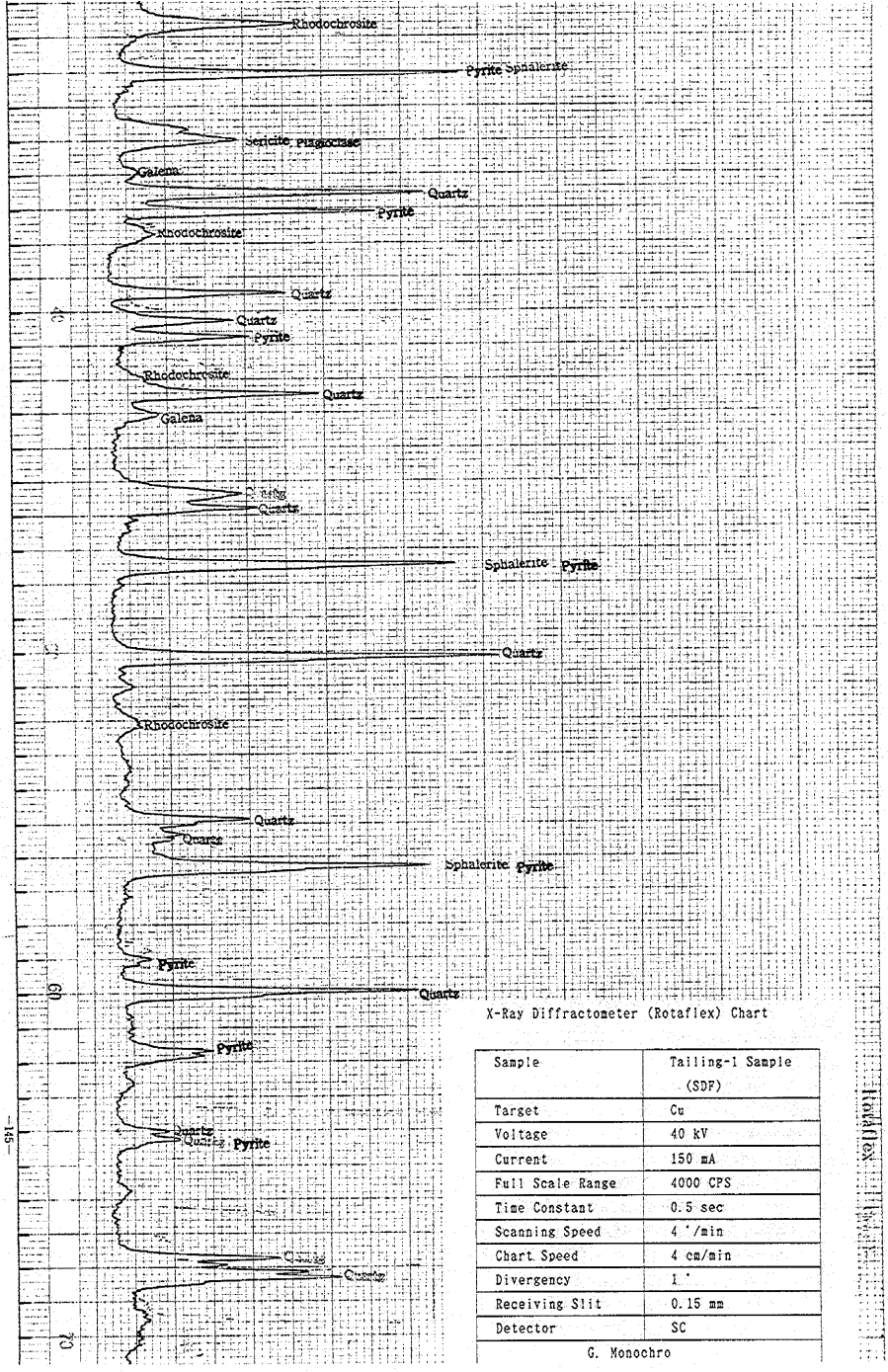
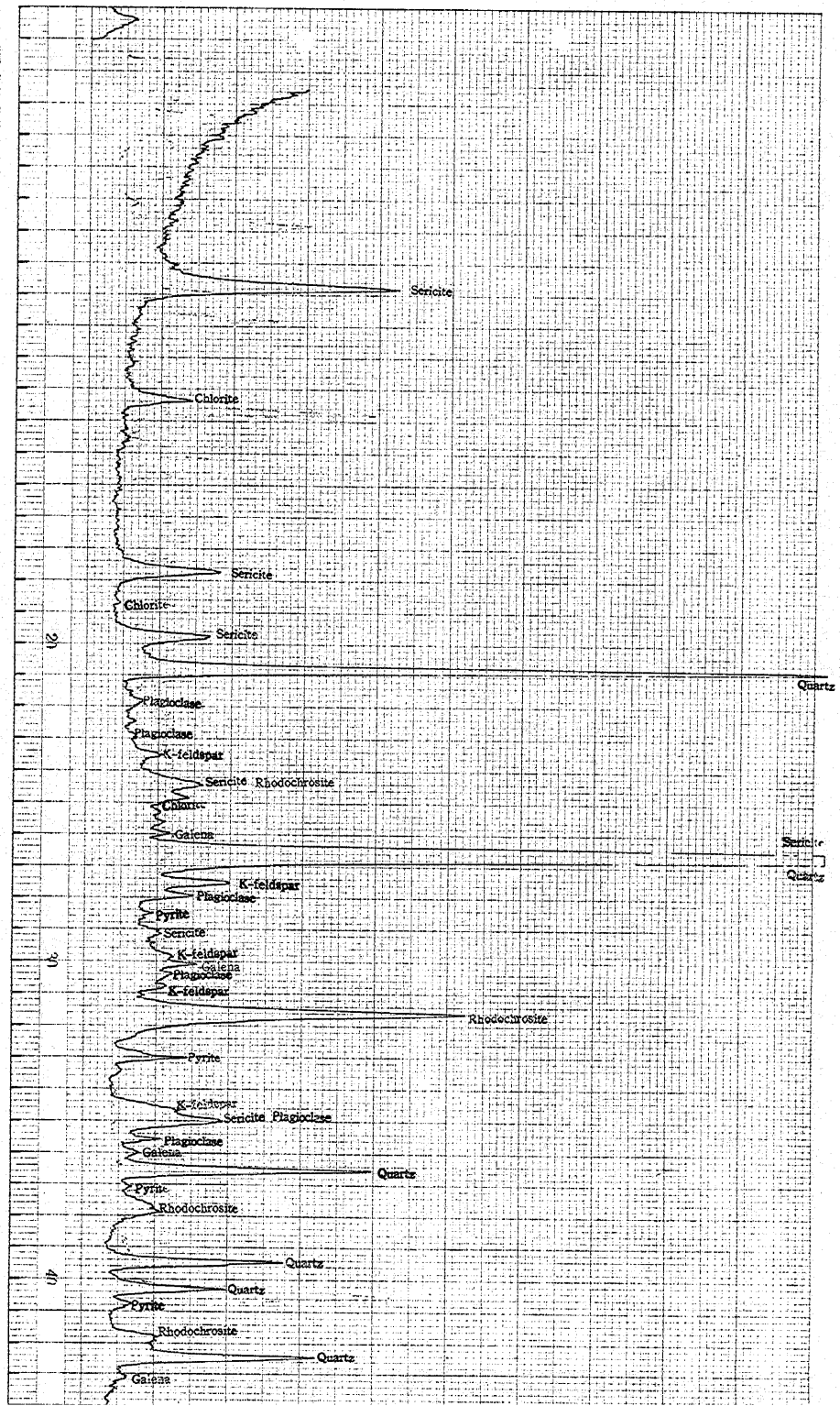


X-Ray Diffractometer (Rotaflex) Chart

Sample	Tailing-1 Sample (SDF)
Target	Cu
Voltage	40 kV
Current	150 mA
Full Scale Range	4000 CPS
Time Constant	0.5 sec
Scanning Speed	4 °/min
Chart Speed	4 cm/min
Divergency	1 °
Receiving Slit	0.15 mm
Detector	SC
G. Monochro	


Sericite
Chlorite
Sericite
Chlorite
Sericite
Quartz
Plagioclase
Plagioclase
K-feldspar
Sericite Rhodochrosite
Chlorite
Galena
Sericite
Quartz
K-feldspar
Plagioclase
Pyrite
Sericite
K-feldspar
Galena
Plagioclase
K-feldspar
Rhodochrosite
Pyrite
K-feldspar
Sericite Plagioclase
Plagioclase
Galena
Quartz
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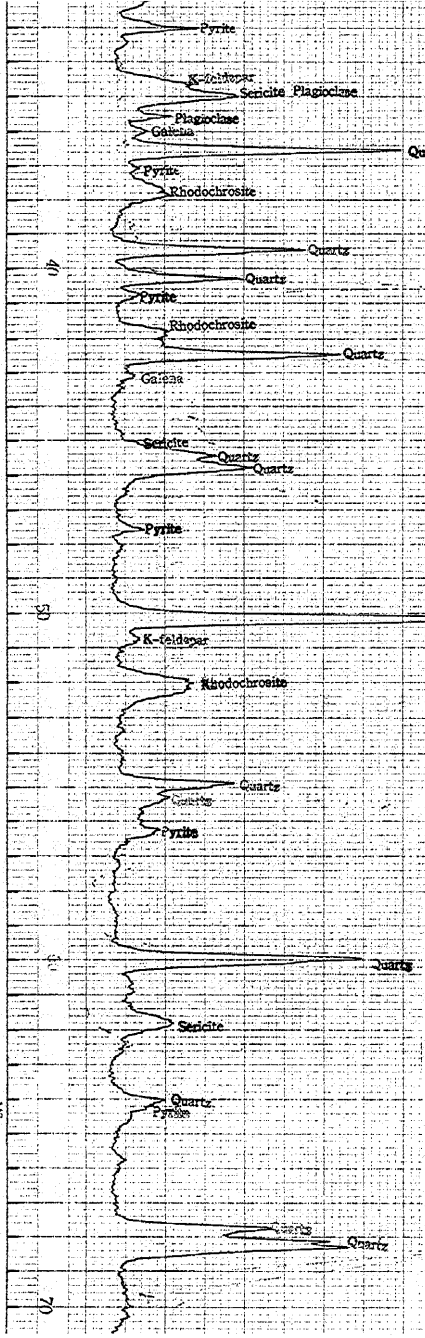
Rhodochrosite
Quartz
Quartz
Pyrite
Rhodochrosite
Quartz
Galena
20
30
40



X-Ray Diffractometer (Rotaflex) Chart

Sample	Tailing-2 Sample (BDF)
Target	Cu
Voltage	40 kV
Current	150 mA
Full Scale Range	4000 CPS
Time Constant	0.5 sec
Scanning Speed	4 °/min
Chart Speed	4 cm/min
Divergency	1 °
Receiving Slit	0.15 mm
Detector	SC
G. Monochro	

Rotaflex Chart No.

Milling time	Particle Size (Mesh)	Weight (%)	cumurative Weight(%)	Grade						Distribution						Cumurative Distribution					
				Cu	Pb	Zn	Fe	Ag	Au	Cu	Pb	Zn	Fe	Ag	Au	Cu	Pb	Zn	Fe	Ag	Au
0 min	+65	54.1	54.1	0.17	9.6	3.7	4.5	277	0.7	44.9%	56.4%	65.1%	51.1%	51.9%	58.3%	44.9%	56.4%	65.1%	51.1%	51.9%	58.3%
	-65~+100	9.0	63.1	0.18	9.7	2.8	5.7	312	0.7	7.9%	9.5%	8.2%	10.8%	9.7%	9.7%	52.8%	65.9%	73.3%	61.9%	61.6%	68.0%
	-100~+150	8.2	71.3	0.18	8.0	2.9	5.3	366	0.8	7.2%	7.1%	7.7%	9.1%	10.4%	10.1%	60.0%	73.0%	81.0%	71.0%	72.0%	78.1%
	-150~+200	5.3	76.6	0.23	11.7	2.5	6.3	317	0.8	5.9%	6.7%	4.3%	7.0%	5.8%	6.5%	65.9%	79.7%	85.3%	78.0%	77.8%	84.6%
	-200~+270	3.9	80.5	0.25	12.1	3.0	6.2	311	0.8	4.8%	5.1%	3.8%	5.1%	4.2%	4.8%	70.7%	84.8%	89.1%	83.1%	82.0%	89.4%
	-270~+325	2.0	82.5	0.29	10.6	2.7	6.1	398	0.8	2.8%	2.3%	1.8%	2.6%	2.8%	2.5%	73.5%	87.1%	90.9%	85.7%	84.8%	91.9%
	-325	17.5	100.0	0.31	6.8	1.6	3.9	250	0.3	26.5%	12.9%	9.1%	14.3%	15.2%	8.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0		0.20	9.2	3.1	4.8	289	0.6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
3 min	+65	33.8	33.8	0.07	3.6	3.2	2.1	105	0.3	11.9%	14.0%	34.9%	18.1%	14.7%	19.3%	11.9%	14.0%	34.9%	18.1%	14.7%	19.3%
	-65~+100	11.9	45.7	0.23	14.1	4.2	5.4	372	0.8	13.7%	19.3%	16.1%	16.4%	18.3%	18.1%	25.6%	33.3%	51.0%	34.5%	33.0%	37.4%
	-100~+150	13.1	58.8	0.26	12.4	3.8	5.4	315	0.8	17.1%	18.7%	16.0%	18.0%	17.1%	19.9%	42.7%	52.0%	67.0%	52.5%	50.1%	57.3%
	-150~+200	8.1	66.9	0.22	11.9	3.7	5.6	292	0.7	8.9%	11.1%	9.7%	11.6%	9.8%	10.8%	51.6%	63.1%	76.7%	64.1%	59.9%	68.1%
	-200~+270	5.4	72.3	0.26	12.6	3.1	5.0	340	0.8	7.0%	7.8%	5.4%	6.9%	7.6%	8.2%	58.6%	70.9%	82.1%	71.0%	67.5%	76.3%
	-270~+325	3.4	75.7	0.28	12.6	3.5	5.7	332	0.8	4.8%	4.9%	3.8%	4.9%	4.7%	5.2%	63.4%	75.8%	85.9%	75.9%	72.2%	81.5%
	-325	24.3	100.0	0.30	8.7	1.8	3.9	277	0.4	36.6%	24.2%	14.1%	24.1%	27.8%	18.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0		0.20	8.7	3.1	3.9	242	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
5 min	+65	16.6	16.6	0.04	1.4	2.0	3.9	52	0.4	3.9%	2.6%	11.0%	13.9%	4.0%	9.2%	3.9%	2.6%	11.0%	13.9%	4.0%	9.2%
	-65~+100	16.8	33.4	0.09	9.1	4.2	5.3	213	0.9	8.9%	17.0%	23.4%	19.1%	16.8%	20.9%	12.8%	19.6%	34.4%	33.0%	20.8%	30.1%
	-100~+150	17.3	50.7	0.16	11.2	3.2	4.4	328	0.9	16.3%	21.6%	18.4%	16.4%	26.6%	21.5%	29.1%	41.2%	52.8%	49.4%	47.4%	51.6%
	-150~+200	10.6	61.3	0.19	13.2	4.0	5.7	326	1.2	11.9%	15.6%	14.1%	13.0%	16.2%	17.6%	41.0%	56.8%	66.9%	62.4%	63.6%	69.2%
	-200~+270	6.2	67.5	0.21	13.8	3.9	5.8	331	1.1	7.7%	9.5%	8.0%	7.7%	9.6%	9.4%	48.7%	66.3%	74.9%	70.1%	73.2%	78.6%
	-270~+325	4.2	71.7	0.25	13.0	3.2	5.5	308	1.0	6.2%	6.1%	4.5%	5.0%	6.1%	5.8%	54.9%	72.4%	79.4%	75.1%	79.3%	84.4%
	-325	28.3	100.0	0.27	8.8	2.2	4.1	157	0.4	45.1%	27.6%	20.6%	24.9%	20.7%	15.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0		0.17	9.0	3.0	4.7	214	0.7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
10 min	+65	2.0	2.0	0.02	1.0	1.5	4.1	12	0.2	0.2%	0.2%	0.9%	1.8%	0.2%	0.8%	0.2%	0.2%	0.9%	1.8%	0.2%	0.8%
	-65~+100	10.3	12.3	0.06	1.3	2.7	3.9	18	0.3	3.4%	1.6%	8.5%	8.6%	1.5%	6.1%	3.6%	1.8%	9.4%	10.4%	1.7%	6.9%
	-100~+150	19.6	31.9	0.12	4.8	3.9	4.7	63	0.6	12.9%	11.4%	23.3%	19.8%	10.0%	23.1%	16.5%	13.2%	32.7%	30.2%	11.7%	30.0%
	-150~+200	16.3	48.2	0.17	7.7	3.6	4.9	127	0.7	15.2%	15.2%	18.1%	17.0%	16.8%	22.5%	31.7%	28.4%	50.8%	47.2%	28.5%	52.5%
	-200~+270	8.3	56.5	0.21	14.9	4.3	5.6	190	1.0	9.6%	14.9%	10.9%	10.1%	12.8%	16.3%	41.3%	43.3%	61.7%	57.3%	41.3%	68.8%
	-270~+325	5.6	62.1	0.22	11.6	4.0	5.2	154	0.8	6.8%	7.9%	6.9%	6.3%	7.0%	8.8%	48.1%	51.2%	68.6%	63.6%	48.3%	77.6%
	-325	37.9	100.0	0.25	10.6	2.7	4.5	168	0.3	51.9%	48.8%	31.4%	36.4%	51.7%	22.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0		0.18	8.3	3.3	4.6	123	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						

Apx. 23 Grinding Test Results

Type	Particle Size (Mesh)	Weight (g)	Weight (%)	Cumulative Weight(%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Grade Ag	Grade Au	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Ag	Distribution Au	Cumulative Distribution Cu	Cumulative Distribution Pb	Cumulative Distribution Zn	Cumulative Distribution Fe	Cumulative Distribution Ag	Cumulative Distribution Au
Crude Ore	+65	46.33	9.3	9.3	0.06	0.67	2.14	3.38	23	0.2	3.0%	1.0%	7.4%	8.5%	1.9%	3.6%	3.0%	1.0%	7.4%	8.5%	1.9%	3.6%
	-65~+100	81.46	16.4	25.7	0.09	2.67	2.65	3.76	52	0.3	8.2%	7.0%	16.1%	16.7%	7.7%	8.8%	11.2%	8.0%	23.5%	25.2%	9.6%	12.4%
	-100~+150	91.64	18.4	44.1	0.13	7.89	3.51	4.09	109	0.7	13.8%	23.1%	24.1%	20.5%	17.9%	26.3%	25.0%	31.1%	47.6%	45.7%	27.5%	38.7%
	-150~+200	54.90	11.0	55.1	0.17	7.35	2.90	4.45	127	0.7	10.5%	12.9%	11.9%	13.3%	12.5%	15.3%	35.5%	44.0%	59.5%	59.0%	40.0%	54.0%
	-200~+270	33.81	6.8	61.9	0.24	13.82	4.48	4.37	183	1.0	9.2%	14.9%	11.3%	8.1%	11.1%	14.2%	44.7%	58.9%	70.8%	67.1%	51.1%	68.2%
	-270~+325	21.24	4.3	66.2	0.24	9.69	3.20	3.96	160	0.8	5.8%	6.6%	5.1%	4.6%	6.1%	6.6%	50.5%	65.5%	75.9%	71.7%	57.2%	74.8%
	-325	167.95	33.8	100.0	0.26	6.42	1.92	3.09	142	0.4	49.5%	34.5%	24.1%	28.3%	42.8%	25.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		497.33	100.0		0.18	6.29	2.69	3.69	112	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 1 0~2min	+65	2.40	3.0	3.0	0.78	11.21	36.60	9.45	205	1.7	2.9%	1.0%	7.5%	4.5%	1.2%	2.2%	2.9%	1.0%	7.6%	4.5%	1.2%	2.2%
	-65~+100	8.33	10.4	13.4	0.70	24.42	23.20	8.39	394	1.5	9.0%	7.2%	16.7%	13.8%	7.8%	6.8%	11.9%	8.2%	24.3%	18.3%	9.0%	9.0%
	-100~+150	17.06	21.3	34.7	0.60	39.78	17.09	7.39	492	3.1	15.8%	24.2%	25.1%	25.0%	19.9%	29.0%	27.7%	32.4%	49.4%	43.3%	28.9%	38.0%
	-150~+200	10.91	13.6	48.3	0.70	34.92	13.36	7.14	538	2.9	11.8%	13.6%	12.6%	15.4%	13.9%	17.3%	39.5%	46.0%	62.0%	58.7%	42.8%	55.3%
	-200~+270	9.47	11.8	60.1	0.71	46.56	14.66	6.97	559	3.2	10.4%	15.7%	12.0%	13.0%	12.6%	16.6%	49.9%	61.7%	74.0%	71.7%	55.4%	71.9%
	-270~+325	5.15	6.4	66.5	0.83	37.30	11.85	6.62	571	2.7	6.6%	6.8%	5.3%	6.7%	7.0%	7.6%	56.5%	68.5%	79.3%	78.4%	62.4%	79.5%
	-325	26.71	33.5	100.0	1.06	33.20	9.00	4.10	595	1.4	43.5%	31.5%	20.7%	21.8%	37.6%	20.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		80.03	100.0		0.81	35.11	14.43	6.22	527	2.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 2 2~8min	+65	0.50	2.6	2.6	0.54	6.14	13.55	18.25	111	0.8	1.7%	1.1%	5.4%	4.3%	0.9%	1.9%	1.7%	1.1%	5.4%	4.3%	0.9%	1.9%
	-65~+100	1.28	6.7	9.3	0.70	10.66	13.09	19.10	175	0.9	5.7%	5.0%	13.0%	11.6%	3.8%	5.8%	7.4%	6.1%	18.4%	15.9%	4.7%	7.7%
	-100~+150	2.17	11.4	20.7	0.67	19.56	11.11	18.79	277	1.8	9.2%	15.4%	18.7%	19.4%	10.2%	19.7%	16.6%	21.5%	37.1%	35.3%	14.9%	27.4%
	-150~+200	1.35	7.1	27.8	0.76	15.55	7.03	15.38	316	1.2	6.5%	7.6%	7.4%	9.5%	7.2%	8.2%	23.1%	29.1%	44.5%	45.2%	22.1%	35.6%
	-200~+270	1.28	6.7	34.5	0.82	19.29	8.06	17.90	338	1.4	6.7%	9.0%	8.0%	10.9%	7.3%	9.0%	29.8%	38.1%	52.5%	56.1%	29.4%	44.6%
	-270~+325	0.69	3.6	38.1	0.86	18.08	7.72	17.96	319	0.6	3.8%	4.5%	4.1%	5.9%	3.7%	2.1%	33.6%	42.6%	56.6%	62.0%	33.1%	46.7%
	-325	11.74	61.9	100.0	0.89	13.47	4.75	18.73	337	0.5	66.4%	57.4%	43.4%	38.0%	66.9%	53.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		19.01	100.0		0.83	14.49	6.77	11.05	311	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 3 6~15min	+65	0.79	3.5	3.5	0.11	0.04	0.84	13.73	75	0.3	2.9%	0.1%	5.1%	5.8%	2.6%	3.0%	2.9%	0.1%	5.1%	5.8%	2.6%	3.0%
	-65~+100	1.25	5.5	9.0	0.12	0.04	0.46	21.32	38	0.8	5.0%	0.2%	4.4%	14.3%	2.1%	12.7%	7.9%	0.3%	9.5%	20.1%	4.7%	15.7%
	-100~+150	1.45	6.4	15.4	0.11	0.05	0.47	26.26	40	0.9	5.3%	0.2%	5.3%	20.4%	2.6%	16.6%	13.2%	0.5%	14.8%	40.5%	7.3%	32.3%
	-150~+200	0.90	4.0	19.4	0.11	0.05	0.49	22.90	45	0.6	3.2%	0.1%	3.3%	11.5%	1.8%	6.9%	16.5%	0.6%	18.1%	52.0%	9.1%	39.2%
	-200~+270	0.81	3.6	23.0	0.10	1.55	0.35	27.76	74	1.0	2.7%	3.9%	2.2%	12.0%	2.7%	10.3%	19.2%	4.5%	20.3%	64.0%	11.8%	49.5%
	-270~+325	0.50	2.2	25.2	0.11	1.96	0.36	23.04	84	1.2	1.3%	2.1%	1.4%	6.2%	1.9%	7.6%	21.0%	7.0%	21.7%	70.2%	13.7%	57.1%
	-325	16.89	74.8	100.0	0.14	1.74	0.60	3.30	115	0.2	79.0%	92.4%	78.2%	29.8%	86.3%	42.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		22.59	100.0		0.13	1.41	0.57	8.27	100	0.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tailing	+65	42.64	11.3	11.3	0.01	0.02	0.09	2.67	11	0.1	10.9%	9.0%	9.9%	12.2%	8.8%	11.3%	10.8%	9.0%	9.9%	12.2%	8.8%	11.3%
	-65~+100	70.60	18.8	30.1	0.00	0.01	0.07	2.63	10	0.1	7.1%	7.4%	12.9%	20.0%	13.2%	18.8%	17.9%	16.4%	22.8%	32.2%	22.0%	30.1%
	-100~+150	70.96	18.9	49.0	0.00	0.02	0.08	2.40	13	0.1	5.4%	15.0%	14.8%	18.3%	17.3%	18.9%	23.3%	31.4%	37.6%	50.5%	39.3%	49.0%
	-150~+200	41.74	11.1	60.1	0.01	0.03	0.09	2.97	15	0.1	10.5%	13.2%	9.8%	13.3%	11.7%	11.1%	33.8%	44.6%	47.4%	63.8%	51.0%	60.1%
	-200~+270	22.25	5.9	66.0	0.01	0.02	0.09	1.63	13	0.1	5.6%	4.7%	5.2%	3.9%	7.5%	5.9%	39.4%	49.3%	52.6%	67.7%	58.5%	66.0%
	-270~+325	14.90	4.0	70.0	0.01	0.02	0.09	1.75	13	0.1	3.8%	3.1%	3.5%	2.8%	3.6%	4.0%	43.2%	52.4%	56.1%	70.5%	62.1%	70.0%
	-325	112.61	30.0	100.0	0.02	0.04	0.15	2.43	18	0.1	56.8%	47.6%	43.9%	29.5%	37.9%	30.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		375.70	100.0	-	0.01	0.03	0.10	2.47	14	0.1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						

Particle Size (Mesh)	Type	Weight (g)	Weight (%)	Cumulative Weight(%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Grade Ag	Grade Au	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Ag	Distribution Au	Total Distribution Cu	Total Distribution Pb	Total Distribution Zn	Total Distribution Fe	Total Distribution Ag	Total Distribution Au
-65	Crude Ore	46.33	100.0	9.3	0.06	0.67	2.14	3.38	23	0.2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	3.0%	1.0%	7.4%	8.5%	1.9%	3.6%
	Conc 1 (0~2)	2.40	5.2	0.5	0.78	11.21	36.60	9.45	205	1.7	70.4%	87.2%	88.4%	14.5%	45.7%	45.6%	2.1%	0.9%	6.6%	1.2%	0.9%	1.6%
	Conc 2 (2~6)	0.50	1.1	0.1	0.54	6.14	13.55	18.25	111	0.8	10.2%	5.8%	7.0%	5.8%	5.2%	4.2%	0.3%	0.1%	0.8%	0.5%	0.1%	0.2%
	Conc 3 (6~15)	0.79	1.7	0.2	0.11	0.04	0.84	13.73	75	0.3	3.3%	0.1%	0.7%	2.8%	5.5%	2.6%	0.1%	0.0%	0.0%	0.6%	0.1%	0.1%
	Tailing	42.64	92.0	8.5	0.01	0.02	0.09	2.67	11	0.1	16.1%	2.8%	3.3%	72.8%	43.6%	47.6%	0.5%	0.0%	0.2%	6.2%	0.8%	1.7%
+100	Crude Ore	81.46	100.0	16.4	0.09	2.67	2.65	3.76	52	0.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	8.2%	7.0%	16.1%	16.7%	7.7%	8.8%
	Conc 1 (0~2)	8.33	10.2	1.7	0.70	24.42	23.20	8.39	394	1.5	81.5%	93.4%	89.6%	22.8%	77.0%	57.6%	6.7%	6.6%	14.4%	3.8%	5.9%	5.1%
	Conc 2 (2~6)	1.28	1.6	0.3	0.70	10.66	13.09	19.10	175	0.9	12.5%	6.3%	7.8%	3.0%	5.3%	5.3%	1.0%	0.4%	1.3%	1.3%	0.4%	0.5%
	Conc 3 (6~15)	1.25	1.5	0.3	0.12	0.04	0.46	21.32	38	0.8	2.1%	0.0%	0.3%	8.7%	1.1%	4.6%	0.2%	0.0%	0.0%	1.5%	0.1%	0.4%
	Tailing	70.60	86.7	14.1	0.00	0.01	0.07	2.63	10	0.1	3.9%	0.2%	2.3%	60.5%	16.6%	32.5%	0.3%	0.0%	0.4%	10.1%	1.3%	2.8%
+150	Crude Ore	91.64	100.0	18.4	0.13	7.89	3.51	4.09	109	0.7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	13.8%	23.1%	24.1%	20.5%	17.9%	26.3%
	Conc 1 (0~2)	17.06	18.6	3.4	0.60	39.78	17.09	7.39	492	3.1	84.8%	93.9%	90.5%	33.6%	84.2%	81.1%	11.7%	21.7%	21.8%	6.9%	15.0%	21.3%
	Conc 2 (2~6)	2.17	2.4	0.4	0.67	19.56	11.11	18.79	277	1.8	12.1%	5.9%	7.5%	10.9%	6.0%	6.0%	1.7%	1.4%	1.8%	2.2%	1.1%	1.6%
	Conc 3 (6~15)	1.45	1.6	0.3	0.11	0.05	0.47	26.28	40	0.9	1.3%	0.0%	0.2%	10.2%	0.6%	2.0%	0.2%	0.0%	0.1%	2.1%	0.1%	0.5%
	Tailing	70.96	77.4	14.2	0.00	0.02	0.08	2.40	13	0.1	1.9%	0.2%	1.8%	45.9%	9.2%	10.9%	0.2%	0.0%	0.4%	9.2%	1.7%	2.9%
-200	Crude Ore	54.90	100.0	11.0	0.17	7.35	2.90	4.45	127	0.7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	10.5%	12.9%	11.9%	13.3%	12.5%	15.3%
	Conc 1 (0~2)	10.91	19.9	2.2	0.70	34.92	13.36	7.14	538	2.9	83.2%	94.5%	91.3%	31.9%	84.3%	83.3%	8.7%	12.2%	10.9%	4.3%	10.5%	12.7%
	Conc 2 (2~6)	1.35	2.5	0.3	0.76	15.55	7.03	15.38	316	1.2	11.2%	5.2%	6.0%	8.5%	6.1%	4.3%	1.2%	0.7%	0.7%	1.1%	0.8%	0.7%
	Conc 3 (6~15)	0.90	1.6	0.2	0.11	0.05	0.48	23.90	46	0.6	1.1%	0.0%	0.2%	8.8%	0.6%	1.4%	0.1%	0.0%	0.0%	1.2%	0.1%	0.2%
	Tailing	41.74	76.0	8.3	0.01	0.03	0.09	2.97	15	0.1	4.5%	0.3%	2.4%	50.8%	9.0%	11.0%	0.5%	0.0%	0.3%	6.7%	1.1%	1.7%
+270	Crude Ore	33.81	100.0	6.8	0.24	13.82	4.48	4.37	183	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	9.2%	14.9%	11.3%	8.1%	11.1%	14.2%
	Conc 1 (0~2)	9.47	28.0	1.9	0.71	46.56	14.66	6.97	559	3.2	83.2%	94.3%	91.7%	44.7%	85.3%	86.3%	7.6%	14.1%	10.4%	3.6%	9.5%	12.2%
	Conc 2 (2~6)	1.28	3.8	0.3	0.82	19.29	8.06	17.90	338	1.4	13.0%	5.3%	6.8%	15.5%	7.0%	5.1%	1.2%	0.8%	0.8%	1.3%	0.8%	0.7%
	Conc 3 (6~15)	0.81	2.4	0.2	0.10	1.55	0.35	27.76	74	1.0	1.0%	0.3%	0.2%	15.2%	1.0%	2.3%	0.1%	0.0%	0.0%	1.2%	0.1%	0.2%
	Tailing	22.25	65.8	4.4	0.01	0.02	0.09	1.63	13	0.1	2.8%	0.1%	1.3%	24.6%	6.5%	6.3%	0.3%	0.0%	0.1%	2.0%	0.7%	0.9%
-325	Crude Ore	21.24	100.0	4.3	0.24	9.69	3.20	3.96	160	0.8	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	5.8%	6.6%	5.1%	4.6%	6.1%	6.6%
	Conc 1 (0~2)	5.15	24.2	1.0	0.83	37.30	11.85	6.62	571	2.7	84.3%	93.3%	89.5%	40.6%	86.6%	84.7%	4.8%	6.2%	4.6%	1.9%	5.3%	5.6%
	Conc 2 (2~6)	0.69	3.2	0.1	0.86	18.08	7.72	17.96	319	0.6	11.7%	6.1%	7.8%	14.7%	6.5%	2.5%	0.7%	0.4%	0.4%	0.7%	0.4%	0.2%
	Conc 3 (6~15)	0.50	2.4	0.1	0.11	1.96	0.36	23.04	84	1.2	1.1%	0.5%	0.3%	13.7%	1.2%	3.7%	0.1%	0.0%	0.0%	0.6%	0.1%	0.2%
	Tailing	14.90	70.2	3.1	0.01	0.02	0.09	1.75	13	0.1	2.9%	0.1%	2.0%	31.0%	5.7%	9.1%	0.2%	0.0%	0.1%	1.4%	0.3%	0.6%
-325	Crude Ore	167.95	100.0	33.8	0.26	6.42	1.92	3.09	142	0.4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	49.5%	34.5%	24.1%	28.3%	42.8%	25.2%
	Conc 1 (0~2)	26.71	15.9	5.4	1.06	33.20	9.00	4.10	595	1.4	65.2%	82.2%	74.4%	21.1%	66.7%	59.7%	32.3%	28.4%	17.9%	6.0%	28.6%	15.0%
	Conc 2 (2~6)	11.74	7.0	2.4	0.89	13.47	4.75	6.78	337	0.9	24.1%	14.7%	17.5%	15.4%	16.6%	16.9%	11.9%	5.1%	4.1%	4.3%	7.1%	4.3%
	Conc 3 (6~15)	16.89	10.1	2.4	0.14	1.74	0.60	3.30	115	0.2	5.5%	2.7%	3.1%	10.7%	8.2%	5.4%	2.7%	0.9%	0.8%	2.0%	2.5%	1.4%
	Tailing	112.61	67.0	22.6	0.02	0.04	0.15	2.43	18	0.1	5.2%	0.4%	5.2%	52.8%	8.5%	18.0%	2.6%	0.1%	1.3%	15.0%	3.6%	4.5%
Total	Crude Ore	497.33	100.0	100.0	0.18	6.29	2.69	3.69	112	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Conc 1 (0~2)	80.03	16.1	16.1	0.81	35.11	14.43	6.22	527	2.3	74.1%	89.9%	86.5%	27.6%	75.8%	73.6%	74.1%	89.9%	86.5%	27.6%	75.8%	73.6%
	Conc 2 (2~6)	19.01	3.8	3.8	0.83	14.49	6.77	11.05	311	1.0	18.0%	8.8%	9.6%	11.5%	10.6%	8.0%	18.0%	8.8%	9.6%	11.5%	10.6%	8.0%
	Conc 3 (6~15)	22.59	4.5	4.5	0.13	1.41	0.57	8.27	100	0.3	3.4%	1.0%	1.0%	10.2%	4.0%	3.2%	3.4%	1.0%	1.0%	10.2%	4.0%	3.2%
	Tailing	375.70	75.6	75.6	0.01	0.03	0.10	2.47	14	0.1	4.5%	0.3%	2.9%	50.7%	9.6%	15.2%	4.5%	0.3%	2.9%	50.7%	9.6%	15.2%

Apx. 24 Results of Flotation Test by Grain Size(with Activater $CuSO_4$)

Type	Particle Size (Mesh)	Weight (g)	Weight (%)	Cumurative Weight(%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Grade Ag	Grade Au	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Ag	Distribution Au	Cumurative Distribution Cu	Cumurative Distribution Pb	Cumurative Distribution Zn	Cumurative Distribution Fe	Cumurative Distribution Ag	Cumurative Distribution Au
Crude Ore	+65	46.35	9.3	9.3	0.06	0.95	2.09	3.78	20	0.2	3.4%	1.4%	3.4%	1.7%	3.3%	3.4%	3.4%	1.4%	3.4%	1.7%	3.3%	3.4%
	-65~+100	82.88	16.7	26.0	0.09	2.83	2.66	3.81	47	0.5	8.9%	7.4%	16.9%	16.5%	7.4%	13.5%	12.3%	8.8%	24.3%	25.7%	9.1%	16.9%
	-100~+150	92.72	18.6	44.6	0.14	6.90	3.28	4.40	103	0.7	15.3%	20.3%	23.3%	21.4%	18.1%	24.4%	27.6%	29.1%	47.6%	47.1%	27.2%	41.2%
	-150~+200	54.94	11.0	55.6	0.18	7.89	2.90	4.34	123	0.7	11.2%	13.7%	12.2%	12.5%	12.8%	14.4%	38.8%	42.8%	59.8%	59.6%	40.0%	55.6%
	-200~+270	32.29	6.5	62.1	0.20	13.11	4.37	4.58	185	0.9	7.5%	13.4%	10.8%	7.7%	10.1%	10.0%	46.3%	56.2%	70.6%	67.3%	50.1%	65.6%
	-270~+325	19.50	3.9	66.0	0.25	9.17	3.46	3.87	148	0.9	5.6%	5.7%	5.2%	3.9%	5.5%	6.3%	51.9%	61.9%	75.8%	71.2%	55.6%	71.9%
	-325	168.92	34.0	100.0	0.25	7.13	1.87	3.25	139	0.5	48.1%	38.1%	24.2%	28.8%	44.4%	28.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		497.60	100.0		0.17	6.35	2.62	3.84	106	0.6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 1 0~2min	+65	3.01	3.3	3.3	0.64	9.57	30.48	11.58	156	1.6	2.8%	1.0%	7.7%	5.0%	1.1%	2.1%	2.8%	1.0%	7.7%	5.0%	1.1%	2.1%
	-65~+100	10.26	11.3	14.6	0.65	20.02	20.70	10.46	297	2.9	9.7%	7.5%	17.8%	15.2%	7.2%	13.3%	12.5%	8.5%	25.5%	20.2%	8.3%	15.4%
	-100~+150	20.13	22.1	36.7	0.58	29.26	14.15	10.31	413	2.9	17.0%	21.4%	23.9%	29.4%	19.6%	26.1%	29.5%	29.9%	49.4%	49.7%	27.9%	41.5%
	-150~+200	12.97	14.2	50.9	0.65	30.92	11.73	8.00	457	2.7	12.3%	14.5%	12.7%	14.8%	14.0%	15.6%	41.8%	44.4%	62.1%	64.5%	41.9%	57.1%
	-200~+270	10.05	11.0	61.9	0.59	39.64	13.56	9.11	482	2.5	8.6%	14.5%	11.4%	13.0%	11.4%	11.1%	50.4%	58.9%	73.5%	77.5%	53.3%	68.2%
	-270~+325	5.66	6.2	68.1	0.77	28.72	11.25	6.96	459	2.8	6.4%	5.5%	5.3%	5.6%	6.1%	7.1%	56.8%	64.8%	78.8%	83.1%	59.4%	75.3%
	-325	29.06	31.9	100.0	1.02	33.44	8.73	4.08	592	1.9	43.2%	35.2%	21.2%	16.9%	40.6%	24.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		91.14	100.0		0.75	30.25	13.11	7.71	465	2.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 2 2~6min	+65	0.25	2.2	2.2	0.35	3.72	6.24	16.09	95	0.8	0.9%	0.6%	2.4%	3.3%	0.6%	1.6%	0.9%	0.6%	2.4%	3.3%	0.6%	1.6%
	-65~+100	0.52	4.5	6.7	0.42	7.17	7.01	17.61	149	0.9	2.4%	2.5%	5.7%	7.4%	2.0%	4.0%	3.3%	3.1%	8.1%	10.7%	2.6%	5.6%
	-100~+150	1.25	10.9	17.6	0.55	20.04	12.10	14.80	313	1.4	7.4%	16.8%	23.6%	15.0%	10.0%	14.8%	10.7%	19.9%	31.7%	25.7%	12.6%	20.4%
	-150~+200	0.62	5.4	23.0	0.54	11.42	5.93	13.89	266	1.1	3.6%	4.8%	5.7%	9.5%	4.2%	5.3%	14.3%	24.7%	37.4%	35.2%	16.8%	26.2%
	-200~+270	0.48	4.2	27.2	0.58	14.94	5.02	18.75	294	1.1	3.0%	4.8%	3.8%	7.3%	3.6%	4.5%	17.3%	29.5%	41.2%	42.5%	20.4%	30.7%
	-270~+325	0.41	3.6	30.8	0.66	13.86	5.72	20.40	246	0.6	2.9%	3.8%	3.7%	6.8%	2.8%	2.1%	20.2%	33.3%	44.9%	49.3%	23.0%	32.8%
	-325	7.95	69.2	100.0	0.93	12.49	4.45	7.82	377	1.0	79.8%	66.7%	55.1%	50.7%	77.0%	67.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		11.48	100.0		0.81	12.97	5.59	10.71	339	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Conc 3 6~15min	+65	0.73	3.5	3.5	0.16	1.37	0.64	13.67	50	0.3	2.7%	2.1%	2.6%	7.8%	2.0%	4.0%	2.7%	2.1%	3.6%	7.8%	2.0%	4.0%
	-65~+100	1.24	5.9	9.4	0.12	1.70	0.54	15.14	57	0.3	4.7%	4.5%	5.2%	14.7%	3.9%	6.9%	8.4%	6.6%	8.8%	22.5%	5.9%	10.9%
	-100~+150	1.29	6.1	15.5	0.15	2.52	0.79	17.53	67	0.6	6.1%	7.0%	7.9%	17.7%	4.8%	14.3%	14.5%	13.6%	16.7%	40.2%	10.7%	25.2%
	-150~+200	0.70	3.3	18.8	0.15	2.76	0.69	18.75	76	0.6	3.3%	4.1%	3.7%	10.3%	2.9%	7.8%	17.8%	17.7%	20.4%	50.5%	13.6%	33.0%
	-200~+270	0.65	3.1	21.9	0.19	4.72	1.06	19.76	101	0.4	3.9%	6.6%	5.3%	10.1%	3.6%	4.3%	21.7%	24.3%	25.7%	60.6%	17.2%	37.8%
	-270~+325	0.38	1.8	23.7	0.16	3.35	0.69	15.80	93	0.4	1.9%	2.7%	2.0%	4.7%	1.9%	2.8%	23.6%	27.0%	27.7%	65.3%	19.1%	40.6%
	-325	16.10	76.3	100.0	0.15	2.12	0.58	2.74	91	0.2	76.4%	73.0%	72.3%	34.7%	80.9%	59.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		21.09	100.0		0.15	2.22	0.61	6.04	86	0.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tailing	+65	42.36	11.3	11.3	0.02	0.31	0.07	2.98	9	0.1	14.8%	6.4%	8.9%	13.2%	8.2%	11.3%	14.8%	6.4%	8.9%	13.2%	8.2%	11.3%
	-65~+100	70.86	19.0	30.3	0.01	0.33	0.05	2.35	10	0.1	12.4%	11.3%	10.6%	18.9%	15.3%	19.0%	27.2%	17.7%	19.5%	32.1%	23.5%	30.3%
	-100~+150	70.05	18.7	49.0	0.01	0.32	0.05	2.28	11	0.1	12.2%	10.9%	10.5%	16.7%	16.6%	18.7%	39.4%	28.6%	30.0%	48.8%	40.1%	49.0%
	-150~+200	40.65	10.9	59.9	0.02	0.58	0.08	2.70	15	0.1	14.2%	11.4%	9.7%	11.5%	13.1%	10.9%	53.6%	40.0%	39.7%	60.3%	53.2%	59.9%
	-200~+270	21.11	5.6	65.5	0.01	0.69	0.08	1.63	13	0.1	3.7%	7.1%	5.0%	3.8%	5.2%	5.6%	57.3%	47.1%	44.7%	63.9%	59.1%	65.5%
	-270~+325	13.05	3.5	69.0	0.01	0.72	0.09	1.66	12	0.1	2.3%	4.6%	3.5%	2.3%	3.4%	3.5%	59.6%	51.7%	48.2%	66.2%	62.5%	69.0%
	-325	115.81	31.0	100.0	0.02	0.86	0.15	2.80	15	0.1	40.4%	48.3%	51.8%	33.8%	37.5%	31.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		373.89	100.0		0.02	0.55	0.09	2.56	12	0.1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						

Particle Size (Mesh)	Type	Weight (g)	Weight (%)	Cumurative Weight(%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Grade Ag	Grade Au	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Ag	Distribution Au	Total Distribution Cu	Total Distribution Pb	Total Distribution Zn	Total Distribution Fe	Total Distribution Ag	Total Distribution Au
+65	Crude Ore	46.35	100.0	9.3	0.06	0.95	2.09	3.78	20	0.2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	3.4%	1.3%	7.3%	9.1%	1.7%	3.4%
	Conc 1 (0~2)	3.01	6.5	0.6	0.64	9.57	30.48	11.58	156	1.6	64.8%	65.7%	94.8%	19.9%	51.6%	50.1%	2.2%	0.9%	7.0%	1.8%	0.9%	1.7%
	Conc 2 (2~6)	0.25	0.5	0.1	0.35	3.72	6.24	16.09	95	0.8	2.5%	2.1%	1.6%	2.3%	2.6%	2.0%	0.1%	0.0%	0.1%	0.2%	0.0%	0.1%
	Conc 3 (6~15)	0.73	1.6	0.1	0.16	1.37	0.64	13.67	50	0.3	3.9%	2.3%	0.5%	5.7%	4.0%	2.4%	0.1%	0.0%	0.0%	0.5%	0.1%	0.1%
	Tailing	42.36	91.4	8.5	0.02	0.31	0.07	2.98	9	0.1	28.4%	29.9%	3.1%	72.1%	41.8%	45.5%	1.0%	0.4%	0.2%	6.6%	0.7%	1.5%
+100	Crude Ore	82.88	100.0	16.6	0.09	2.83	2.66	3.81	47	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	9.0%	7.4%	17.0%	16.6%	7.3%	13.5%
	Conc 1 (0~2)	10.26	12.4	2.1	0.65	20.02	20.70	10.46	297	2.9	86.2%	87.5%	96.4%	34.0%	78.0%	79.0%	7.7%	6.5%	16.3%	5.6%	5.8%	10.7%
	Conc 2 (2~6)	0.52	0.6	0.1	0.42	7.17	7.01	17.61	149	0.9	2.8%	1.6%	1.7%	2.9%	2.0%	1.2%	0.2%	0.1%	0.3%	0.5%	0.1%	0.2%
	Conc 3 (6~15)	1.24	1.5	0.2	0.12	1.70	0.54	15.14	57	0.3	1.9%	0.9%	0.3%	5.9%	1.8%	1.0%	0.2%	0.1%	0.1%	1.0%	0.1%	0.1%
	Tailing	70.86	85.5	14.2	0.01	0.33	0.05	2.35	10	0.1	9.1%	10.0%	1.8%	57.2%	18.2%	18.8%	0.8%	0.7%	0.3%	9.5%	1.2%	2.5%
+150	Crude Ore	92.72	100.0	18.7	0.14	6.90	3.28	4.40	103	0.7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	15.3%	20.2%	23.3%	21.5%	18.2%	24.4%
	Conc 1 (0~2)	20.13	21.7	4.0	0.58	29.26	14.15	10.31	413	2.9	88.0%	92.1%	93.5%	50.9%	86.0%	86.0%	13.5%	18.6%	21.9%	10.9%	15.6%	21.0%
	Conc 2 (2~6)	1.25	1.3	0.3	0.55	20.04	12.10	14.80	313	1.4	5.2%	3.9%	5.0%	4.5%	4.1%	2.6%	0.8%	0.8%	1.2%	1.0%	0.7%	0.6%
	Conc 3 (6~15)	1.29	1.4	0.3	0.15	2.52	0.79	17.53	67	0.6	1.5%	0.5%	0.3%	5.5%	0.9%	1.1%	0.2%	0.1%	0.1%	1.2%	0.2%	0.3%
	Tailing	70.05	75.6	14.1	0.01	0.32	0.05	2.28	11	0.1	5.3%	3.5%	1.2%	39.1%	8.1%	10.3%	0.8%	0.7%	0.3%	8.4%	1.5%	2.5%
+200	Crude Ore	54.94	100.0	11.0	0.18	7.89	2.90	4.34	123	0.7	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	11.1%	13.7%	12.2%	12.4%	12.8%	14.5%
	Conc 1 (0~2)	12.97	23.6	2.6	0.65	30.92	11.73	8.00	457	2.7	87.0%	92.6%	95.4%	43.5%	87.8%	87.2%	9.7%	12.7%	11.7%	5.4%	11.2%	12.6%
	Conc 2 (2~6)	0.62	1.1	0.1	0.54	11.42	5.93	13.89	266	1.1	3.5%	1.6%	2.3%	4.9%	2.4%	1.7%	0.4%	0.2%	0.3%	0.6%	0.3%	0.2%
	Conc 3 (6~15)	0.70	1.3	0.1	0.15	2.76	0.69	18.75	76	0.6	1.1%	0.4%	0.3%	5.5%	0.8%	1.0%	0.1%	0.1%	0.0%	0.7%	0.1%	0.2%
	Tailing	40.65	74.0	8.2	0.02	0.58	0.08	2.70	15	0.1	8.4%	5.4%	2.0%	46.1%	9.0%	10.1%	0.9%	0.7%	0.2%	5.7%	1.2%	1.5%
+270	Crude Ore	32.29	100.0	6.5	0.20	13.11	4.37	4.58	185	0.9	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	7.4%	13.4%	10.8%	7.8%	10.1%	10.1%
	Conc 1 (0~2)	10.05	31.1	2.0	0.59	39.64	13.56	9.11	482	2.5	90.6%	94.2%	96.6%	61.9%	91.0%	89.6%	6.8%	12.6%	10.4%	4.8%	9.2%	9.0%
	Conc 2 (2~6)	0.48	1.5	0.1	0.58	14.94	5.02	18.75	294	1.1	4.3%	1.7%	1.7%	6.1%	2.6%	1.9%	0.3%	0.2%	0.2%	0.5%	0.3%	0.2%
	Conc 3 (6~15)	0.65	2.0	0.1	0.19	4.72	1.06	19.76	101	0.4	1.9%	0.7%	0.5%	8.7%	1.2%	0.9%	0.1%	0.1%	0.1%	0.7%	0.1%	0.1%
	Tailing	21.11	65.4	4.3	0.01	0.69	0.08	1.63	13	0.1	3.2%	3.4%	1.2%	23.3%	5.2%	7.6%	0.2%	0.5%	0.1%	1.8%	0.5%	0.8%
+325	Crude Ore	19.50	100.0	3.9	0.25	9.17	3.46	3.87	148	0.9	100.0%	100.1%	100.0%	100.0%	100.0%	100.0%	5.6%	5.6%	5.2%	3.9%	5.5%	6.4%
	Conc 1 (0~2)	5.66	29.0	1.1	0.77	28.72	11.25	6.96	459	2.8	90.4%	90.9%	94.4%	52.2%	89.9%	90.3%	5.0%	5.1%	4.9%	2.1%	4.9%	5.7%
	Conc 2 (2~6)	0.41	2.1	0.1	0.66	13.86	5.72	20.40	246	0.6	5.6%	3.2%	3.5%	11.1%	3.5%	1.4%	0.3%	0.2%	0.2%	0.4%	0.2%	0.1%
	Conc 3 (6~15)	0.38	1.9	0.1	0.16	3.35	0.69	15.80	93	0.4	1.2%	0.7%	0.4%	8.0%	1.2%	0.9%	0.1%	0.0%	0.0%	0.3%	0.1%	0.1%
	Tailing	13.05	67.0	2.6	0.01	0.72	0.09	1.66	12	0.1	2.7%	5.3%	1.7%	28.7%	5.4%	7.4%	0.2%	0.3%	0.1%	1.1%	0.5%	0.8%
-325	Crude Ore	168.92	100.0	33.9	0.25	7.13	1.87	3.25	139	0.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	48.4%	38.2%	24.1%	28.8%	44.5%	28.1%
	Conc 1 (0~2)	29.06	17.2	5.8	1.02	33.44	8.73	4.08	592	1.9	71.0%	80.7%	80.3%	21.6%	73.5%	70.8%	34.3%	30.8%	19.4%	6.2%	32.7%	19.8%
	Conc 2 (2~6)	7.95	4.7	1.6	0.93	12.49	4.45	7.82	377	1.0	17.7%	8.2%	11.2%	11.3%	12.8%	10.2%	8.5%	3.1%	2.7%	3.3%	5.7%	2.9%
	Conc 3 (6~15)	16.10	9.5	3.2	0.15	2.12	0.58	2.74	91	0.2	5.8%	2.8%	3.0%	8.0%	6.3%	4.1%	2.9%	1.1%	0.7%	2.2%	2.8%	1.2%
	Tailing	115.81	68.6	23.3	0.02	0.86	0.15	2.80	15	0.1	5.5%	8.3%	5.5%	58.1%	7.4%	14.5%	2.7%	2.2%	1.3%	10.0%	3.8%	4.2%
Total	Crude Ore	497.60	100.0	100.0	0.17	6.35	2.62	3.84	106	0.6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Conc 1 (0~2)	91.14	18.3	18.3	0.75	30.25	13.11	7.71	465	2.5	79.1%	87.3%	91.5%	36.8%	80.4%	80.5%	79.1%	87.3%	91.5%	36.8%	80.4%	80.5%
	Conc 2 (2~6)	11.48	2.3	2.3	0.81	12.97	5.59	10.71	339	1.0	10.7%	4.7%	4.9%	6.4%	7.4%	4.2%	10.7%	4.8%	5.0%	6.4%	7.4%	4.2%
	Conc 3 (6~15)	21.09	4.2	4.2	0.15	2.22	0.61	6.04	86	0.3	3.6%	1.5%	1.0%	6.7%	3.4%	1.9%	3.6%	1.6%	0.9%	6.7%	3.4%	1.9%
	Tailing	373.89	75.2	75.2	0.02	0.55	0.09	2.56	12	0.1	6.6%	6.5%	2.6%	50.1%	8.8%	13.4%	6.6%	6.5%	2.6%	50.1%	8.8%	13.4%

Apx. 25 Results of Flotation Test by Grain Size(without Activater $CuSO_4$)

Test No.	Type	Weight (g)	Weight (%)	Weight (%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe
1	Crude Ore	497.78	100.0		0.17	7.91	2.52	4.59	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	101.93	20.4	100.0	0.70	34.95	11.80	9.15	85.7%	90.5%	95.9%	40.8%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	73.81	14.8	72.4	0.79	43.36	14.50	7.24	70.4%	81.3%	85.3%	23.4%	82.2%	89.8%	89.0%	57.3%
	Zn Conc	28.12	5.6	27.6	0.45	12.88	4.72	14.18	15.3%	9.2%	10.6%	17.4%	17.8%	10.2%	11.0%	42.7%
	Tailing	395.85	79.6		0.03	0.95	0.13	3.42	14.3%	9.5%	4.1%	59.2%				
2	Crude Ore	498.80	100.0		0.17	7.94	2.56	4.64	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	93.73	18.8	100.0	0.66	37.52	12.87	7.46	75.4%	88.8%	94.6%	30.2%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	72.37	14.5	77.2	0.78	47.55	15.85	4.30	68.4%	86.9%	89.9%	13.4%	90.7%	97.8%	95.1%	44.5%
	Zn Conc	21.36	4.3	22.8	0.27	3.55	2.78	18.17	7.0%	1.9%	4.7%	16.8%	9.3%	2.2%	4.9%	55.5%
	Tailing	405.07	81.2		0.05	1.10	0.17	3.99	24.6%	11.2%	5.4%	69.8%				
3	Crude Ore	498.15	100.0		0.16	8.02	2.49	4.64	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	95.36	19.2	100.0	0.73	37.49	12.34	8.59	85.1%	89.5%	94.8%	35.4%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	75.05	15.1	78.7	0.85	46.61	15.49	5.28	78.4%	87.6%	93.7%	17.1%	92.1%	97.8%	98.8%	48.4%
	Zn Conc	20.31	4.1	21.3	0.27	3.79	0.68	20.80	6.7%	1.9%	1.1%	18.3%	7.9%	2.2%	1.2%	51.6%
	Tailing	402.79	80.8		0.03	1.04	0.16	3.71	14.9%	10.5%	5.2%	64.6%				
4	Crude Ore	498.84	100.0		0.16	7.97	2.49	4.77	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	95.87	19.2	100.0	0.72	37.58	12.36	8.91	85.1%	90.6%	95.5%	35.9%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	79.34	15.9	82.8	0.82	44.55	14.64	6.99	80.4%	88.9%	93.6%	23.3%	94.5%	98.1%	98.0%	64.9%
	Zn Conc	16.53	3.3	17.2	0.23	4.10	1.43	18.14	4.7%	1.7%	1.9%	12.6%	5.5%	1.9%	2.0%	35.1%
	Tailing	402.97	80.8		0.03	0.93	0.14	3.78	14.9%	9.4%	4.5%	64.1%				
5	Crude Ore	498.59	100.0		0.16	7.93	2.42	4.64	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	102.38	20.6	100.0	0.72	35.36	11.39	9.18	94.9%	91.6%	96.7%	40.7%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	79.17	15.9	77.3	0.83	44.09	14.45	7.04	84.5%	88.3%	94.9%	24.1%	89.0%	96.4%	98.1%	59.3%
	Zn Conc	23.21	4.7	22.7	0.35	5.58	0.95	16.50	10.4%	3.3%	1.8%	16.6%	11.0%	3.6%	1.9%	40.7%
	Tailing	396.21	79.4		0.01	0.84	0.10	3.46	5.1%	8.4%	3.3%	59.3%				
6	Crude Ore	498.48	100.0		0.16	7.90	2.52	4.70	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	96.20	19.3	100.0	0.73	36.47	12.37	8.82	89.8%	89.1%	94.6%	36.2%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	79.03	15.9	82.2	0.82	43.57	14.94	7.10	82.6%	87.4%	93.8%	23.9%	92.0%	98.1%	99.2%	66.1%
	Zn Conc	17.17	3.4	17.8	0.33	3.80	0.55	16.73	7.2%	1.7%	0.8%	12.3%	8.0%	1.9%	0.8%	33.9%
	Tailing	402.28	80.7		0.02	1.07	0.17	3.72	10.2%	10.9%	5.4%	63.8%				
7	Crude Ore	499.10	100.0		0.17	7.80	2.58	4.71	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	99.71	20.0	100.0	0.75	35.32	12.53	8.85	90.3%	90.5%	96.9%	37.5%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	81.22	16.3	81.5	0.85	42.34	14.99	7.19	83.6%	88.4%	94.5%	24.8%	92.6%	97.6%	97.5%	66.2%
	Zn Conc	18.49	3.7	18.5	0.30	4.50	1.70	16.15	6.7%	2.1%	2.4%	12.7%	7.4%	2.4%	2.5%	33.8%
	Tailing	399.39	80.0		0.02	0.93	0.10	3.68	9.7%	9.5%	3.1%	62.5%				
8	Crude Ore	499.99	100.0		0.17	7.91	2.57	4.74	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	95.24	19.1	100.0	0.74	37.61	12.88	8.28	85.4%	90.6%	95.6%	33.3%	100.0%	100.0%	100.0%	100.0%
	Pb Conc	80.79	16.2	84.8	0.83	43.55	14.91	7.41	80.9%	89.0%	93.9%	25.3%	94.7%	98.2%	98.2%	75.9%
	Zn Conc	14.45	2.9	15.2	0.26	4.38	1.55	13.12	4.5%	1.6%	1.7%	8.0%	5.3%	1.8%	1.8%	24.1%
	Tailing	404.75	80.9		0.03	0.92	0.14	3.91	14.6%	9.4%	4.4%	66.7%				

Apx. 26 Results of Preliminary Flotation Test(Bulk Differential Flotation)

Test No.	Type	Weight (g)	Weight (%)	Grade				Distribution			
				Cu	Pb	Zn	Fe	Cu	Pb	Zn	Fe
1	Crude Ore	496.77	100.0	0.17	6.44	3.09	4.71	100.0%	100.0%	100.0%	100.0%
	Pb Conc	56.65	11.4	0.93	44.23	12.73	2.09	64.0%	78.3%	47.0%	5.1%
	Tailing	440.12	88.6	0.07	1.58	1.85	5.05	36.0%	21.7%	53.0%	94.9%
2	Crude Ore	498.71	100.0	0.17	6.83	3.27	4.64	100.0%	100.0%	100.0%	100.0%
	Pb Conc	34.16	6.9	0.96	52.76	4.98	1.06	38.2%	52.9%	10.5%	1.6%
	Tailing	464.55	93.1	0.11	3.45	3.14	4.90	61.8%	47.1%	89.5%	98.4%
3	Crude Ore	496.95	100.0	0.16	6.24	2.94	4.66	100.0%	100.0%	100.0%	100.0%
	Pb Conc	54.20	10.9	0.92	44.77	11.54	2.06	61.7%	78.1%	42.9%	4.8%
	Tailing	442.75	89.1	0.07	1.53	1.88	4.98	38.3%	21.9%	57.1%	95.2%
4	Crude Ore	496.96	100.0	0.18	6.07	3.18	4.57	100.0%	100.0%	100.0%	100.0%
	Pb Conc	43.90	8.8	0.99	38.46	8.26	1.61	49.1%	56.0%	22.9%	3.1%
	Tailing	453.06	91.2	0.10	2.93	2.69	4.85	50.9%	44.0%	77.1%	96.9%
5	Crude Ore	497.47	100.0	0.17	6.32	3.08	4.62	100.0%	100.0%	100.0%	100.0%
	Pb Conc	45.28	9.1	0.93	48.57	6.77	1.27	49.4%	69.9%	20.1%	2.5%
	Tailing	452.19	90.9	0.10	2.09	2.71	4.96	50.6%	30.1%	79.9%	97.5%
6	Crude Ore	497.22	100.0	0.16	7.11	3.03	4.63	100.0%	100.0%	100.0%	100.0%
	Pb Conc	61.99	12.5	0.92	48.27	13.70	2.39	72.4%	84.7%	56.4%	6.4%
	Tailing	435.23	87.5	0.05	1.24	1.51	4.95	27.6%	15.3%	43.6%	93.6%
7	Crude Ore	497.62	100.0	0.17	5.43	3.14	4.69	100.0%	100.0%	100.0%	100.0%
	Pb Conc	48.30	9.7	0.86	42.02	5.79	1.19	48.4%	75.0%	17.9%	2.5%
	Tailing	449.32	90.3	0.10	1.50	2.86	5.06	51.6%	25.0%	82.1%	97.5%
8	Crude Ore	496.01	100.0	0.18	6.38	3.20	4.64	100.0%	100.0%	100.0%	100.0%
	Pb Conc	31.17	6.3	0.96	39.54	4.48	1.21	34.6%	39.0%	8.8%	1.7%
	Tailing	464.84	93.7	0.12	4.15	3.11	4.87	65.4%	61.0%	91.2%	98.3%
9	Crude Ore	497.99	100.0	0.17	6.56	3.16	4.80	100.0%	100.0%	100.0%	100.0%
	Pb Conc	54.19	10.9	0.86	45.42	12.67	2.08	54.9%	75.3%	43.6%	4.7%
	Tailing	443.80	89.1	0.09	1.82	2.00	5.13	45.1%	24.7%	56.4%	95.3%

Apx. 27 Results of Preliminary Flotation Test(Straight Differential Flotation)

Test No.	Type	Weight (g)	Weight (%)	Grade				Distribution			
				Cu	Pb	Zn	Fe	Cu	Pb	Zn	Fe
1	Crude Ore	495.79	100.0	0.10	7.94	3.07	4.71	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	89.89	18.1	0.39	39.34	15.97	8.58	74.4%	89.8%	94.4%	33.0%
	Tailing	405.90	81.9	0.03	0.99	0.21	3.85	25.6%	10.2%	5.6%	67.0%
2	Crude Ore	498.10	100.0	0.13	7.92	3.04	4.71	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	88.67	17.7	0.60	39.85	16.10	8.45	81.1%	89.5%	94.3%	32.0%
	Tailing	409.43	82.3	0.03	1.01	0.21	3.90	18.9%	10.5%	5.7%	68.0%
3	Crude Ore	498.59	100.0	0.08	7.91	3.05	4.67	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	95.00	19.0	0.34	37.55	15.14	8.50	79.9%	90.5%	94.7%	34.7%
	Tailing	403.59	81.0	0.02	0.93	0.20	3.77	20.1%	9.5%	5.3%	65.3%
4	Crude Ore	496.96	100.0	0.10	7.82	3.07	4.80	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	88.30	17.8	0.43	39.55	16.37	8.09	75.6%	89.9%	94.6%	30.0%
	Tailing	408.66	82.2	0.03	0.96	0.20	4.09	24.4%	10.1%	5.4%	70.0%
5	Crude Ore	497.61	100.0	0.09	7.82	3.07	4.66	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	98.69	19.8	0.36	35.90	14.78	8.43	81.9%	91.1%	95.6%	36.0%
	Tailing	398.92	80.2	0.02	0.87	0.17	3.72	18.1%	8.9%	4.4%	64.0%
6	Crude Ore	496.91	100.0	0.10	8.03	3.47	4.40	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	92.95	18.8	0.38	38.69	17.63	7.53	74.5%	90.1%	95.1%	32.0%
	Tailing	403.96	81.2	0.03	0.98	0.21	3.68	25.5%	9.9%	4.9%	68.0%
7	Crude Ore	497.35	100.0	0.10	7.45	3.11	4.60	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	90.14	18.1	0.39	37.24	16.23	7.92	74.3%	90.6%	94.5%	31.2%
	Tailing	407.21	81.9	0.03	0.86	0.21	3.86	25.7%	9.4%	5.5%	68.8%
8	Crude Ore	498.17	100.0	0.13	8.10	3.13	4.81	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	93.64	18.7	0.56	38.21	15.60	8.70	81.3%	88.7%	93.8%	34.0%
	Tailing	404.53	81.3	0.03	1.13	0.24	3.91	18.7%	11.3%	6.2%	66.0%
9	Crude Ore	496.85	100.0	0.11	7.68	3.14	4.72	100.0%	100.0%	100.0%	100.0%
	Bulk Conc	87.80	17.7	0.43	38.55	16.72	7.93	69.9%	88.7%	94.0%	29.7%
	Tailing	409.05	82.3	0.04	1.05	0.23	4.03	30.1%	11.3%	6.0%	70.3%

Apx. 28 Results of Basic Flotation Test(Bulk Differential Flotation)

Test No.	Type	Weight (g)	Weight (%)	Weight (%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe
1	Crude Ore	495.79	100.0		0.10	7.94	3.07	4.71	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	89.76	18.1	100.0	0.41	39.38	16.01	8.59	75.0%	89.8%	94.4%	33.0%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	406.03	81.9		0.03	0.99	0.21	3.85	25.0%	10.2%	5.6%	67.0%				
	Pb Conc	49.50	10.0	55.1	0.13	69.34	4.62	1.79	13.2%	87.2%	15.0%	3.8%	17.6%	97.1%	15.9%	11.5%
	Zn Conc	40.26	8.1	44.9	0.75	2.55	30.01	16.94	61.8%	2.6%	79.4%	29.2%	82.4%	2.9%	84.1%	88.5%
2	Crude Ore	498.10	100.1		0.13	7.92	3.04	4.71	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	91.86	18.4	100.0	0.57	39.46	15.58	9.19	81.0%	91.9%	94.4%	35.9%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	406.24	81.7		0.03	0.79	0.21	3.70	19.0%	8.1%	5.6%	64.1%				
	Pb Conc	57.52	11.5	62.6	0.32	61.07	11.97	3.04	28.6%	89.1%	45.4%	7.4%	35.4%	96.9%	48.1%	20.7%
	Zn Conc	34.34	6.9	37.4	0.98	3.27	21.63	19.50	52.4%	2.8%	49.0%	28.5%	64.6%	3.1%	51.9%	79.3%
3	Crude Ore	498.59	100.0		0.09	7.91	3.05	4.67	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	90.54	18.1	100.0	0.34	38.46	15.85	8.18	71.4%	88.3%	94.4%	31.8%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	408.05	81.9		0.03	1.13	0.21	3.89	28.6%	11.7%	5.6%	68.2%				
	Pb Conc	55.94	11.2	61.8	0.04	60.45	12.19	2.87	5.2%	85.7%	44.8%	6.9%	7.3%	97.1%	47.5%	21.7%
	Zn Conc	34.60	6.9	38.2	0.82	2.92	21.78	16.76	66.2%	2.6%	49.6%	24.9%	92.7%	2.9%	52.5%	78.3%
4	Crude Ore	496.96	100.1		0.10	7.82	3.07	4.80	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	89.20	18.0	100.0	0.41	39.43	16.20	9.28	75.1%	90.5%	94.7%	34.7%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	407.76	82.1		0.03	0.91	0.20	3.82	24.9%	9.5%	5.3%	65.3%				
	Pb Conc	50.58	10.2	56.7	0.15	67.59	4.54	1.83	15.4%	88.0%	15.0%	3.9%	20.5%	97.2%	15.9%	11.2%
	Zn Conc	38.62	7.8	43.3	0.76	2.55	31.46	19.03	59.7%	2.5%	79.7%	30.8%	79.5%	2.8%	84.1%	88.8%
5	Crude Ore	497.61	100.1		0.09	7.82	3.07	4.66	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	87.08	17.5	100.0	0.41	39.24	16.45	8.65	81.2%	87.8%	93.8%	32.5%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	410.53	82.6		0.02	1.16	0.23	3.81	18.8%	12.2%	6.2%	67.5%				
	Pb Conc	48.56	9.8	55.8	0.12	68.18	5.90	1.55	13.3%	85.1%	18.8%	3.2%	16.4%	96.9%	20.0%	10.0%
	Zn Conc	38.52	7.7	44.2	0.77	2.75	29.76	17.61	67.9%	2.7%	75.0%	29.3%	83.6%	3.1%	80.0%	90.0%
6	Crude Ore	496.91	100.1		0.10	8.03	3.47	4.40	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	94.45	19.0	100.0	0.40	38.06	17.36	7.41	75.6%	90.1%	95.1%	32.1%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	402.46	81.1		0.03	0.98	0.21	3.69	24.4%	9.9%	4.9%	67.9%				
	Pb Conc	59.38	11.9	62.9	0.18	58.91	12.84	3.63	21.6%	87.7%	44.2%	9.9%	28.6%	97.3%	46.5%	30.8%
	Zn Conc	35.07	7.1	37.1	0.76	2.77	25.02	13.81	54.0%	2.4%	50.9%	22.2%	71.4%	2.7%	53.5%	69.2%
7	Crude Ore	497.35	100.0		0.10	7.45	3.11	4.60	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	90.52	18.2	100.0	0.43	35.84	16.13	8.60	75.9%	90.0%	94.5%	34.1%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	406.83	81.8		0.03	0.91	0.21	3.71	24.1%	10.0%	5.5%	65.9%				
	Pb Conc	52.82	10.6	58.4	0.08	61.24	10.81	2.67	8.3%	87.3%	36.9%	6.2%	11.0%	97.0%	39.1%	18.1%
	Zn Conc	37.70	7.6	41.6	0.91	2.65	23.59	16.90	67.6%	2.7%	57.6%	27.9%	89.0%	3.0%	60.9%	81.9%
8	Crude Ore	498.17	100.2		0.13	7.80	3.13	4.81	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	91.73	18.5	100.0	0.57	37.57	15.94	8.88	81.2%	88.7%	93.7%	34.0%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	406.44	81.7		0.03	1.08	0.24	3.89	18.8%	11.3%	6.3%	66.0%				
	Pb Conc	50.62	10.2	55.2	0.47	64.68	8.84	1.95	36.7%	84.3%	28.7%	4.1%	45.3%	95.0%	30.6%	12.1%
	Zn Conc	41.11	8.3	44.8	0.70	4.19	24.69	17.42	44.5%	4.4%	65.0%	29.9%	54.7%	5.0%	69.4%	87.9%
9	Crude Ore	496.85	100.1		0.11	7.68	3.14	4.72	100.0%	100.0%	100.0%	100.0%				
	Bulk Conc	90.14	18.1	100.0	0.49	38.36	16.54	8.32	78.4%	90.6%	95.6%	32.0%	100.0%	100.0%	100.0%	100.0%
	Bulk Tail	406.71	82.0		0.03	0.88	0.17	3.92	21.6%	9.4%	4.4%	68.0%				
	Pb Conc	48.76	9.8	54.1	0.18	68.92	3.33	1.20	15.5%	88.1%	10.4%	2.5%	19.8%	97.2%	10.9%	7.8%
	Zn Conc	41.38	8.3	45.9	0.86	2.34	32.11	16.72	62.9%	2.5%	85.2%	29.5%	80.2%	2.8%	89.1%	92.2%

Apx. 29 Results of Basic Flotation Test(Pb– Flotation in Bulk Differential Flotation)

Test No.	Type	Weight (g)	Weight (%)	Grade				Distribution			
				Cu	Pb	Zn	Fe	Cu	Pb	Zn	Fe
1	Crude Ore	497.58	100.0	0.14	7.09	3.00	4.53	100.0%	100.0%	100.0%	100.0%
	Pb Conc	59.07	11.9	0.64	43.11	18.03	2.98	55.8%	72.1%	71.3%	7.9%
	Tailing	438.51	88.1	0.07	2.24	0.98	4.74	44.2%	27.9%	28.7%	92.1%
2	Crude Ore	497.34	100.0	0.13	6.99	3.02	4.64	100.0%	100.0%	100.0%	100.0%
	Pb Conc	61.00	12.2	0.63	42.87	17.50	2.75	57.2%	75.2%	71.2%	7.3%
	Tailing	436.34	87.8	0.07	1.98	0.99	4.91	42.8%	24.8%	28.8%	92.7%
3	Crude Ore	497.76	100.0	0.13	7.12	3.17	4.67	100.0%	100.0%	100.0%	100.0%
	Pb Conc	54.91	11.1	0.67	51.96	12.24	2.11	55.9%	80.5%	42.5%	5.0%
	Tailing	442.85	88.9	0.07	1.56	2.05	4.99	44.1%	19.5%	57.5%	95.0%
4	Crude Ore	497.99	100.0	0.13	6.86	3.03	4.50	100.0%	100.0%	100.0%	100.0%
	Pb Conc	69.74	13.9	0.58	40.19	17.97	3.55	63.7%	82.0%	83.1%	11.0%
	Tailing	428.25	86.1	0.05	1.44	0.60	4.65	36.3%	18.0%	16.9%	89.0%
5	Crude Ore	495.22	100.0	0.14	6.33	3.10	4.61	100.0%	100.0%	100.0%	100.0%
	Pb Conc	67.54	13.6	0.64	37.28	18.61	3.33	64.4%	80.2%	81.7%	9.9%
	Tailing	427.68	86.4	0.06	1.45	0.65	4.81	35.6%	19.8%	18.3%	90.1%
6	Crude Ore	497.30	100.0	0.13	7.25	3.14	4.66	100.0%	100.0%	100.0%	100.0%
	Pb Conc	60.46	12.1	0.68	51.80	14.91	2.28	65.7%	86.8%	57.7%	5.9%
	Tailing	436.84	87.9	0.05	1.09	1.51	4.99	34.3%	13.2%	42.3%	94.1%
7	Crude Ore	497.61	100.0	0.12	6.84	3.09	4.60	100.0%	100.0%	100.0%	100.0%
	Pb Conc	74.23	14.9	0.59	40.20	18.51	4.04	70.0%	87.7%	89.3%	13.1%
	Tailing	423.38	85.1	0.04	0.99	0.39	4.70	30.0%	12.3%	10.7%	86.9%
8	Crude Ore	499.74	100.0	0.14	7.08	3.13	4.26	100.0%	100.0%	100.0%	100.0%
	Pb Conc	66.47	13.3	0.59	44.12	18.55	2.98	57.4%	82.9%	78.8%	9.4%
	Tailing	433.27	86.7	0.07	1.40	0.77	4.46	42.6%	17.1%	21.2%	90.6%
9	Crude Ore	496.48	100.0	0.13	6.85	3.16	4.66	100.0%	100.0%	100.0%	100.0%
	Pb Conc	61.09	12.3	0.63	47.83	15.45	2.29	60.9%	86.0%	60.1%	6.0%
	Tailing	435.39	87.7	0.06	1.10	1.44	4.99	39.1%	14.0%	39.9%	94.0%

Apx. 30 Results of Basic Flotation Test(Pb– Flotation in Straight Differential Flotation)

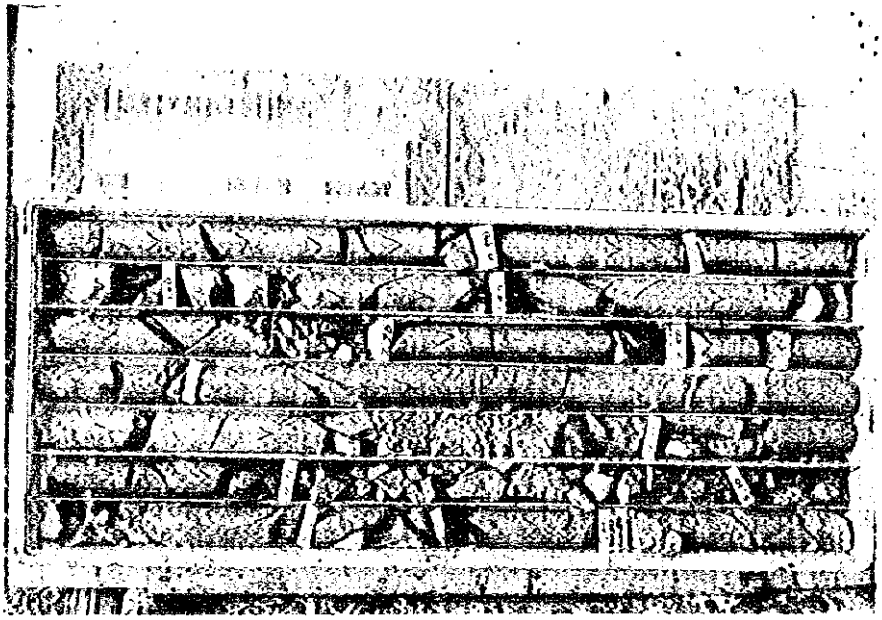
Test No.	Type	Weight (g)	Weight (%)	Weight (%)	Grade Cu	Grade Pb	Grade Zn	Grade Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe	Distribution Cu	Distribution Pb	Distribution Zn	Distribution Fe
1	Crude Ore	497.00	100.0		0.14	7.09	3.00	4.53	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	65.06	13.1		0.63	45.53	14.23	2.16	58.6%	84.1%	62.0%	6.2%				
	Pb Tail	431.94	86.9	100.0	0.07	1.30	1.31	4.89	41.4%	15.9%	38.0%	93.8%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	22.93	4.6	5.3	0.73	14.16	19.18	13.81	23.9%	9.2%	29.5%	14.1%	57.7%	57.8%	77.6%	15.0%
	Tailing	409.01	82.3	94.7	0.03	0.58	0.31	4.39	17.5%	6.7%	8.5%	79.7%	42.3%	42.2%	22.4%	85.0%
2	Crude Ore	497.34	100.0		0.13	6.97	3.00	4.64	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	61.00	12.3		0.66	48.63	14.20	2.23	64.6%	85.6%	58.1%	5.9%				
	Pb Tail	436.34	87.7	100.0	0.05	1.15	1.43	4.98	35.4%	14.4%	41.9%	94.1%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	19.29	3.9	4.4	0.71	13.80	23.14	13.40	22.0%	7.7%	29.9%	11.2%	62.1%	53.3%	71.3%	11.9%
	Tailing	417.05	83.8	95.6	0.02	0.56	0.43	4.59	13.4%	6.7%	12.0%	82.9%	37.9%	46.7%	28.7%	88.1%
3	Crude Ore	497.76	100.0		0.13	7.12	3.17	4.67	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	62.45	12.5		0.64	44.86	13.86	2.11	60.7%	79.0%	54.9%	5.7%				
	Pb Tail	435.31	87.5	100.0	0.06	1.70	1.64	5.04	39.3%	21.0%	45.1%	94.3%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	23.56	4.7	5.4	0.75	17.87	27.60	7.26	26.8%	11.9%	41.2%	7.4%	68.2%	56.7%	91.3%	7.8%
	Tailing	411.75	82.8	94.6	0.02	0.78	0.15	4.91	12.5%	9.1%	3.9%	86.9%	31.8%	43.3%	8.7%	92.2%
4	Crude Ore	497.99	100.0		0.13	6.83	3.02	4.50	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	69.74	14.0		0.58	40.19	15.00	2.08	62.9%	82.4%	69.6%	6.5%				
	Pb Tail	428.25	86.0	100.0	0.06	1.40	1.07	4.90	37.1%	17.6%	30.4%	93.5%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	19.87	4.0	4.6	0.79	15.62	17.66	13.50	24.4%	9.1%	23.3%	12.0%	65.8%	51.7%	76.8%	12.8%
	Tailing	408.38	82.0	95.4	0.02	0.71	0.26	4.48	12.7%	8.5%	7.1%	81.5%	34.2%	48.3%	23.2%	87.2%
5	Crude Ore	495.22	100.0		0.14	6.30	3.09	4.61	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	67.54	13.6		0.64	37.28	15.58	2.33	63.4%	80.7%	68.8%	6.9%				
	Pb Tail	427.68	86.4	100.0	0.06	1.41	1.11	4.97	36.6%	19.3%	31.2%	93.1%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	17.72	3.6	4.1	0.71	15.28	19.21	14.03	18.5%	8.7%	22.3%	10.9%	50.6%	44.9%	71.6%	11.7%
	Tailing	409.96	82.8	95.9	0.03	0.81	0.33	4.58	18.1%	10.6%	8.9%	82.2%	49.4%	55.1%	28.4%	88.3%
6	Crude Ore	497.30	100.0		0.13	7.22	3.13	4.66	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	60.46	12.2		0.68	51.80	14.91	2.28	64.4%	87.2%	57.9%	5.9%				
	Pb Tail	436.84	87.8	100.0	0.05	1.06	1.50	4.99	35.6%	12.8%	42.1%	94.1%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	18.67	3.8	4.3	0.77	9.01	30.44	10.86	22.5%	4.7%	36.5%	8.7%	63.2%	36.5%	86.6%	9.3%
	Tailing	418.17	84.0	95.7	0.02	0.70	0.21	4.73	13.1%	8.1%	5.6%	85.4%	36.8%	63.5%	13.4%	90.7%
7	Crude Ore	497.61	100.0		0.12	6.84	3.09	4.60	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	63.83	12.8		0.58	44.37	16.04	2.34	63.8%	83.2%	66.6%	6.5%				
	Pb Tail	433.78	87.2	100.0	0.05	1.32	1.18	4.94	36.2%	16.8%	33.4%	93.5%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	26.81	5.4	6.2	0.48	6.33	13.07	18.99	22.2%	5.0%	22.8%	22.2%	61.3%	29.6%	68.3%	23.8%
	Tailing	406.97	81.8	93.8	0.02	0.99	0.40	4.01	14.0%	11.8%	10.6%	71.3%	38.7%	70.4%	31.7%	76.2%
8	Crude Ore	499.74	100.0		0.14	7.08	3.13	4.26	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	66.47	13.3		0.61	44.12	16.32	2.18	58.2%	82.9%	69.4%	6.8%				
	Pb Tail	433.27	86.7	100.0	0.07	1.40	1.10	4.58	41.8%	17.1%	30.6%	93.2%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	15.67	3.1	3.6	1.06	17.81	22.80	10.51	23.8%	7.9%	22.9%	7.7%	57.0%	46.1%	74.7%	8.3%
	Tailing	417.60	83.6	96.4	0.03	0.78	0.29	4.36	18.0%	9.2%	7.7%	85.5%	43.0%	53.9%	25.3%	91.7%
9	Crude Ore	496.48	100.0		0.13	6.82	3.15	4.66	100.0%	100.0%	100.0%	100.0%				
	Pb Conc	61.09	12.3		0.63	47.83	15.45	2.29	60.3%	86.3%	60.3%	6.0%				
	Pb Tail	435.39	87.7	100.0	0.06	1.07	1.43	4.99	39.7%	13.7%	39.7%	94.0%	100.0%	100.0%	100.0%	100.0%
	Zn Conc	18.58	3.7	4.3	0.69	6.60	27.59	15.79	20.1%	3.6%	32.8%	12.7%	50.6%	26.4%	82.5%	13.5%
	Tailing	416.81	84.0	95.7	0.03	0.82	0.26	4.51	19.6%	10.1%	6.9%	81.3%	49.4%	73.6%	17.5%	86.5%

Apx. 31 Results of Basic Flotation Test(Zn– Flotation in Straight Differential Flotation)

Item	Equipment	Maker	Model	Specification
Sample Preparation	Sample breaker	Otsuka	R-52	125mmL x 50mmW
	Sample grinder	Otsuka	AG-6	135mmφ
	Screen	San-ei	501	500mmφ
Mineral Dressing Test	Apparatus of Work Index	Ogawa	OSK141	Hardgrove method
	Sieve shaker	Teraoka	S-1	Lo-tap type
	Sieve shaker	Seishin	200	Vibration type
	Ball mill	Kyokuto	B-1	153mmφ x 174mmL
	Flotation machine	Ohta machinery	MS	500g/batch
	Flotation machine	Ohta machinery	MS	150g/batch
Analysis Instruments	Atomic Absorption Spectrometer	Shimazu	AA-660	
	Emission Spectrometer	Seikou	SPS-1100H	
	X-Ray Fluorescence Spectrometer	Rigaku	3270	
	X-Ray Diffractometer	Rigaku	D/max-Ⅲ	
Mineralogical study	Diamond cutter	Maruto	MC-4290	
	Polishing machine	Marumoto	5627-62	
	Lapping machine	Marumoto	T-62	
	Reflecting microscope	Olympus	BHM	
	Camera	Olympus	PM104A	

Apx.32 Equipment List for Mineral Dressing Test

Photographs of Diamond Drilling Core



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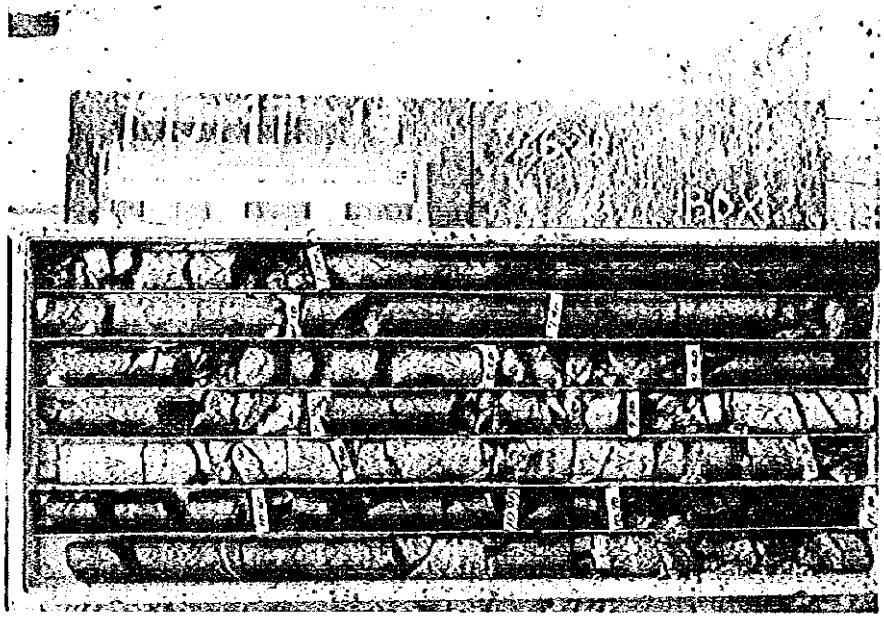
～5. 80m～



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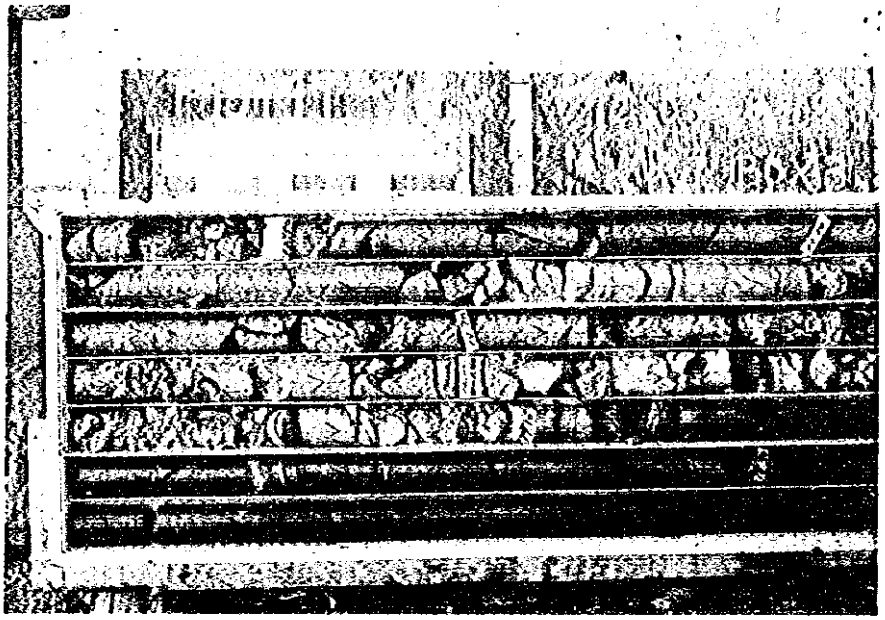

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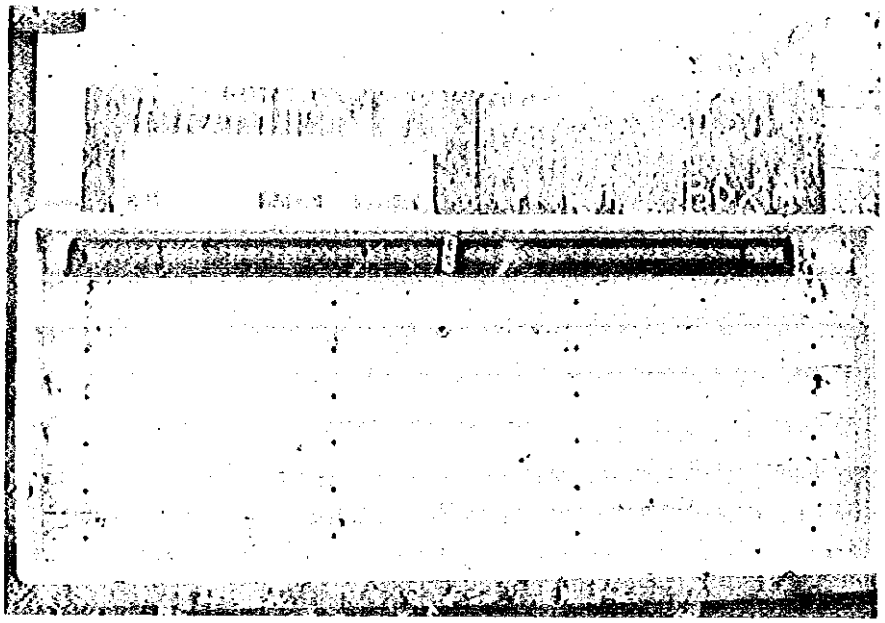

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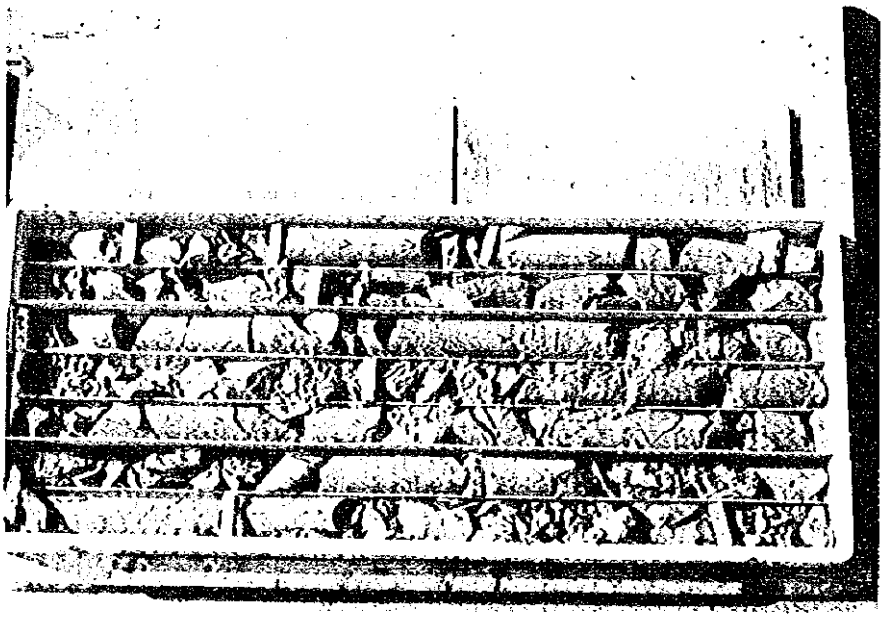

MJMT−16
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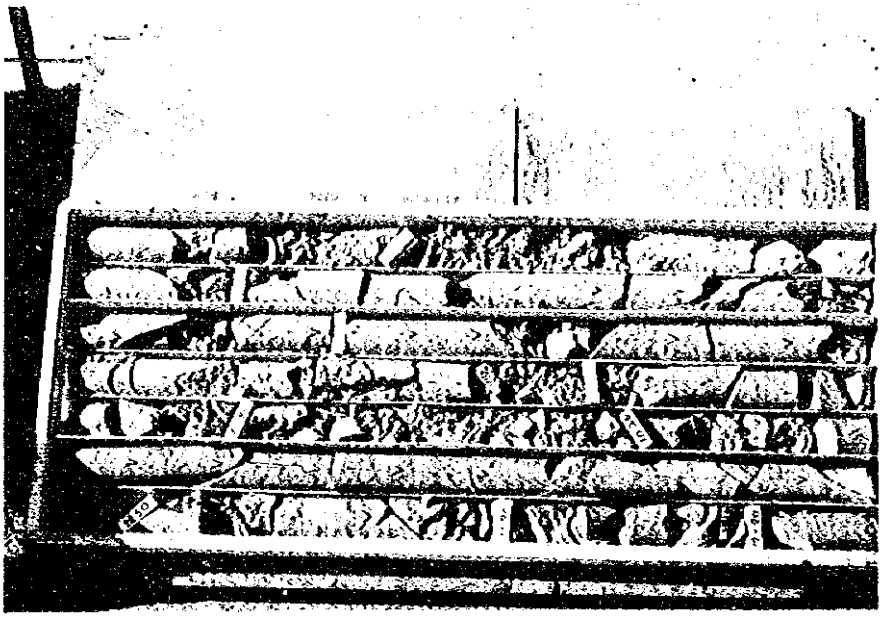

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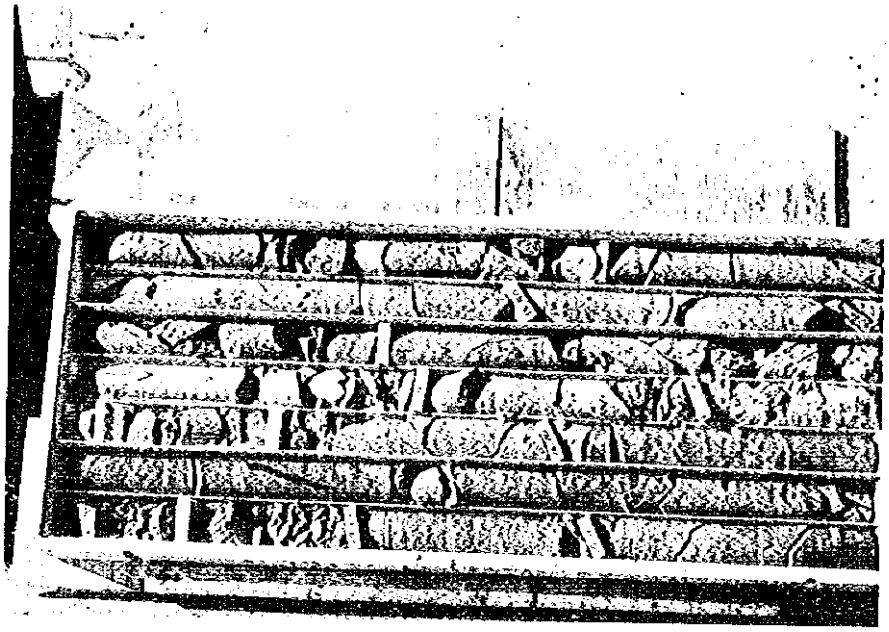

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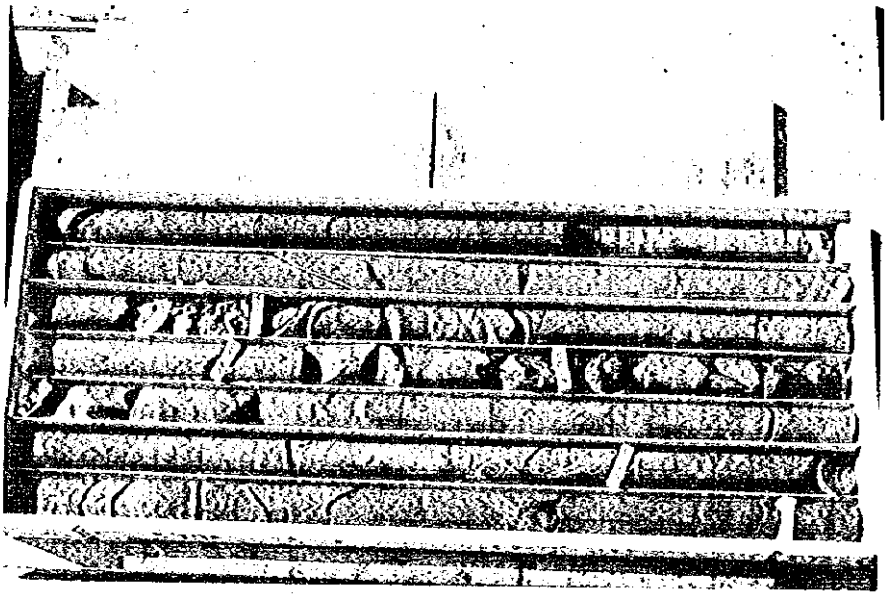

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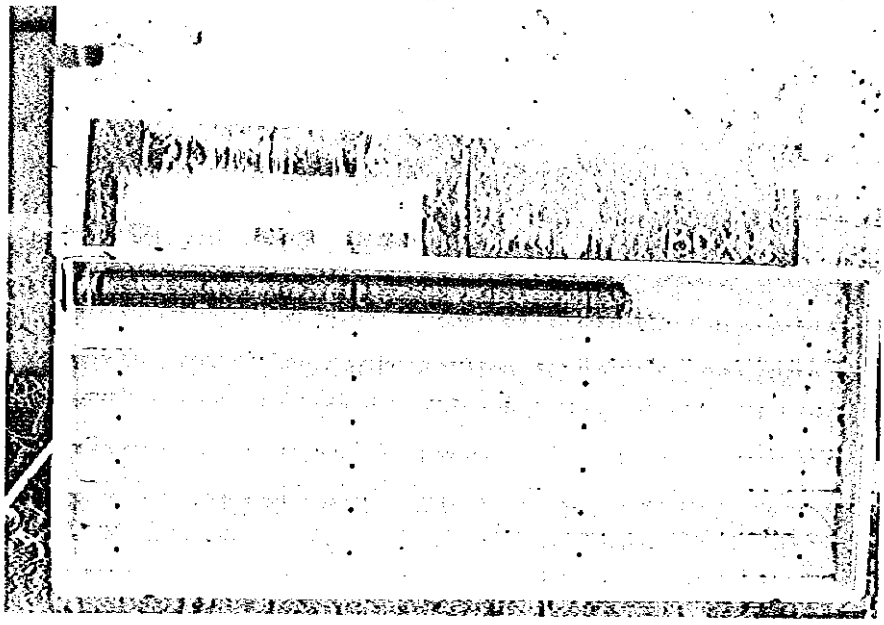

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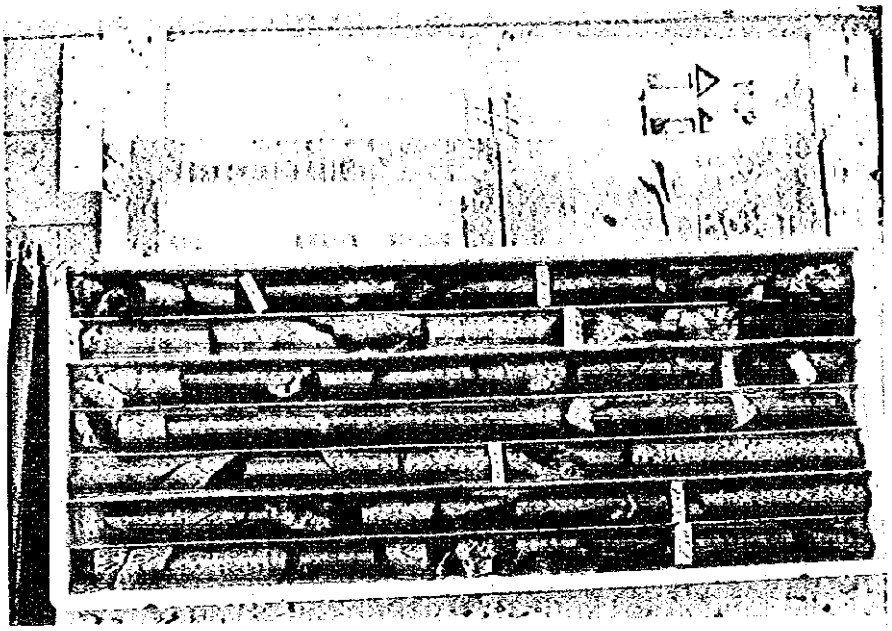

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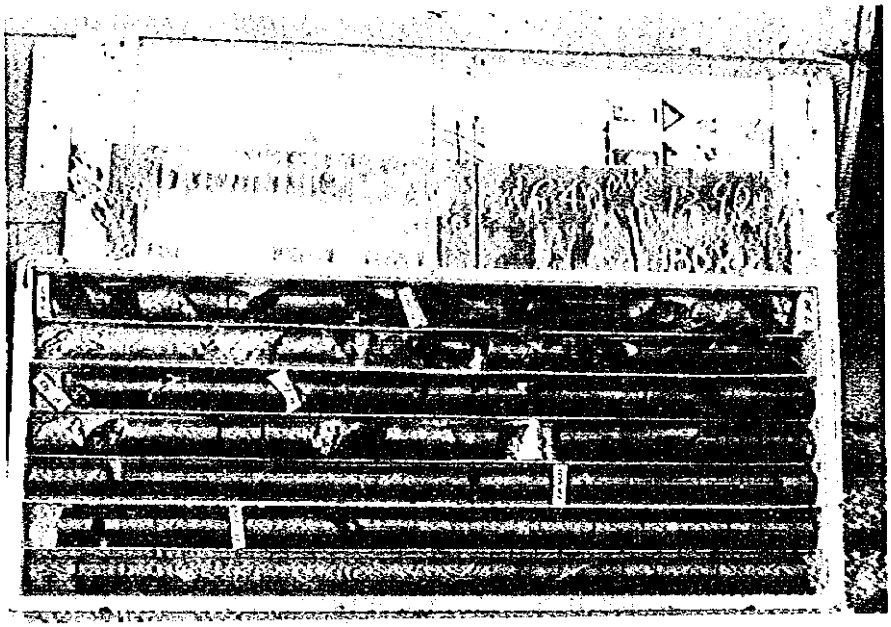

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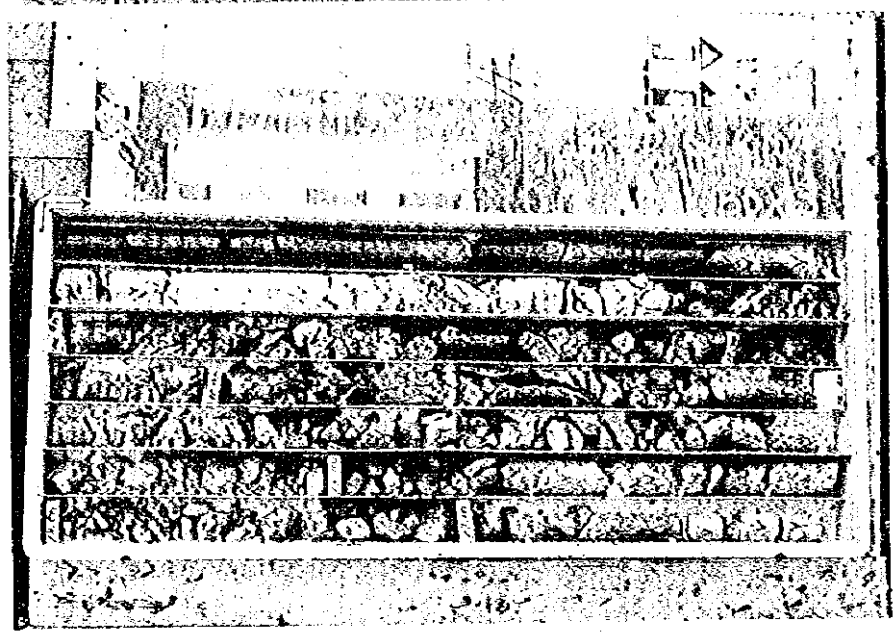
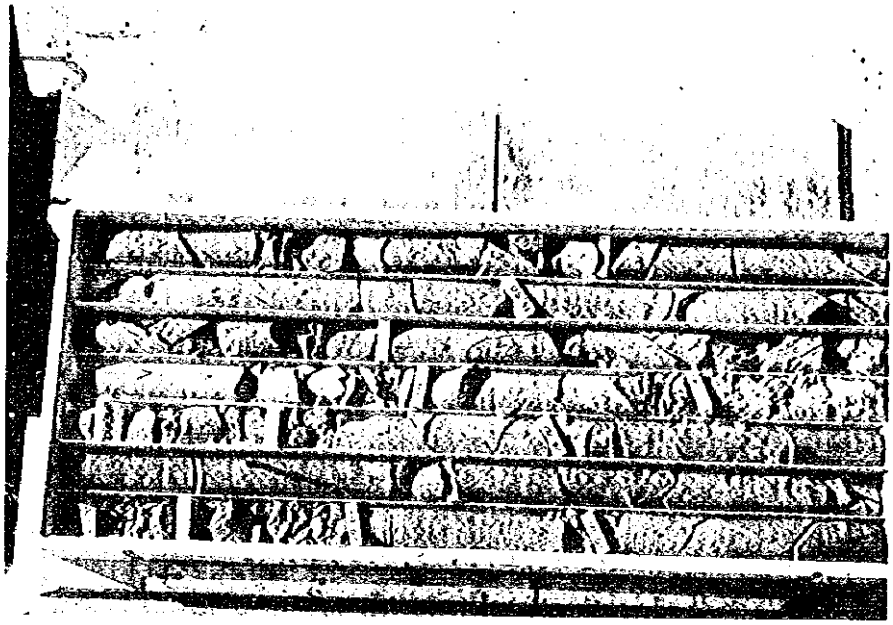
～12．90m～



～14．50m
～19．10m～



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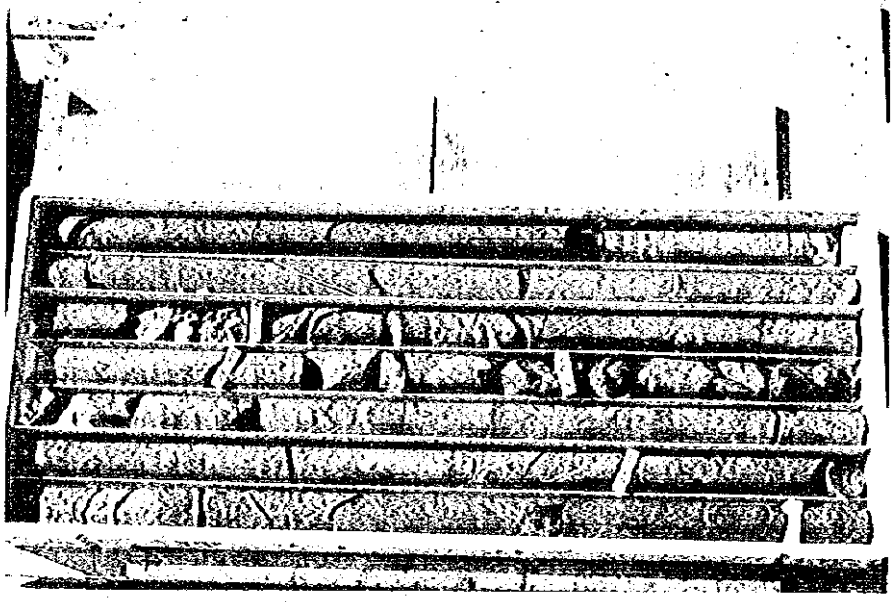

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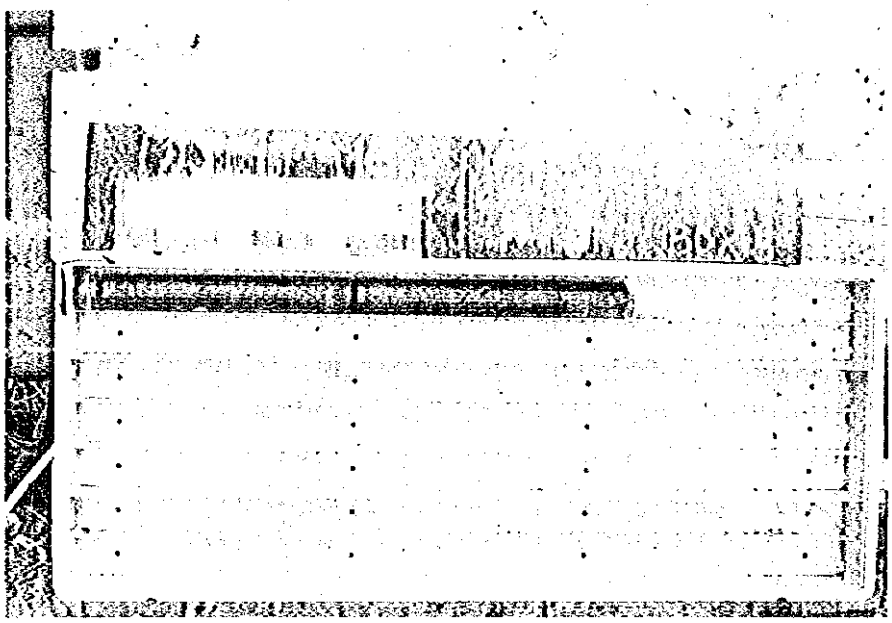

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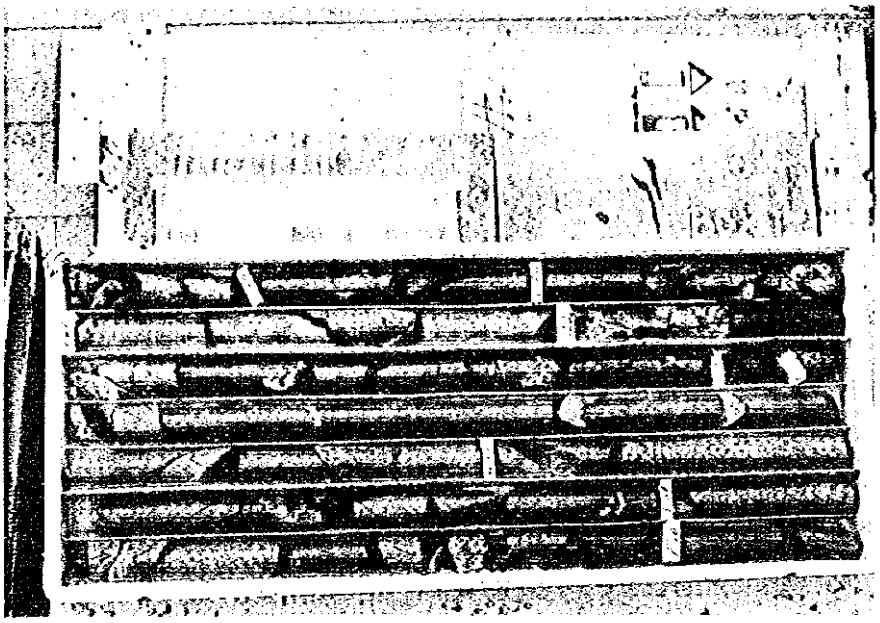

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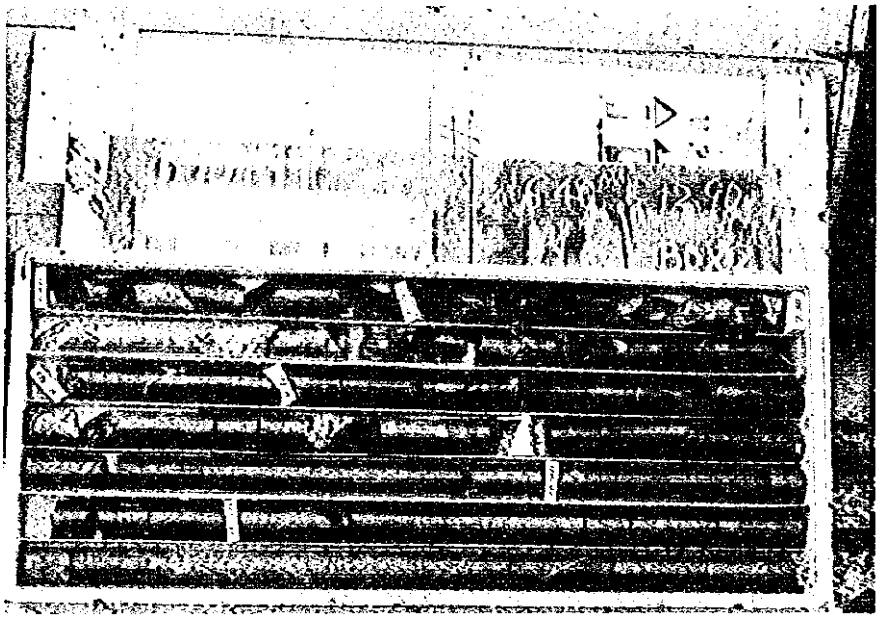
～6．20m～



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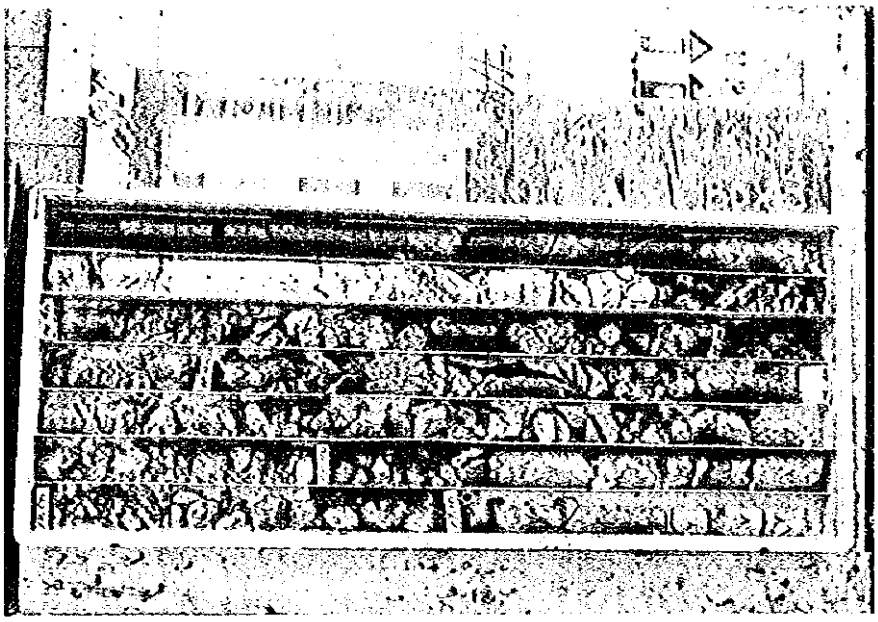

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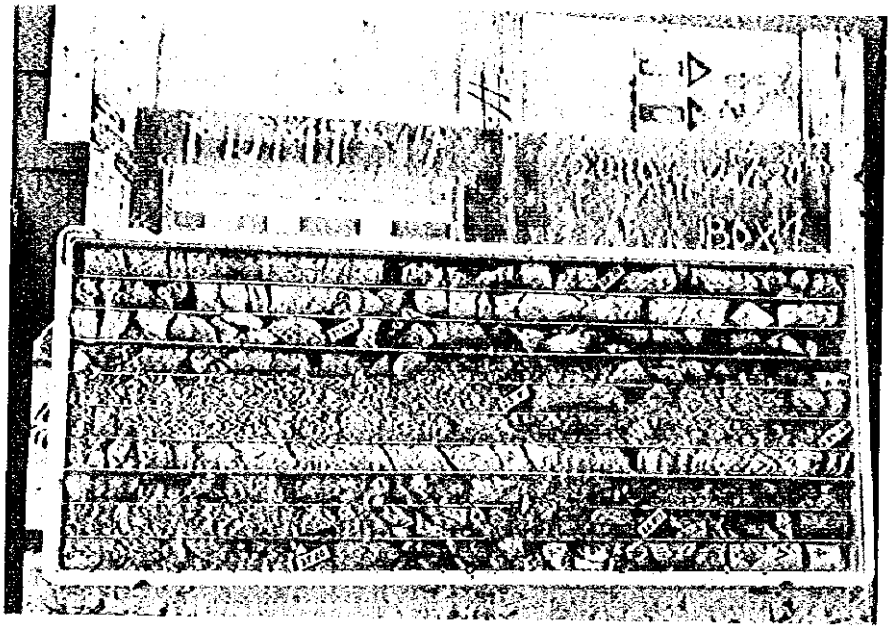
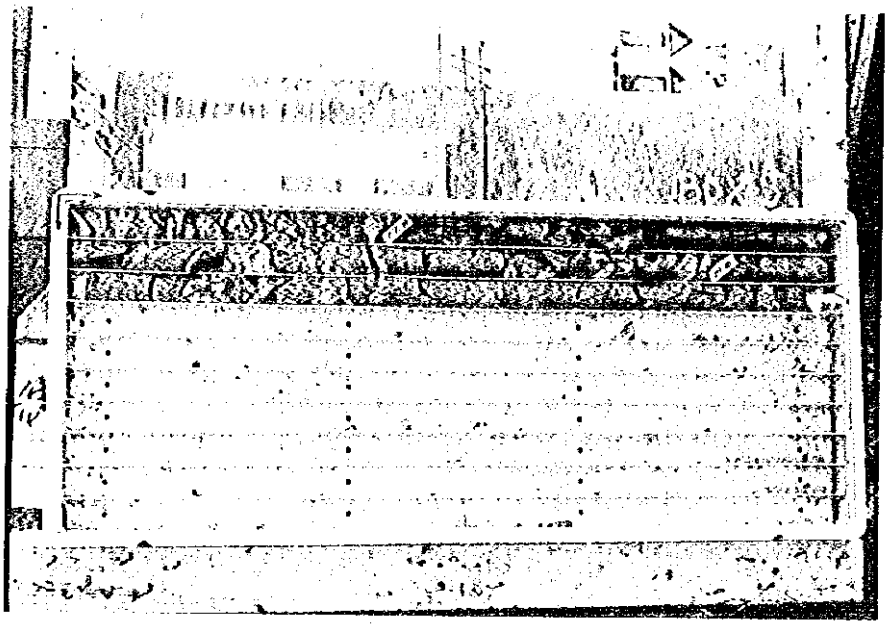


~20. 10m
~27. 20m~



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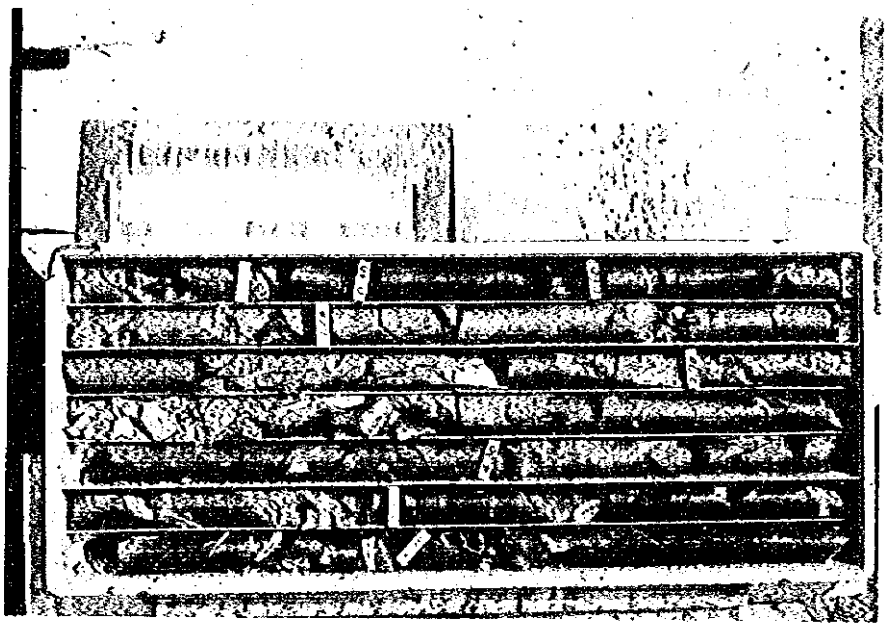

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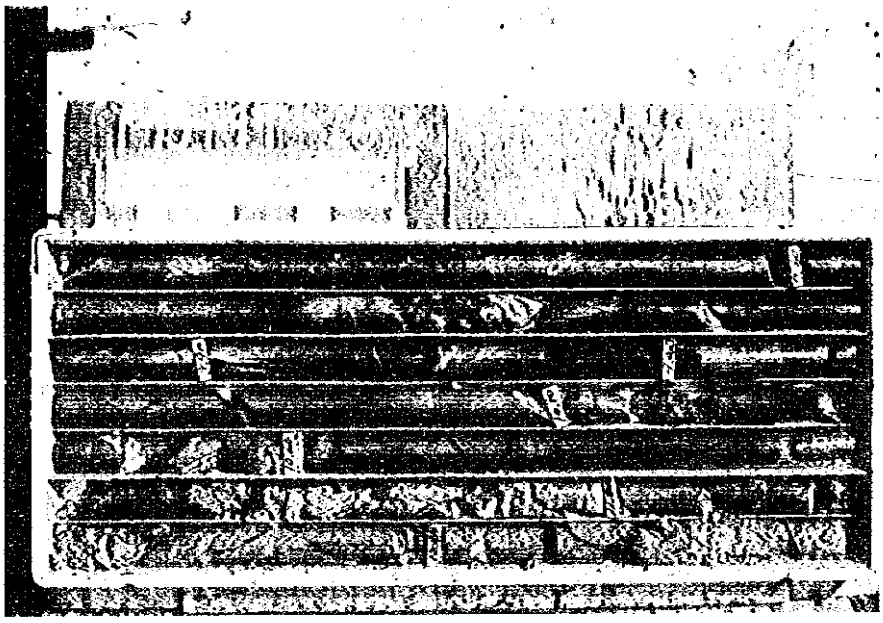
~6. 10m~



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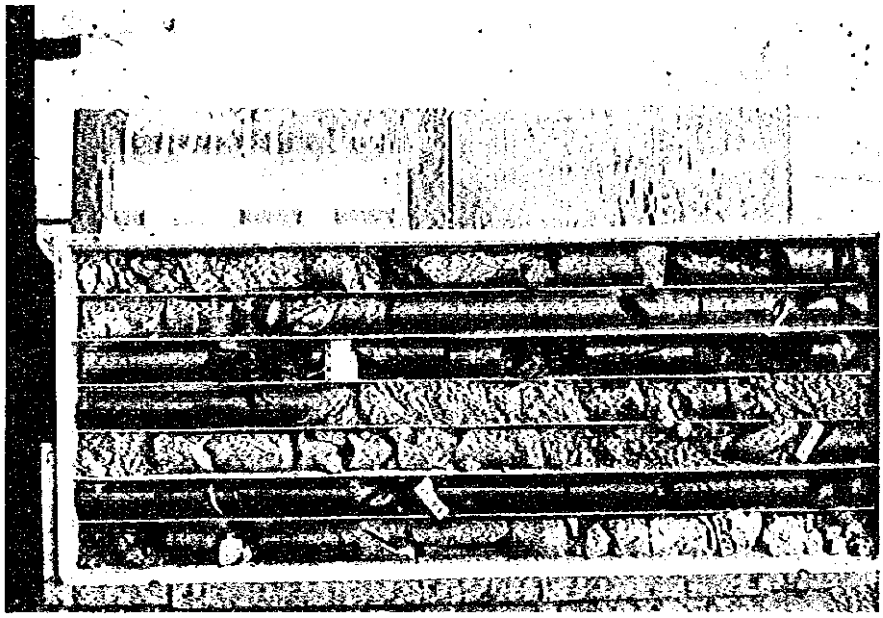
~12. 40m~



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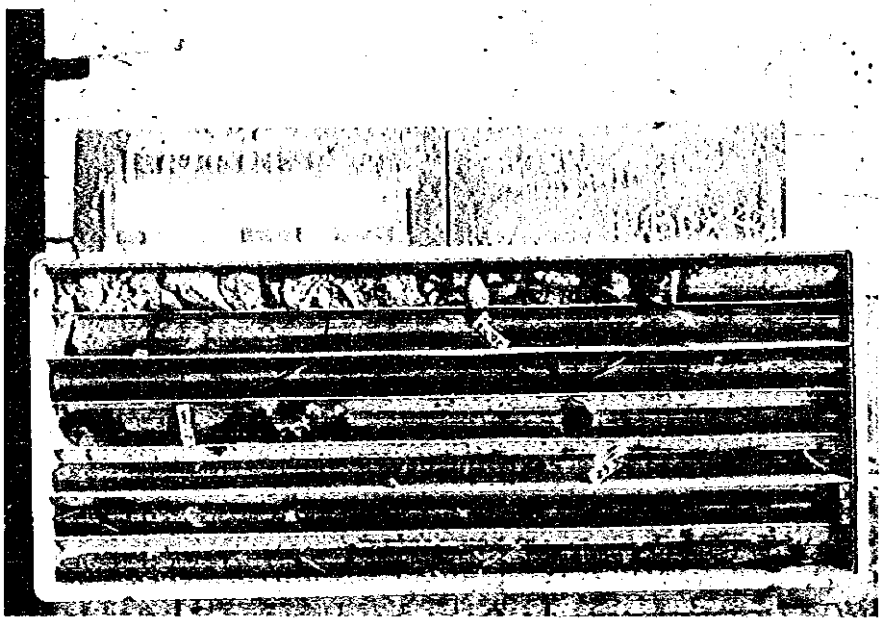

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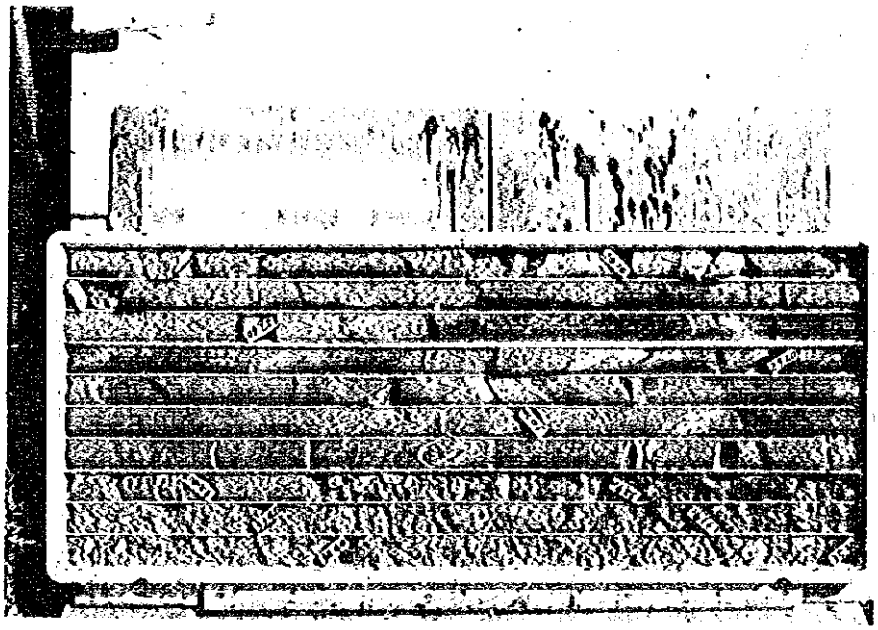

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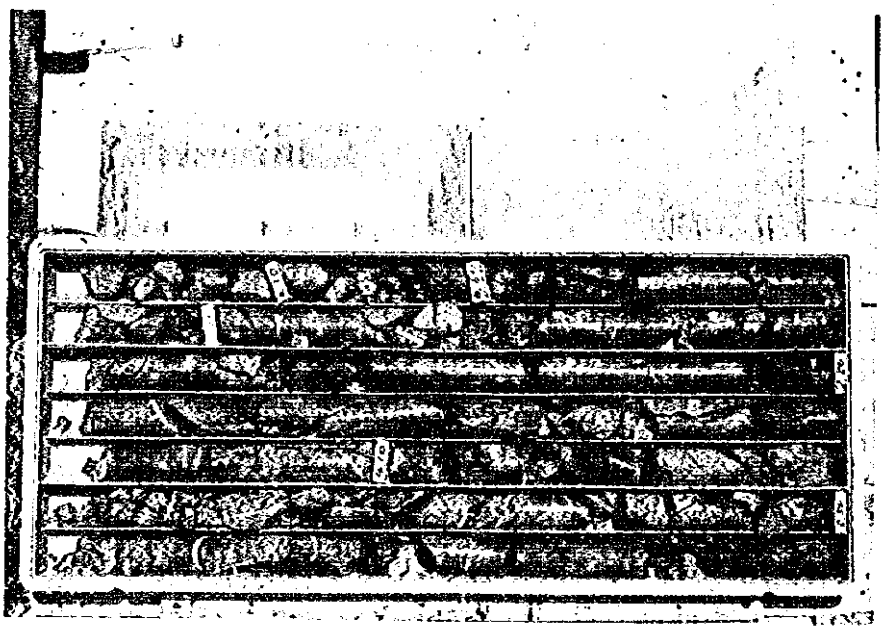

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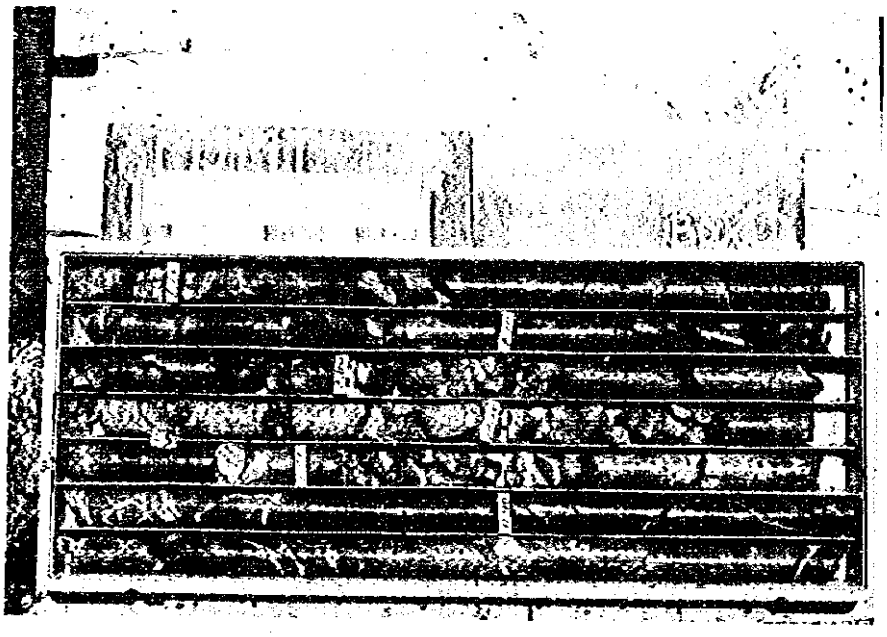

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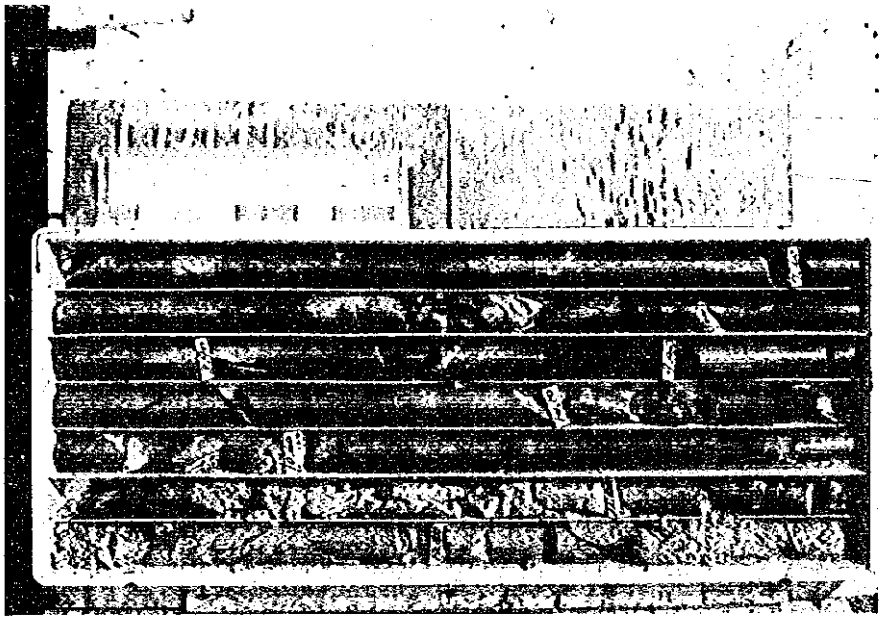

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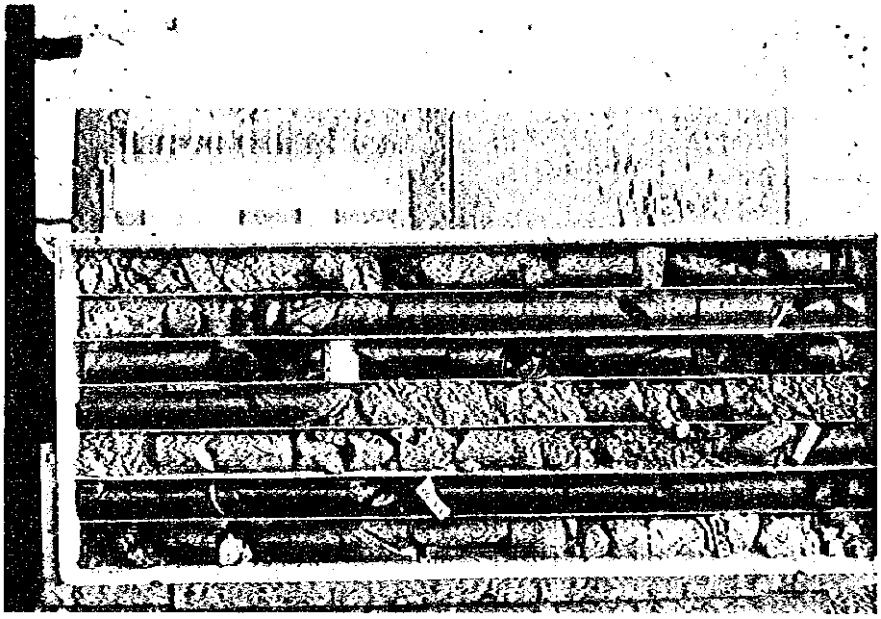

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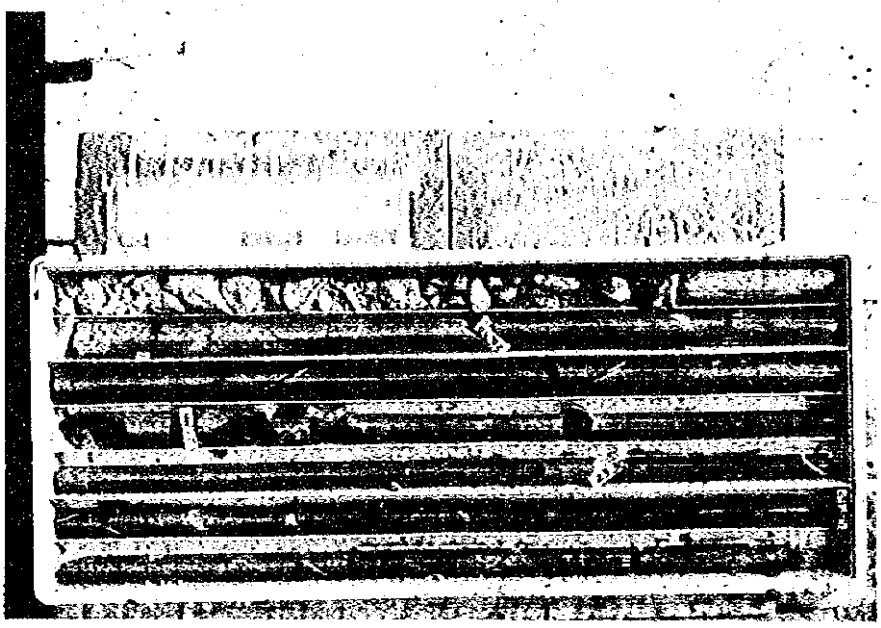

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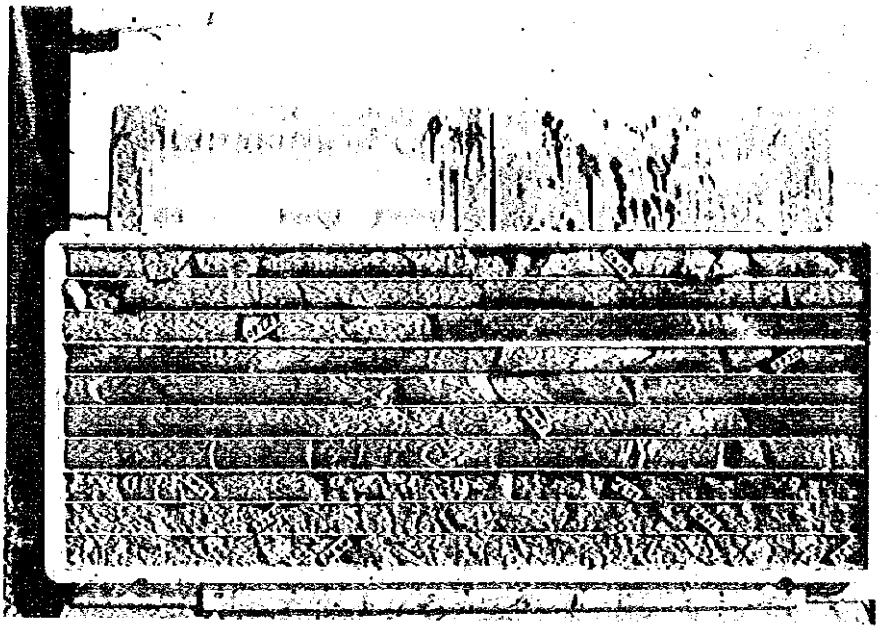

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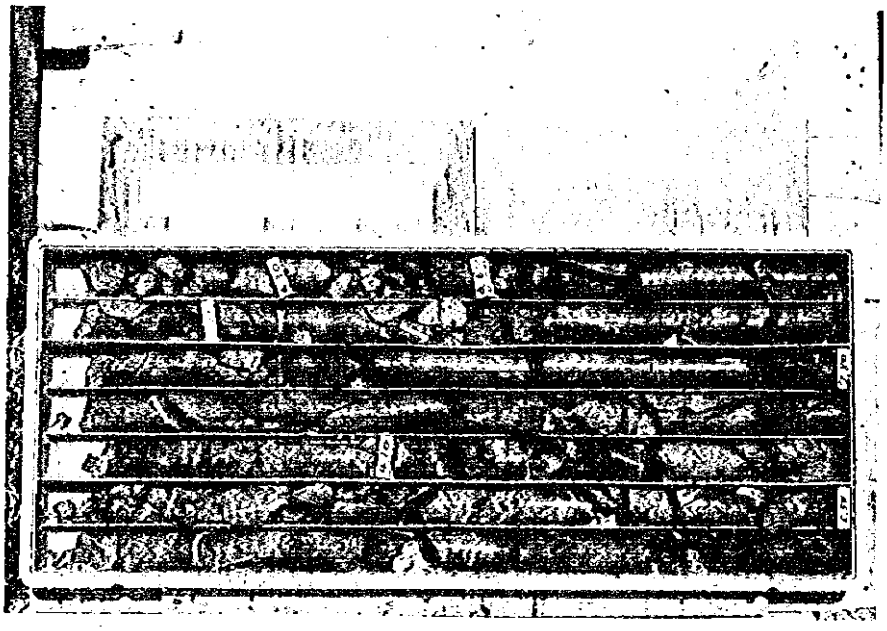

MJMT--19
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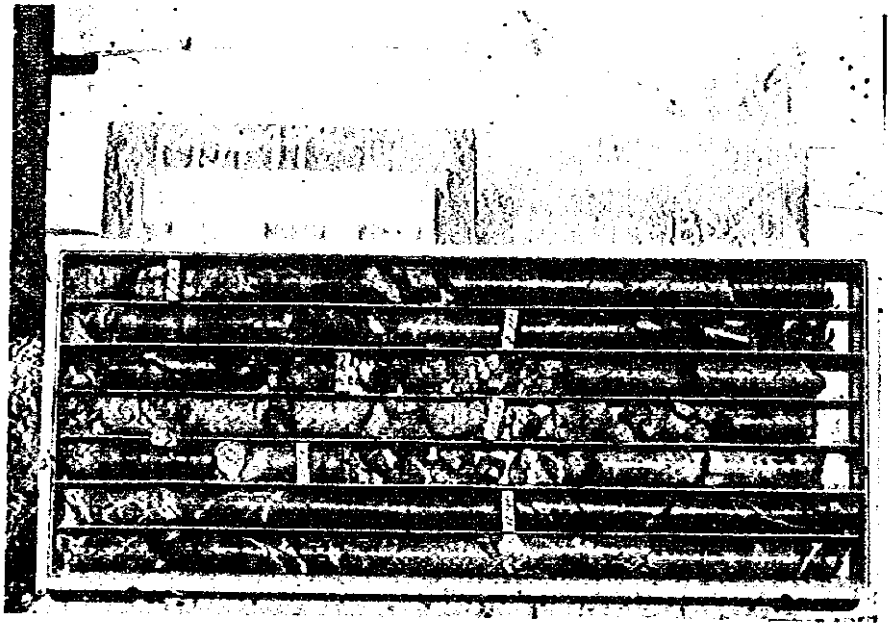

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