DIAGRAM	4-V-2020-PR-PFD-000001	8500135645

Fluor-Salfa
Ingeniería y Construcción, S.A.

BHP MINERA SPENCE S.A.

BHP PARA REVISIÓN FOR REVIEW

☐ Revisado / Reviewed
☐ Revisado con Comentarios Reviewed with comments
☐ Rechazado y volver a emitir Rejected, reissue
☒ Solo Información Information Only

Fecha / Date 02-12-2019 Firma / Signature Marcial Mendoza

- NOTES CONT:
- REAGENTS SPILLAGES WILL BE REMOVED BY PORTABLE PUMP TO A DRUM FOR DISPOSAL. PORTABLE PUMP IS PROVIDED BY THE COMPANY.
 - ALL TEMPERATURES, PRESSURES, FLOW QUANTITIES, AND COMPOSITIONS ARE FOR PROCESS DESIGN PURPOSES ONLY, AND NO OTHER IS INTENDED OR IMPLIED. ACTUAL OPERATING CONDITIONS AND YIELDS MAY VARY FROM THOSE INDICATED.
 - LINE DESIGN FLOW FOR PUMP CAPACITY.
 - TO WASH MILK OF LIME PIPES.
 - DESIGN FLOW 75 L/min (20 gal/min, 15 min).
 - MILK OF LIME TO SECOND CLEANER FLOTATION WILL BE ADDED ON THE FIRST CLEANER CONCENTRATE LAUNDER.
 - 7 TRUCKS PER DAY DESIGN. LINE BULK DENSITY: 0.9 - 1.0 t/m³.
 - LIME (100% CaO) TOTAL CONSUMPTION IS 1472 g/t. DISTRIBUTED AS:
75% TO SAG MILL FEED (1184 g/t, ALTERNATIVE)
75% TO ROUGHER FLOTATION DISTRIBUTOR (74 g/t, EACH)
5% TO ROUGHER CONCENTRATE LAUNDER (110 g/t, EACH)
5% TO FIRST CLEANER FEED (74 g/t)
5% TO FIRST CLEANER CONCENTRATE LAUNDER (74 g/t, ALTERNATIVE).
 - EMERGENCY SHOWER WITH WATER HEATER.
 - TANK CAPACITIES IN FLOWSHEET ARE USEFUL VOLUME.
- LEGEND**
- SECONDARY FLOW ———
- ALTERNATE FLOW - - - - -
- BATTERY LIMIT ---|---
- SERVICE LINE CONNECTOR [XX]
- ☐ SPANISH LANGUAGE GOVERNS
☒ ENGLISH LANGUAGE GOVERNS