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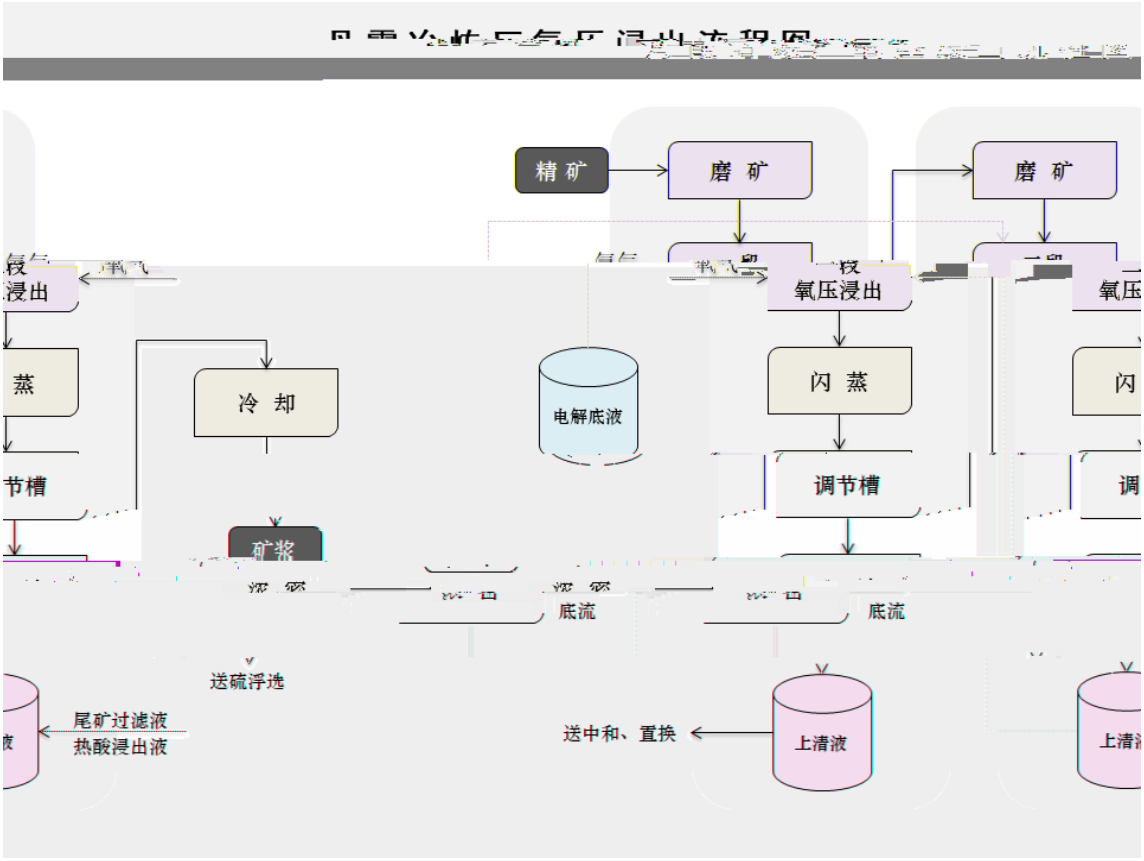
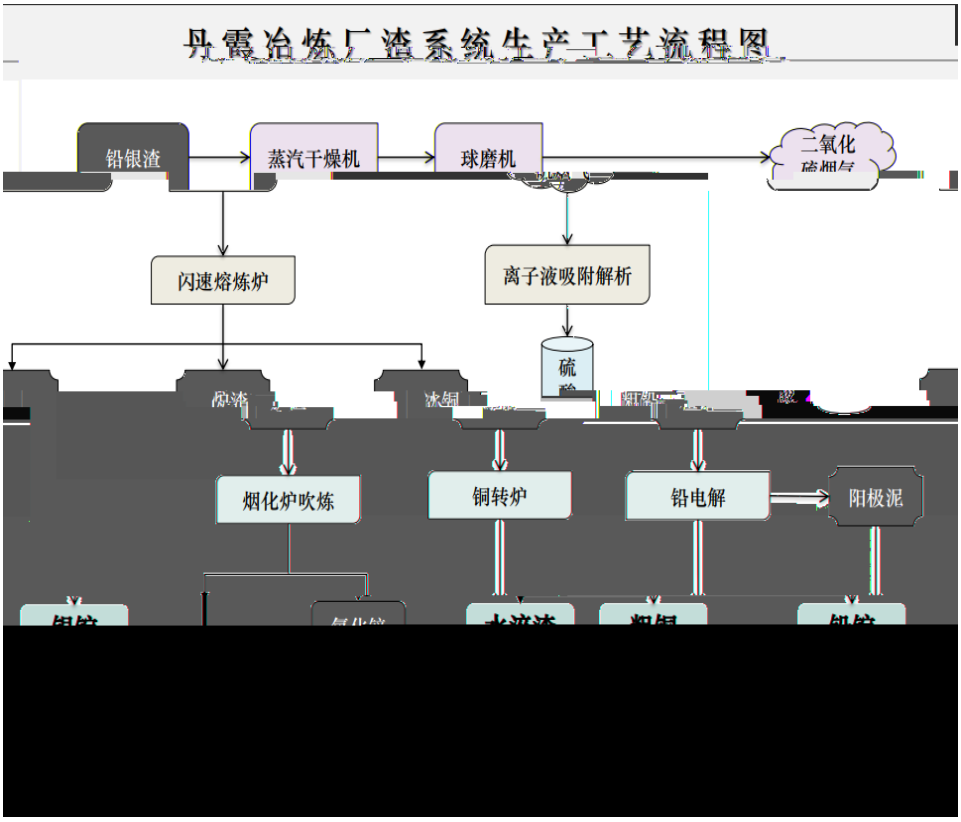
韶关冶炼厂ISP工艺流程图


精矿
磨矿
磨矿
氧压浸出
闪蒸
电解底液
冷却
调节槽
矿浆
底流
底流
送硫浮选
尾矿过滤液
热酸浸出液
送中和、置换
上清液


铅银渣
蒸汽干燥机
球磨机
闪速熔炼炉
离子液吸附解析
烟化炉吹炼
铜转炉
铅电解
阳极泥

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							0.23%
							1.83%
							6.89%

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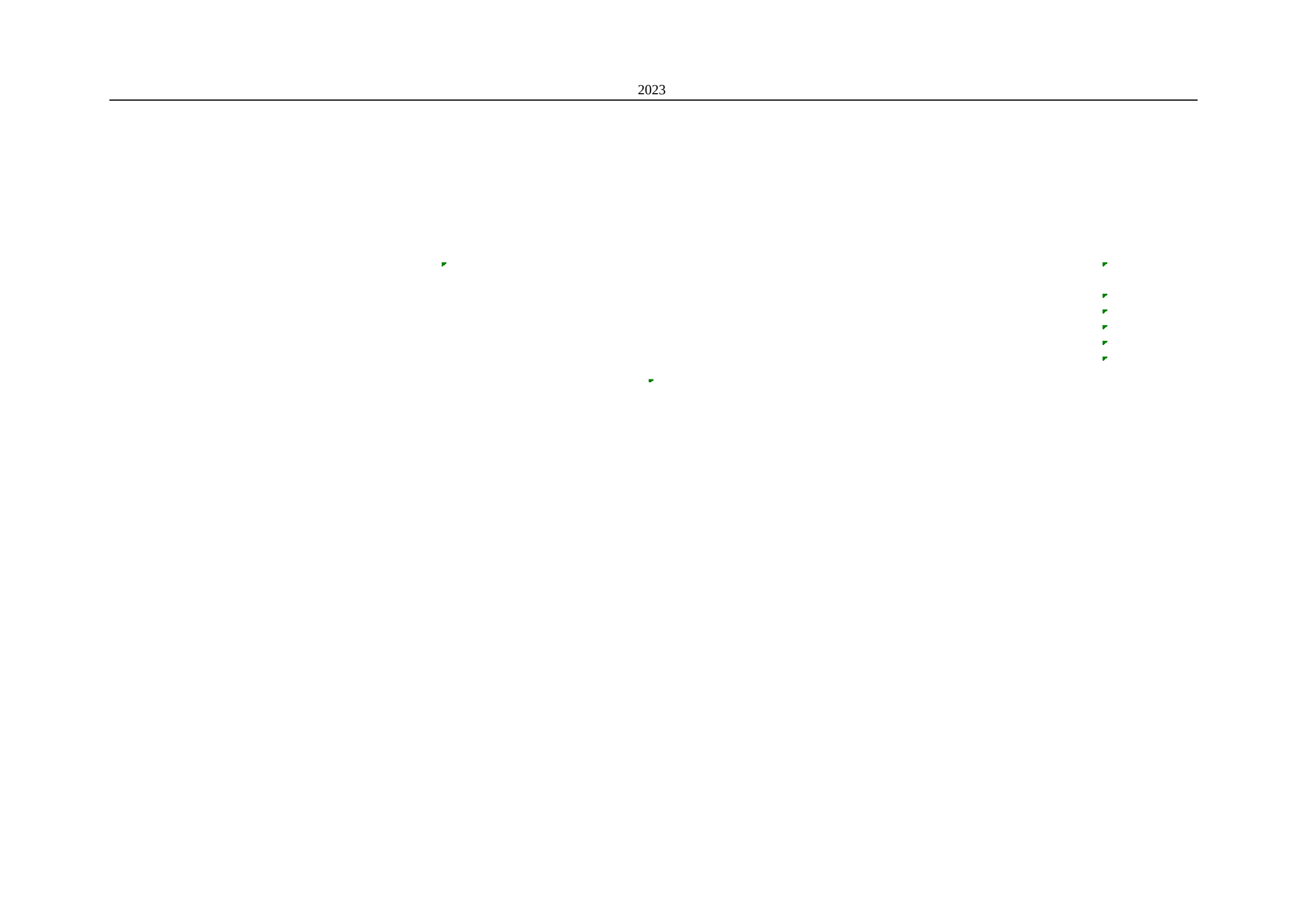
	1	4,279,396,332.91	3,103,169,428.76
*	2	767,233,006.49	675,350,318.74
*			
	3	1,030,617,569.03	968,469,681.80
	4	3,839,536.74	23,079,736.50
	5	46,279,254.47	44,914,412.91
	6	735,955,593.80	720,938,292.18
	7	61,257,730.57	38,083,492.85
	8	373,038,227.73	158,077,995.51
	9	281,015,468.56	253,700,783.50
*			
	10	8,290,466,107.82	3,488,710,427.88
	11	69,040,630.67	20,014,738.63
	12	531,987,275.48	507,517,561.82
		16,470,126,734.27	**10,002,026,871.08**
	13	733,210,554.36	716,404,686.77
	14	216,506,242.41	192,382,892.15
	15	117,907,893.88	39,725,670.87
	16	15,678,931,623.56	11,276,593,748.28
	17	3,442,832,449.01	3,830,322,007.17
	18	201,325,045.93	128,061,755.20
	19	5,408,614,961.14	5,036,588,761.69
	20	140,882,354.35	140,882,354.35
	21	27,380,846.52	22,898,606.09
	22	466,109,921.96	439,215,157.26
	23	196,561,889.76	827,091,876.47
		26,630,263,782.88	**22,650,167,516.30**
		43,100,390,517.15	**32,652,194,387.38**

		2023 6 30	2022 12 31
ز	24	5,894,559,897.37	5,355,309,665.01
*			
*			
*			
	25	11,603,609.70	4,172,875.00
	26	20,833,636.35	14,965,567.80
	27	1,707,800,182.78	1,352,139,944.12
	28	251,962,096.95	115,239,551.17
	29	414,459,635.49	370,543,913.99
	30	161,625,315.63	166,113,868.66
	31	1,457,156,512.12	1,007,932,612.66
		16,893,738.58	
*	32	936,407.12	3,224,328.72
	33	1,434,969,288.32	1,411,828,550.18
	34	1,565,490,449.20	58,326,187.89
		12,921,397,031.03	**9,859,797,065.20**
	35	4,978,303,210.60	2,456,277,447.91
	36	2,806,295,201.50	2,749,384,361.88
	37	99,975,784.68	43,587,109.98
	38	1,677,825,034.17	520,950,500.00
	39	404,484,288.32	454,443,771.88
	40	290,113,984.51	278,012,944.56
	41	83,209,498.50	58,910,661.48
	22	880,474,243.55	855,490,997.15
	42	2,668,188,288.24	80,239,266.05
		13,888,869,534.07	**7,497,297,060.89**
		26,810,266,565.10	**17,357,094,126.09**
	43	3,737,544,918.00	3,737,543,730.00
	44	508,642,501.06	508,643,409.72
	45	-	2,279,321,154.87
	46	-205,297,236.55	-354,840,082.34
	47	39,318,022.61	8,736,020.41
	48	1,233,753,775.15	1,233,753,775.15
	49	7,201,311,275.24	7,343,351,496.93
		12,515,273,255.51	**14,756,509,504.74**
		3,774,850,696.54	538,590,756.55
		16,290,123,952.05	**15,295,100,261.29**
		43,100,390,517.15	**32,652,194,387.38**

		2023 1-6	2022 1-6
		37,227,223,512.58	**35,877,650,464.24**
	.50	37,208,368,387.16	35,816,904,990.97
		6,892,111.48	6,403,841.46
		11,963,013.94	54,341,631.81
		36,456,753,732.56	**34,872,775,246.29**
	.50	35,572,226,845.05	34,165,829,106.13
		1,817,023.16	199,744.26
		8,570,143.66	37,502,715.86
	.51	137,477,154.43	119,605,019.58
	.52	70,521,393.87	64,837,225.98
	.53	304,885,495.30	242,168,245.28
	.54	163,158,725.03	153,434,049.83
	.55	198,096,952.06	89,199,139.37
		246,500,518.97	97,832,261.74
		31,506,625.37	17,267,696.17
	.56	38,859,224.70	33,441,442.58
“ ”	.57	38,341,790.16	26,211,924.36
		18,498,363.82	33,962,907.03
“-”			
“ ”			
“ ”	.58	39,363,872.97	-75,238,271.27
“ ”	.59	872,687.55	-1,873,752.98
“ ”	.60	-14,655,480.40	-768,369.46
“ ”	.61	2,710,226.34	3,312,888.76
“ ”		**875,962,101.34**	**989,961,079.94**
ذ	.62	1,553,579.70	3,531,866.20
	.63	807,246.29	8,266,542.59
“ ”		**876,708,434.75**	**985,226,403.55**
	.64	174,962,149.37	124,815,517.53
“ ”		**701,746,285.38**	**860,410,886.02**
1 “ ”		701,746,285.38	860,410,886.02
2 “ ”			-
1 “ ”		540,335,753.96	848,838,302.37
2 “ ”		161,410,531.42	11,572,583.65
	.65	**149,542,845.79**	**175,386,713.88**
		149,542,845.79	175,386,713.88
1		1,900,081.58	-3,709.48
1			
2			
3		1,900,081.58	-3,709.48
4			
5			
2		147,642,764.21	175,390,423.36
1			
2			
3			
4			
5		-1,328,363.85	105,565,035.25
6		148,971,128.06	69,825,388.11
7			
		851,289,131.17	**1,035,797,599.90**
		689,878,599.75	1,024,225,016.25
		161,410,531.42	11,572,583.65
	.2		
/		0.14	0.23
/		0.13	0.19

		2023 1-6	2022 1-6
:			
		31,811,344,840.87	24,857,639,791.62
		18,855,125.42	60,745,473.27
			-
		47,853,094.06	182,894,993.68
	66	216,140,154.13	100,254,019.64
		32,094,193,214.48	**25,201,534,278.21**
		29,544,031,432.84	22,469,126,548.28
		10,387,166.82	37,664,390.15
		1,034,814,712.59	932,178,056.11
		1,108,751,215.35	505,236,629.91
	66	348,985,632.08	766,649,831.30
		32,046,970,159.68	**24,710,855,455.75**
		47,223,054.80	**490,678,822.46**
		12,613,065.38	656,066,782.76
		19,024,068.27	16,540,712.45
		144,936,246.09	12,602,268.47
	66	100,000,000.00	1,180,000,000.00
		276,573,379.74	**1,865,209,763.68**
		1,193,062,470.48	1,331,705,333.73
		30,425,269.42	353,012,961.58
		2,755,771,945.02	
	66	-	440,000,000.00
		3,979,259,684.92	**2,124,718,295.31**
		-3,702,686,305.18	**-259,508, 7.-0 -0**



		2023 6 30	2022 12 31
		4,514,628,445.86	4,555,353,397.54
		-	-
		1,763,525,579.96	1,186,162,765.52
		125,502,039.56	72,536,717.19
		180,483,387.19	161,819,387.84
		76,314,226.71	97,401,767.25
		2,395,593,129.50	1,191,745,572.71
		783,429,278.67	732,351,470.26
		1,506,777,398.43	10,639,681.10
		11,346,253,485.88	**8,008,010,759.41**
		3,297,649,946.84	868,280,786.63
		2,806,295,201.50	2,749,384,361.88
		57,788,792.32	
		120,000,000.00	
		358,408,054.93	425,440,706.81
		23,472,043.28	19,348,143.28
		14,320,504.68	14,250,575.74
		6,677,934,543.55	**4,076,704,574.34**
		18,024,188,029.43	**12,084,715,333.75**
		3,737,544,918.00	3,737,543,730.00
		508,642,501.06	508,643,409.72
		2,090,508,220.09	2,090,503,486.17
		-225,736,658.34	-226,132,922.32
		9,849,323.60	3,958,525.51
		1,233,753,775.15	1,233,753,775.15
		4,630,229,169.45	4,709,768,129.76
		11,984,791,249.01	**12,058,038,133.99**
		30,008,979,278.44	**24,142,753,467.74**

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		2023 1-6	2022 1-6
	.4	**4,094,536,123.34**	**3,967,988,789.28**
	.4	3,374,904,903.21	2,864,524,107.92
		53,982,595.39	53,611,466.19
		18,917,973.09	23,098,649.96
		127,553,318.36	137,237,239.54
		114,950,803.20	111,151,622.46
		131,199,120.99	77,395,060.12
		120,687,521.98	101,235,958.33
		54,910,217.62	31,779,467.59
		22,588,081.20	26,408,109.41
“ ”	.5	50,684,404.11	20,939,309.55
		15,567,188.91	26,981,860.39
“-”			
“ ”			
“ ”		-	6,558,700.75
“ ”		-190,063.49	-92,775.51
“ ”		10,203.05	1,908.81
“ ”		2,636,618.02	566.04
“ ”		**348,756,651.99**	**754,786,462.14**
)		304,694.04	1,011,427.43
		449,921.58	7,663,482.18
“ ”		**348,611,424.45**	**748,134,407.39**
		54,397,542.51	113,235,237.78
“ ”		**294,213,881.94**	**634,899,169.61**
1 “ ”		294,213,881.94	634,899,169.61
2 “ ”			
		396,263.98	**17,193,481.75**
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2		396,263.98	17,193,481.75
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5		396,263.98	17,193,481.75
6			
7			
		294,610,145.92	**652,092,651.36**

3,737,543,730.00	508,643,409.72	2,090,503,486.17	-226,132,922.32	3,958,525.51	1,233,753,775.15	4,709,768,129.76	12,058,038,133.99
3,737,543,730.00	508,643,409.72	2,090,503,486.17	-226,132,922.32	3,958,525.51	1,233,753,775.15	4,709,768,129.76	12,058,038,133.99

			3,650,034,613.00		**576,820,737.85**	**1,747,277,044.20**	**-225,121,370.80**	**11,890.54**	**1,143,437,823.03**	**4,250,976,866.99**	**11,143,437,604.81**
			3,650,034,613.00		**576,820,737.85**	**1,747,277,044.20**	**-225,121,370.80**	**11,890.54**	**1,143,437,823.03**	**4,250,976,866.99**	**11,143,437,604.81**
		“ ”	**87,509,117.00**		**-68,177,328.13**	**343,226,441.97**	**-1,011,551.52**	**3,946,634.97**	**90,315,952.12**	**458,791,262.77**	**914,600,529.18**
							-1,011,551.52			**903,159,521.19**	**902,147,969.67**
			87,509,117.00		**-68,177,328.13**	**343,226,441.97**					**362,558,230.84**
1											
2			87,509,117.00		-68,177,328.13	343,226,441.97					362,558,230.84
3											
4											
									90,315,952.12	**-444,368,258.42**	**-354,052,306.30**
1									90,315,952.12	-90,315,952.12	
2											
3										-354,052,306.30	-354,052,306.30
4											
1		( )									
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6											
								3,946,634.97			**3,946,634.97**
1								50,395,861.77			50,395,861.77
2								46,449,226.80			46,449,226.80
			3,737,543,730.00		**508,643,409.72**	**2,090,503,486.17**	**-226,132,922.32**				

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	4-14	3.00-10.00	6.79-22.5
	5-25	3.00-10.00	3.8-19.4

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		1% 1.5% 2% 3%
		15% 16.5% 20% 25% 26.5% 27% 30%
	70% 80%	1.2% 12%
		3%
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2011 2020 15%

2020 4 23

2020 23

2021 2030 15%

2 15%

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2		GR202144206380	2021 12 23	
3		GR202144203724	2021 12 23	
4		GR202144208049	2021 12 23	
5		GR202036001147	2020 9 14	
6		GR202043002109	2020 9 11	
7		GR202145000533	2021 10 14	
8		GR202244004830	2022 12 19	

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	10,000,000.00	
	10,000,000.00	

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	1,030,617,569.03	968,469,681.80
	430,803,172.08	409,516,019.10
	161,026,131.90	369,381,503.78
	438,788,265.05	189,572,158.92
	1,030,617,569.03	968,469,681.80

4

	3,839,536.74	22,569,362.03
-	3,839,536.74	22,569,362.03
		510,374.47
		510,374.47
	3,839,536.74	23,079,736.50

5

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	46,279,254.47	44,914,412.91
	46,279,254.47	44,914,412.91
	46,279,254.47	44,914,412.91

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	676,191,011.26
1	31,918,110.10
1 2	36,871,238.59
2 3	4,556,934.84
3 4	313,795.35
4 5	911,042.18
5	70,197,846.52
	820,959,978.84
	85,004,385.04
	735,955,593.80

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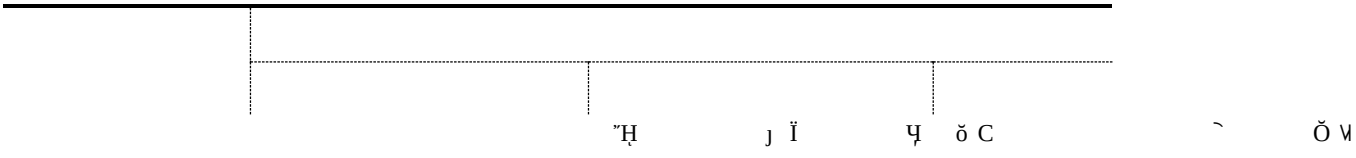

			%	
	188,797.76	188,797.76	100.00	
	2,923,114.72	2,923,114.72	100.00	
	3,111,912.48	3,111,912.48	100.00	

				%
1		31,918,110.10	1,595,905.51	5.00
1	2	36,871,238.59	5,530,685.78	15.00
2	3	1,633,820.12	490,146.03	30.00
3	4	313,795.35	156,897.68	50.00
4	5	911,042.18	728,833.74	80.00
5		70,009,048.76	70,009,048.76	100.00
		141,657,055.10	78,511,517.50	

				%
1		31,156,495.47	1,557,824.76	5.00
1	2	37,485,481.39	5,622,822.21	15.00
2	3	1,260,221.44	378,066.43	30.00
3	4	339,265.09	169,632.55	50.00
4	5	942,193.07	753,754.44	80.00
5		71,944,866.37	71,944,866.37	100.00
		143,128,522.83	80,426,966.76	

			%
	676,191,011.26	3,380,955.06	0.50
	676,191,011.26	3,380,955.06	0.50

		2023	
			%
	661,541,228.83	3,304,492.72	0.50
	661,541,228.83	3,304,492.72	0.50

		%		%
2 3	14,814,289.47	3.97	61,882.19	0.04
3	2,246,054.25	0.60	2,016,548.39	1.27
	373,038,227.73	100.00	158,077,995.51	100.00

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119,192,087.10

31.95%

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	281,015,468.56	253,700,783.50
	281,015,468.56	253,700,783.50

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	277,915,524.69
1	8,321,907.78

1 7 [@1 Wμcp27779a10.6(0R0.013713.7(21,)17(90)47.78

	300,412,033.71	268,122,826.31
	19,396,565.15	14,422,042.81
	281,015,468.56	253,700,783.50

	12			
2023 1 1	844,901.02		13,577,141.79	14,422,042.81
	5,044,457.92		-94,655.35	4,949,802.57
/				
			24,719.77	24,719.77
2023 6 30	5,889,358.94		13,507,206.21	19,396,565.15

8 48424..1252424<4 17(94)T4G

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		/	
	3,493,934,667.37	32,603,856.40	3,461,330,810.97
	2,609,296,638.51		2,609,296,638.51
	1,122,212,249.35	31,699,654.54	1,090,512,594.81
	927,320,141.44		927,320,141.44
	6,703,053.07		6,703,053.07
	157,382,997.92		157,382,997.92
	37,919,871.10		37,919,871.10
	8,354,769,618.76	64,303,510.94	8,290,466,107.82

		/	
	787,722,967.41	8,893,101.51	778,829,865.90
	1,013,612,442.49		1,013,612,442.49
	778,699,249.24	31,391,495.67	747,307,753.57
	1,629,856.98		1,629,856.98
	610,544,356.89		610,544,356.89
	298,634,937.92		298,634,937.92
	38,151,214.13		38,151,214.13
	3,528,995,025.06	40,284,597.18	3,488,710,427.88

33,020,046.02

31,468,834.10

			927,320,141.44		927,320,141.44	44,709,145.09	11,896,796.72
			927,320,141.44		927,320,141.44	44,709,145.09	11,896,796.72

	494,780,201.33	303,728,050.41
	31,282,327.60	58,878,860.81
	1,516,849.61	7,051,315.35
	659,842.16	5,480,837.64
		31,392,634.60
-		100,985,863.01
	3,748,054.78	
	531,987,275.48	507,517,561.82

13

	228,198,009.07			19,684,145.62		
	31,331,242.54			-345,337.18		
1	31,681,535.77			749,133.44		
Ballinalack	26,866,182.86			-6,237.93		
	131,567,026.84			-4,095,459.39		
	81,680,656.90			-1,252,481.85		
	1,172,680.21			-120,993.25		
	162,540,567.17			3,774,968.59		
	21,366,785.41			110,625.77		
	716,404,686.77			18,498,363.82		

				247,882,154.69	
				30,985,905.36	
1			842,526.77	33,273,195.98	

14

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	8,853,075.00	8,853,075.00
	3,159,000.00	3,159,000.00
	1,318,147.19	1,318,147.19
African Nickel	3,390,808.05	3,330,464.65
	10,000,750.00	10,000,750.00
	100,000,000.00	100,000,000.00
Myanmar Metals Limited	68,375,514.17	65,721,455.31
	4,644,400.00	
	15,440,416.00	
	1,324,132.00	
	216,506,242.41	192,382,892.15

2

African Nickel		597,293.48				
		13,602.56				
Myanmar Metals Limited		1,857,841.20				
		2,468,737.24				

15

1

1	76,910,261.45	76,910,261.45
2	88,491,174.29	88,491,174.29
:	88,256,803.14	88,256,803.14
3		
4	165,401,435.74	165,401,435.74

1	36,761,246.47	36,761,246.47
2	10,308,951.28	10,308,951.28
:	8,510,997.12	8,510,997.12
3		
4	47,070,197.75	47,070,197.75
1	423,344.11	423,344.11
2		
3		
4	423,344.11	423,344.11

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3	664,799.90		3,584,309.37	5,110,072.94	420,706.59	9,779,888.80
	664,799.90		3,584,309.37	5,110,072.94	420,706.59	9,779,888.80
4	4,168,077,384.39	3,904,068,516.38	1,553,392,450.73	327,375,426.88	394,927,529.49	10,347,841,307.87
1	33,101,677.13	70,818,494.47	186,796,201.94		6,235,347.61	296,951,721.15
2	27,906,547.52	10,057,753.37	3,599,859.17		112,965.91	41,677,125.97
1	27,439,497.77	8,774,733.42	215,669.00			36,429,900.19
2	467,049.75	1,283,019.95	3,384,190.17		112,965.91	5,247,225.78
3						
4	61,008,224.65	80,876,247.84	190,396,061.11		6,348,313.52	338,628,847.12
1	11,289,513,119.71	2,932,695,351.98	712,539,277.91	300,830,936.00	443,352,937.96	15,678,931,623.56
2	7,963,396,928.49	1,971,073,061.53	621,145,705.73	287,317,519.75		

	492,843,093.26	
	295,529,041.67	
	852,199,219.01	
	47,393,453.02	
	130,146,468.27	

17

	3,413,998,262.10	3,810,590,573.76
	28,834,186.91	19,731,433.41
	3,442,832,449.01	3,830,322,007.17

1

	3,413,998,262.10		3,413,998,262.10	3,810,590,573.76		3,810,590,573.76
	3,413,998,262.10		3,413,998,262.10	3,810,590,573.76		3,810,590,573.76

200	2,091,000,000.00	1,404,197,839.76	190,957,887.98			1,595,155,727.74
	1,081,280,000.00	545,890,317.60	33,369,351.42		579,259,669.02	
	1,537,000,000.00	376,264,081.10	52,638,241.50			428,902,322.60
6000t/d	788,561,700.00	346,998,235.27	39,684,248.33			386,682,483.60
	61,890,000.00	30,952,729.91	8,632,445.37			39,585,175.28
	43,105,000.00	19,197,447.18	9,209,781.37	28,407,228.55		
	219,135,056.01	16,558,027.19	100,482,212.10	86,178,491.77		30,861,747.52

2

	28,834,186.91		28,834,186.91	19,147,156.94		19,147,156.94
				584,276.47		584,276.47
	28,834,186.91		28,834,186.91	19,731,433.41		19,731,433.41

18

1		46,414,266.45	135,093,772.36	181,508,038.81
2	83,789,804.51		21,671,155.55	105,460,960.06
3				
4	83,789,804.51	46,414,266.45	156,764,927.91	286,968,998.87
1		17,625,714.71	35,820,568.90	53,446,283.61
2	13,964,967.42	5,997,228.64	12,235,473.27	32,197,669.33
3				
4	13,964,967.42	23,622,943.35	48,056,042.17	85,643,952.94
1	69,824,837.09	22,791,323.10	108,708,885.74	201,325,045.93
2		28,788,551.74	99,273,203.46	128,061,755.20

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1	2,488,909,308.33	5,904,545,375.50	31,427,819.22	91,336,502.46	8,516,219,005.51

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3	50,970,837.50				50,970,837.50
4	281,055,832.70	3,211,432,890.82	25,707,945.04	139,421,665.56	3,657,618,334.12
1		26,544,965.81	-	8,202,000.00	34,746,965.81
2		5,487,992.74	-	-	5,487,992.74
1		4,881,879.31			4,881,879.31
2		606,113.43			606,113.43
3					
4		32,032,958.55		8,202,000.00	40,234,958.55
1	2,301,463,631.11	2,797,669,909.09	7,789,875.87	301,691,545.07	5,408,614,961.14
2	2,274,961,237.13	2,737,484,423.81	6,673,797.59	17,469,303.16	5,036,588,761.69

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2 58,569,974.71

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	279,426,850.77	

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	70,079,321.81					70,079,321.81
	51,543,152.12					51,543,152.12
	3,305,067.29					3,305,067.29
	15,954,813.13					15,954,813.13
	140,882,354.35					140,882,354.35

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2008

341,000,000.00

270,920,678.19 70,079,321.81

2009 “ ”

407,979,048.34

356,435,896.22 51,543,152.12

2009

128,549,615.82

125,244,548.53 3,305,067.29

2017

44,970,000.00

29,015,186.87 15,954,813.13

21

	22,898,606.09	11,271,318.73	6,789,078.30		27,380,846.52
	22,898,606.09	11,271,318.73	6,789,078.30		27,380,846.52

22 /

1

	118,089,337.31	23,255,879.70	126,859,718.39	25,176,310.13
	63,936,589.25	16,714,568.56	83,421,265.41	21,572,740.02
	760,287,632.33	215,633,300.53	599,081,377.41	172,642,967.63
	259,166,431.68	38,874,964.75	319,299,495.69	47,894,924.36
	121,364,274.82	36,409,282.45	119,204,642.16	35,761,392.65
	94,392,585.88	23,598,146.47	100,585,721.58	24,080,183.91
	327,393,411.04	98,218,023.31	321,567,565.60	96,470,269.69
	31,070,491.41	9,321,147.42	30,859,318.68	9,240,709.84
	24,635,569.81	4,084,608.77	21,426,330.33	6,375,659.03
	1,800,336,323.53	466,109,921.96	1,722,305,435.25	439,215,157.26

2

	83,303,275.09	17,354,907.90	56,209,506.48	14,865,667.39
	901,616,293.89	252,539,815.35	897,900,385.27	249,894,550.91
	1,565,217,649.11	451,581,194.63	1,539,091,493.75	442,223,222.82
	204,115,116.14	57,823,053.13	165,789,369.51	47,307,573.85
	403,537,802.47	101,175,272.54	403,999,940.77	101,199,982.18
	3,157,790,136.70	880,474,243.55	3,062,990,695.78	855,490,997.15

3

	378,648,213.13	349,938,788.34
	43,191,956.98	44,029,711.74

	421,840,170.11	393,968,500.08

4

2023		1,249,323.12	
2024	6,600,972.88	6,600,972.88	
2025	3,040,708.67	3,040,708.67	
2026	13,450,038.29	13,450,038.29	
2027	19,688,668.78	19,688,668.78	
2028	411,568.36		
	43,191,956.98	44,029,711.74	

23

155,036,099.88			155,036,099.88
40,125,789.88			40,125,789.88
1,400,000.00			1,400,000.00
196,561,889.76			196,561,889.76

102,585,745.68			102,585,745.68
123,106,130.79			123,106,130.79
1,400,000.00			1,400,000.00
600,000,000.00			600,000,000.00
827,091,876.47			827,091,876.47

24

1

	410,000,000.00	380,000,000.00
	5,473,300,136.43	4,965,311,875.04
	11,259,760.94	9,997,789.97

	6,231,275.71	8,772,351.59
	6,778,642.81	7,737,168.81
	5,688,671.39	2,888,003.70
Royalities	16,423,340.98	21,729,078.94
	6,385,566.50	5,010,573.63
	161,625,315.63	166,113,868.66

31

	16,893,738.58	
	1,440,262,773.54	1,007,932,612.66
	1,457,156,512.12	1,007,932,612.66

1

	16,893,738.58	
	16,893,738.58	

2

	181,661,320.83	267,423,020.02
	385,620,343.74	
	872,981,108.97	740,509,592.64
	1,440,262,773.54	1,007,932,612.66

1

32

	936,407.12	3,224,328.72
	936,407.12	3,224,328.72

33

1	35	1,214,394,310.67	1,370,393,643.53

1	37	65,366,696.07	41,434,906.65
1	38	155,208,281.58	
		1,434,969,288.32	1,411,828,550.18

34

	53,094,877.68	43,548,213.75
	8,852,238.19	14,777,974.14
	1,503,543,333.33	
	1,565,490,449.20	58,326,187.89

2023 5 5 2023

5 90 2.65% 2023 6 7 2023

10 180 2.32%

7 4

35

1	788,494,289.34	633,487,620.63
2	892,158,974.42	1,593,645,463.44
	4,512,044,257.51	1,599,538,007.37
33	1,214,394,310.67	1,370,393,643.53
	4,978,303,210.60	2,456,277,447.91

1 26,100

52% 48%

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36

1

	2,806,295,201.50

2

	3,800,000,000.00	2020 7	6	3,800,000,000.00	2,749,384,361.88		9,068,346.30	47,847,506.58	5,013.26		2,806,295,201.50
	3,800,000,000.00			3,800,000,000.00	2,749,384,361.88		9,068,346.30	47,847,506.58	5,013.26		2,806,295,201.50
	3,800,000,000.00			3,800,000,000.00	2,749,384,361.88		9,068,346.30	47,847,506.58	5,013.26		2,806,295,201.50

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[2020]1181 2020 7 20 3,800,000,000 100

38,000,000

1 6 2020 7 20 2026 7 19

2 0.20% 0.40% 0.60% 1.00% 1.50% 2.00%

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4 2020 1 25 2026 7 19

5 4.71 / A

85% 85% 2023

6 16 2022 4.54 / 4.44 /

4

5,400.00 54 5,013.26 1188 908.66

4,733.92

2023

42

	1,904,454,409.81	4,733.92		1,904,459,143.73
	374,866,745.06			374,866,745.06
			2,279,325,888.79	-2,279,325,888.79
	2,279,321,154.87	4,733.92	2,279,325,888.79	0.00

1. 4,733.92

36 4

2. 42

46

47

	8,736,020.41	69,604,182.03	39,022,179.83	39,318,022.61
	8,736,020.41	69,604,182.03	39,022,179.83	39,318,022.61

48

	1,127,323,262.32			1,127,323,262.32
	106,430,512.83			106,430,512.83
	1,233,753,775.15			1,233,753,775.15

49

	7,343,351,496.93	6,575,430,400.10
	7,343,351,496.93	6,575,430,400.10
	540,335,753.96	1,212,289,355.25
		90,315,952.12
	373,752,842.25	354,052,306.30
	308,623,133.40	
	7,201,311,275.24	7,343,351,496.93

50

	37,043,924,447.03	35,482,251,948.93	35,557,654,722.68	33,984,890,700.92
	164,443,940.13	89,974,896.12	259,250,268.29	180,938,405.21
	6,892,111.48	1,817,023.16	6,403,841.46	199,744.26
	11,963,013.94	8,570,143.66	54,341,631.81	37,502,715.86
	37,227,223,512.58	35,582,614,011.87	35,877,650,464.24	34,203,531,566.25

1

	17,847,641,865.78	791,357,396.34	18,665,404,736.86	406,505,502.17	-502,541,113.99	37,208,368,387.16
	16,995,912,037.12	765,668,578.47	2,784,273,898.01	406,505,502.17	-207,524,833.71	20,744,835,182.06
	851,729,828.66	25,688,817.87	15,881,130,838.85		-295,016,280.28	16,463,533,205.10
	17,847,641,865.78	791,357,396.34	18,665,404,736.86	406,505,502.17	-502,541,113.99	37,208,368,387.16
	17,847,641,865.78	727,796,135.92	18,665,404,736.86	347,156,538.63	-502,541,113.99	37,085,458,163.20
		63,561,260.42		59,348,963.54		122,910,223.96

2

332,201,363.00 224,332,421.74 2023

27,629,675.21 2024 80,239,266.05 2025

51

	6,940,385.17	2,420,645.84
	4,176,540.93	1,729,707.16
	33,841,639.20	47,396,194.48
Royalities	35,260,076.01	40,049,880.74
	13,859,262.38	6,294,213.78
	17,349,632.03	8,056,414.63
	30,185.30	32,627.85
	23,328,854.50	11,725,178.11
	2,690,578.91	1,900,156.99
	137,477,154.43	119,605,019.58

52

	37,404,842.04	40,045,180.33
	2,160,500.89	2,296,979.33
	40,518.31	166,609.31
	11,556,153.04	5,357,769.63
	5,641,724.15	7,539,104.64
	473,804.47	407,845.78
	1,164,505.58	401,250.78
	658,709.11	746,251.40
	753,599.70	693,604.68
	486,140.04	587,766.87
	2,788,749.26	2,166,387.80
	7,392,147.28	4,428,475.43
	70,521,393.87	64,837,225.98

53

	151,459,504.00	142,981,338.65
	65,617,477.58	37,445,933.44
	5,003,815.68	7,702,832.21

	1,019,533.13	990,075.81	1,019,533.13
	38,859,224.70	33,441,442.58	38,859,224.70

			/
2022	2,707,600.00		
	1,740,900.00	4,560,200.00	
	2,034,400.00		
	3,149,910.00		
	1,333,400.00		
2021	4,240,000.00		
	22,633,481.57	27,891,166.77	
	37,839,691.57	32,451,366.77	

57

	18,498,363.82	33,962,907.03
		1,218,119.10
	10,095,867.57	
	6,863,833.03	-2,882,893.86
	3,183,408.24	-6,086,207.91
	-299,682.50	
	38,341,790.16	26,211,924.36

58

	39,363,872.97	-81,796,972.02
		6,558,700.75
	39,363,872.97	-75,238,271.27

59

	1,966,051.97	1,114,485.20
	-1,093,364.42	-809,475.77
		-2,178,762.41

	872,687.55	-1,873,752.98

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60

	-10,493,337.99	-100,922.15
	719,736.90	-419,066.86
	-4,881,879.31	-248,380.45
	-14,655,480.40	-768,369.46

“ ” “+”

61

“ ”	2,710,226.34	3,312,888.76	2,710,226.34
	2,710,226.34	3,312,888.76	2,710,226.34

62

	78,643.75	72,618.21	78,643.75
	553,424.00	199,100.00	553,424.00
	921,511.95	3,260,147.99	921,511.95
	1,553,579.70	3,531,866.20	1,553,579.70

63

	186,781.14	7,345,848.49	186,781.14
	40,000.00		40,000.00
	580,465.15	920,694.10	580,465.15
	807,246.29	8,266,542.59	807,246.29

64

	102,955,613.59	140,918,257.63
	72,006,535.78	-16,102,740.10
	174,962,149.37	124,815,517.53

1		
	701,746,285.38	860,410,886.02
	14,655,480.40	768,369.46
	-872,687.55	1,873,752.98
	540,157,588.47	

	417,917.89	4.7992	2,005,671.54
	19,969,455.78	7.2258	144,295,293.58
	74,139.21	7.2258	535,715.10
	130,218,977.28	0.0010	124,164.25
	2,785.61	0.9220	2,568.28
	29,974,788.16	4.7992	143,855,003.34
	5,847,678.67	5.4673	31,971,154.61
	248,391,877.30	0.1310	32,542,506.14
	69,386,750.21	7.2258	501,374,779.66
	5,922,133.98	4.7992	28,421,505.42
	123,250,000.00	7.2258	890,579,850.00
	5,530,915.22	4.7992	26,543,968.33

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2023 6 30

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=7.2258 1 =4.7992 2023 1-6

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2023

	15				15			
2	2023-5-31	60,637.84	100%		2023-5-31		16,271.68	413.56

1. 7 1

63% 2023 5 25

“ ” 61.30%

38.62%

2. 7 1

“ ” 100%

--	299,875.90	25,485.00	60,637.84
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	299,875.90	25,485.00	60,637.84
	299,875.90	25,485.00	60,637.84
/			

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					%		
1					99.79		
2					100.00		
3						100.00	
4						100.00	
5					100.00		
6					100.00		
7					72.00		
8						100.00	
9						65.57	
10					100.00		
11					100.00		
12						100.00	
13						60.00	
14						100.00	
15					100.00		

					%		
34						100.00	
35						100.00	
36						75	
37						100	
38						100	
39						100	
40						100	
41						100	
42						100	
43				:		100	
44						100	
45						100	
46						100	
47						100	
48						100	
49						100	
50				: :		100	
51						100	

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%				
0.21				228,285.00
28.00	6,490,848.74	13,223,263.67		309,647085.08

3

2,379,682,884.56	51,765,228.20	2,431,448,112.76	1,964,258,348.63	1,505,298.05	1,965,763,646.68
415,450,875.38	944,738,722.68	1,360,189,598.06	140,946,602.50	113,360,548.85	254,307,151.35

404,500,046.70	49,908,765.51	454,408,812.21	342,329,889.72	1,458,423.81	343,788,313.53
445,506,249.89	933,768,169.12	1,379,274,419.01	136,934,301.93	112,097,337.67	249,031,639.60

22,197,758,964.01	44,629,782.94	55,063,967.40	-771,830,255.73	22,582,237,263.73	3,356,729.84	-91,355.25	-118,731,125.29
304,498,368.09	23,181,602.65	23,181602.65	62,473,860.73	365,434,208.16	28,454,579.28	28,454,579.28	41,107,928.50

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				%		
				25.00		
				29.48		

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	/	/	/	/
	885,497,010.46	682,058,533.94	159,482,679.51	184,605,447.47
	591,865,354.39	621,647,382.84	21,057,302.88	23,135,743.82
	1,477,362,364.85	1,303,705,916.78	180,539,982.39	207,741,191.29
	565,802,840.44	202,461,957.53	16,118,177.95	20,953,073.40
	226,778,054.67	195,041,596.68	504,242.65	375,975.52
	792,580,895.11	397,503,554.21	16,622,420.60	21,329,048.92
	684,781,469.74	906,202,362.57	163,917,561.79	186,412,142.37
	465,789,408.10	589,950,679.65	9,492,828.43	6,332,139.80
	78,736,582.49	122,603,827.17	-13,893,740.13	-12,040,603.95
	78,736,582.49	122,603,827.17	-13,893,740.13	-12,550,603.95
			2,535,280.00	2,915,276.45

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				%	%
			100	35.72	35.72

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( )		2,325,463.11	4,936,383.19
			9,999,852.46
		1,679,550.57	1,428,465.49
		827,156.58	25,035.85
		451,844.25	720,985.51
		4,505,769.89	1,522,922.62
		9,789,784.40	18,633,645.12

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( )		29,580,930.01	79,493,105.05
		178,178.00	2,756,349.82
( )		1,123,912.31	1,179,942.16
		3,914.91	
		398,330.35	4,534,492.64
			58,610,834.50
			15,572,141.39
		31,285,265.58	162,146,865.56

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	1,500,000,000.00	1.35%-1.90%	985,418,149.57	5,294,558.663.18	5,793,457,689.82	486,519,122.93

	2,000,000,000.00	3.3500%	90,000,000.00	2023 1 17	2024 1 17
		3.3000%	100,000,000.00	2023 3 27	2024 3 27
		3.3600%	9,000,000.00	2023 4 20	2030 4 20
		3.6500%	800,000,000.00	2023 5 23	2024 5 23
		3.3600%	25,000,000.00	2023 5 24	2029 12 21

2022 8 26 < >

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2023 6 30

486,519,122.93 990,000,000.00 34,000,000.00 5,566,654.47 8,897,903.33

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	17,635,470.91	88,177.35	18,635,470.91	91,870.71
	15,604,515.30	78,022.58	27,337,203.29	136,686.02
	33,239,986.21	166,199.93	45,972,674.20	228,556.73
			24,000.00	
			24,000.00	
	5,000.00	25.00	5,000.00	25.00
	40,409,364.72	202,046.82	40,409,364.72	202,046.82
	40,414,364.72	202,071.82	40,414,364.72	202,071.82

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	172,617.9	812,127.00
		235,493.00
	1,052,980.21	1,016,837.24
	1,225,598.11	2,064,457.24
	10,000,000.00	10,000,000.00
( )	889,485.28	889,485.28
	5,510,675.20	
	15,522,800.00	6,000,000.00
	31,922,960.48	16,889,485.28
	99,427.19	73,344.43
	1,382,138.05	1,339,449.54

	1,481,565.24	1,412,793.97
	12,925.53	9,534.78
	179,677.95	120,550.46
	192,603.48	130,085.24

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72,628,566.48

72,628,566.48

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	17,847,641,865.78	791,357,396.34	18,665,404,736.86	406,505,502.17	-502,541,113.99	37,208,368,387.16
	16,398,627,953.27	696,593,057.56	18,638,579,444.68	340,967,503.53	-502,541,113.99	35,572,226,845.05
	36,774,745,264.64	2,899,644,975.67	1,392,753,618.86	4,722,398,998.60	-2,689,152,340.62	43,100,390,517.15
	23,171,068,944.46	773,625,308.39	851,360,936.64	3,732,880,257.30	-1,718,668,881.69	26,810,266,565.10

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b.

50%

2,304,165,631.50

1,152,082,815.75

c.

4,891,881,684.08

2,998,759,011.84 61.30%

38.70%

63%

“

” 61.30%

2)

606,378,396.94

606,378,396.94 “ ”

100%

3)

90%

18.9

11.1 2,998,759,011.84

245,864,656.26

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2023 8 1 2023

5 120 2.34%

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	233,621,384.34
1	14.60
1 2	63,066.95
3 4	79,065,383.48
5	19,084,228.92
	331,834,078.29
	19,918,638.61
	311,915,439.68

2

		%		%	
	331,834,078.29	100.00	19,918,638.61	6.00	311,915,439.68
: 1	148,310,917.27	44.69	-	-	148,310,917.27
2	164,375,850.55	49.54	824,948.92	0.50	163,550,901.63
3	19,147,310.47	5.77	19,093,689.69	99.72	53,620.78
	331,834,078.29	100.00	19,918,638.61	6.00	311,915,439.68

		%		%	
	284,552,096.53	100	19,683,382.13	6.92	264,868,714.40

		%		%	
: 1	149,164,214.74	52.42			149,164,214.74
2	115,911,766.37	40.73	579,558.82	0.5	115,332,207.55
3	19,476,115.42	6.85	19,103,823.31	98.09	372,292.11
	284,552,096.53	100	19,683,382.13	6.92	264,868,714.40

			%
1	14.60	0.73	5.00
1 2	63,066.95	9,460.04	50.00
5	19,084,228.92	19,084,228.92	100.00
	19,147,310.47	19,093,689.69	

			%
1	391,886.38	19,594.32	5.00
3 4	0.04	0.02	50.00
5	19,084,229.00	19,084,228.97	100.00
	19,476,115.42	19,103,823.31	

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	130,473,577.28	130,473,577.28
	5,402,742,724.45	2,346,296,130.47
	5,533,216,301.73	2,476,769,707.75

1

	130,473,577.28	130,473,577.28
	130,473,577.28	130,473,577.28
	130,473,577.28	130,473,577.28

1

	130,473,577.28	1-2		
	130,473,577.28			

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	5,333,799,649.85
1	596,533.60
2 3	2,718,966.27
5	146,641,675.16
	5,483,756,824.88
	81,014,100.43
	5,402,742,724.45

	4,065,412.04	12,337,437.26

	4,419,387.05	4,215,278.59
	5,475,272,025.79	2,410,812,911.09
	5,483,756,824.88	2,427,365,626.94
	81,014,100.43	81,069,496.47
	5,402,742,724.45	2,346,296,130.47

	12			

2023 1 1 288,021.89

				%	
		4,450,742,688.78		81.16	

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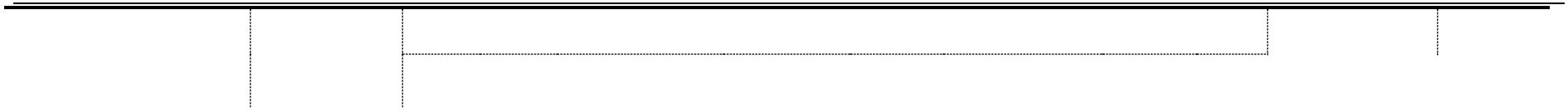
	10,856,116,941.63		10,856,116,941.63	8,338,616,941.63		8,338,616,941.63
	442,712,833.69		442,712,833.69	429,680,667.78		429,680,667.78
	11,298,829,775.32		11,298,829,775.32	8,768,297,609.41		8,768,297,609.41

2

	310,889,707.44	319,000,000.00		629,889,707.44		
	406,014,575.32	-		406,014,575.32		
	20,000,000.00	-		20,000,000.00		
	300,000,000.00	-		300,000,000.00		

23,989,278CID 156 >>BDC 11.493 0 Td ( )Tj EMC /P <</MCID 157 >>BDC 10.187 0 477.48 295.8 cm 0 0 m 0 -23.4 l S Q q 1 0 3t278CID 156 >>E

	1,038,337,400.00			1,038,337,400.00		
	1,243,072,387.31	608,500,000.00		1,851,572,387.31		
	90,000,000.00	-		90,000,000.00		
	330,000,000.00	-		330,000,000.00		
	100,000,000.00	-		100,000,000.00		
	188,350,343.83	-		188,350,343.83		
	192,214,100.00	-		192,214,100.00		
	50,000,000.00	-		50,000,000.00		



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	4,024,381,530.68	3,341,923,268.64	3,915,663,288.09	2,848,716,706.23
	70,154,592.66	32,981,634.57	52,325,501.19	15,807,401.69
	4,094,536,123.34	3,374,904,903.21	3,967,988,789.28	2,864,524,107.92

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	34,002,678.00	
	15,567,188.91	26,981,860.39
		609,066.98
		1,218,119.10
	1,114,537.20	-7,869,736.92
	50,684,404.11	20,939,309.55

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	2,602,088.95	

37,844,691.57