



Bergvesenet

Postboks 3021, N-7441 Trondheim

Rapportarkivet

Bergvesenet rapport nr 7006	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering
Kommer fra ..arkiv Bidjovagge Gruber A/S	Ekstern rapport nr	Oversendt fra Bidjovagge Gruber a.s.	Fortrolig pga	Fortrolig fra dato:

Tittel

Flotation Tests on Bidjovagge 99C, 10F og 12J

Forfatter

Palosaari, Veiko

Dato År

08.05 1989

Bedrift (Oppdragsgiver og/eller oppdragstaker)

Bidjovagge Gruber A/S

Kommune Kautokeino	Fylke Finnmark	Bergdistrikt	1: 50 000 kartblad 18334	1: 250 000 kartblad Nordreisa
-----------------------	-------------------	--------------	-----------------------------	----------------------------------

Fagområde Oppredning	Dokument type	Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Bidjovagge
Råstoffgruppe Malm/metall	Råstofftype Cu,Au,	

Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse

Telefax med resultater fra analyser av 3 prøver fra flotasjonen.
Hensikten med testene var å sammenligne samlere (SEX, SAX, Aerophine 3418A og en mix av de to siste) for å bestemme nødvendig nedmaling for gull-flotasjon.
Aerophin anbefales som samler for malmtypene 10F og 12J.
Det er ingen fare for overmaling av disse to malmtypene. Maling i to steg kan redusere behovet for samler i prosessen.

TELEFAX MESSAGE

EXPLORATION
GEOANALYTICAL LABORATORY

Date
8.5.1989

Number of pages
(This page incl.)
1+10

To:
Torvald Östby
Bidjovagge

Copy to:
M. Egberg
H. Alaniska

FAX 990 47 8456245

From:
Veikko Palosaari
GAL

Additional instructions:

MESSAGE: Oheinen raportti

If transmission not complete, please inform us.

Address:	Telephone:	Telex:	Telefax:
PO BOX 74 SF-83501 Outokumpu FINLAND	NAT. 973-561 INT. +358 73 561	46113	NAT. 973-56610 INT. +358 73 56610

OUTOKUMPU
Mining Services
Geoanalytical Laboratory
V. Palosaari

C-Am
8.5.1989

FLOTATION TESTS ON BIDJOVAGGE ORES 99C, 10F AND 12J

The aim of the flotation tests was to compare collectors (Sodium Ethylxanthate, Sodium Amylxanthate, Aerophine 3418 A and the mixture of Amylxanthate and Aerophine) and to measure the degree of grinding fineness necessary for gold flotation.

At this stage five flotation tests were done for the ore 99C and the same for the mixture of 10F and 12J 1:1. The tests of comparison were the tests 15 and 16 done earlier by Aerophine and 26 min grinding in laboratory ball mill on both feeds.

The test results show:

- Aerophine is very powerful and selective collector for gold flotation and also the selectivity in copper flotation is good. The dosage of 40 g/t to preflotation has been enough but in the second cleaning there has been some deficiency of collector that has lead to low Au-recoveries especially in the case of ore mixture 10F+12J. Aerophine can be recommended to use as only collector for both the ore types.
- There is no fear of overgrinding of these ore types. Even for 40 minutes grinding in one stage when the fineness in preflotation is about 80 % -37 μ m the higher Au-assays are in coarser sieve fraction of the tailing. Two stage grinding can be recommended especially for the ore 99C because the recoveries and grades in preflotation are good already at 20 min grinding (about 30 % -37 μ m) and the need of collector is clearly lower.

- Appendices
1. Flotation records of the tests 15 -16 by Aerophine.
 2. Flotation records of the tests 30 -31 by NaEX.
 3. Flotation records of the tests 32 -33 by NAX+Aerophine
 4. Flotation records of the tests 34 -35 by NAX
 5. Flotation records of the test 36 on 99C by two stage grinding
 6. Flotation records of the test 37 on 10F+12J by two stage grinding
 7. Flotation records of the tests 38 -39 by longer one stage grinding
 8. Graph of Au recovery and grade of the ore 99C
 9. Graph of Au recovery and grade of the mixture 10F+12J 1:1

GUTOKUMFU
Mining Services
Geoanalytical Laboratory

Appendix 1.

Project: Bidjowappe ores 99C, 10F and 12J

TEST 15 99C - *CAg*
Grinding 26 min
Conditioning 3-2+1+1
pH 9.0
Aerophine 40 g/t
Dewfroth 110 30+20 g/t

	WEIGHT	CU		AU		S		CUK	SK	MOBT			
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.				ASSAY	ASSAY	ASSAY
		%	%	g/t	%	%	%				%	%	%
FEED	100.0	0.272	100.0	7.95	100.0	0.43	100.0	0.8	0.3	93.9			
PRECONC.	15.3	1.593	59.5	43.42	64.8	2.55	90.5	4.6	1.8	93.6			
PRETAIL.	64.7	0.034	10.5	1.43	15.4	0.08	9.5	0.1	0.0	99.9			
SCAV. CONC.	6.7	0.057	1.6	0.46	0.1	0.15	2.3	0.2	0.2	99.7			
TAILING	76.0	0.001	0.9	1.34	13.3	0.04	7.2	0.1	0.0	99.9			
1. CL. CONC.	2.7	7.842	97.7	217.70	74.9	12.46	77.9	22.7	6.5	68.8			
1. CL. TAIL.	12.6	0.254	11.7	0.07	9.7	0.43	12.5	0.7	0.3	98.9			
2. CL. CONC.	1.4	14.400	74.0	366.00	65.3	19.87	64.4	41.6	10.0	46.4			
2. CL. TAIL.	1.3	0.779	3.7	58.00	9.6	4.49	13.5	2.3	6.9	90.8			

TEST 16 10F+12J 1:1
7
Grinding 26 min
Conditioning 3-2+1+1
pH 9.0
Aerophine 40 g/t
Dewfroth 210 30+20 g/t

	WEIGHT	CU		AU		S		CUK	SK	MOBT			
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.				ASSAY	ASSAY	ASSAY
		%	%	g/t	%	%	%				%	%	%
FEED	100.0	1.620	100.0	4.99	100.0	2.67	100.0	4.7	2.0	93.4			
PRECONC.	17.1	9.180	56.6	22.55	77.8	15.23	97.4	26.5	11.2	62.3			
PRETAIL.	82.9	0.050	0.7	1.33	22.2	0.09	2.6	0.2	0.0	99.8			
SCAV. CONC.	5.8	0.301	1.0	3.07	3.4	0.14	0.9	0.9	0.3	98.9			
TAILING	77.4	0.043	1.0	1.21	18.6	0.06	1.7	0.1	0.0	99.8			
1. CL. CONC.	7.6	19.512	91.6	44.10	67.4	31.82	90.4	56.4	22.8	20.8			
1. CL. TAIL.	9.5	0.912	9.9	0.39	10.0	1.96	7.0	2.6	1.9	95.4			
2. CL. CONC.	0.0	24.000	50.0	47.00	67.1	33.64	73.5	69.4	21.5	9.2			
2. CL. TAIL.	1.6	2.688	1.4	12.11	10.2	17.48	10.5	7.7	27.7	64.5			

OUTSOURCE
Mining Services
General Analytical Laboratory

Appendix 2.

Project: Edjovagge ores 99C, 10F and 10J

TEST 30 99C

Grinding 26 min
Conditioning 3-2+1+1
pH 8.9
Na2S 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT	CU		AU		S		CUK	SE	MUUT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
	%	%	%	g/t	%	%	%	%	%	%
FEED	100.0	0.242	100.0	6.41	100.0	0.46	100.0	0.7	0.4	93.9
PRECONC.	11.9	1.854	92.3	41.47	77.0	3.56	88.7	3.4	3.1	91.4
PRETAIL.	68.1	0.021	7.5	1.67	23.0	0.06	12.3	0.1	0.1	99.9
SCAV. CONC.	5.5	0.089	2.0	3.76	3.2	0.23	2.7	0.3	0.3	99.9
TAILING	62.6	0.016	5.5	1.53	19.7	0.05	6.7	0.0	0.1	99.9
1. CL. CONC.	2.5	8.538	67.5	174.95	68.3	16.33	69.5	14.6	14.5	60.9
1. CL. TAIL.	9.4	0.120	4.7	5.97	6.6	0.16	3.2	0.3	0.1	99.6
2. CL. CONC.	2.6	12.900	85.2	249.00	62.2	24.29	61.4	17.3	21.2	41.6
2. CL. TAIL.	0.9	0.729	2.7	43.30	6.1	2.19	4.1	2.1	2.7	96.2

TEST 31 10F+10J 1:1

Grinding 26 min
Conditioning 3+2+1+1
pH 8.8
Na2S 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT	CU		AU		S		CUK	SE	MUUT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
	%	%	%	g/t	%	%	%	%	%	%
FEED	100.0	1.629	100.0	4.61	100.0	1.19	100.0	4.7	1.3	94.2
PRECONC.	14.3	10.914	95.8	77.12	68.7	15.37	51.7	31.5	6.1	60.4
PRETAIL.	55.7	0.079	4.0	1.68	39.2	0.09	2.3	0.2	-0.0	99.8
SCAV. CONC.	4.1	0.503	1.2	2.93	2.6	0.67	1.2	1.6	0.3	96.2
TAILING	61.6	0.058	2.8	1.62	35.7	0.13	3.1	0.2	-0.1	99.9
1. CL. CONC.	7.6	16.911	93.4	37.91	62.5	21.33	94.6	17.3	14.5	27.6
1. CL. TAIL.	6.7	0.596	2.5	4.32	6.3	1.01	2.0	1.7	0.8	97.5
2. CL. CONC.	6.9	22.800	91.0	40.30	58.8	31.94	91.4	65.9	16.0	17.1
2. CL. TAIL.	2.3	1.330	2.3	23.63	3.7	1.42	3.2	10.2	5.7	64.1

OUTOKUMPU
Mining Services
Secondary Laboratory

Appendix 3.

Project: Sidjowagge ores 990, 107 and 100

TEST 32 990
Grinding 26 min
Conditioning 3+2+1-1
pH 6.9
NAX+ABROPHINE 60+20 g/t
Dowfroth 210 30+20 g/t

	WEIGHT %	CU		AU		S		CUK	SE	MOOT
		ASSAY %	RECOV. %	ASSAY g/t	RECOV. %	ASSAY %	RECOV. %			
FEED	100.0	0.242	100.0	6.42	100.0	0.48	100.0	0.7	0.4	98.8
PRECONC.	11.5	1.947	92.5	44.90	50.5	4.03	97.3	5.6	3.9	90.5
PRETAIL.	22.5	0.020	7.5	1.41	19.5	0.01	2.7	0.1	-0.0	100.0
SCAV. CONC.	4.7	0.047	0.5	3.28	2.4	0.10	1.0	0.1	0.1	95.8
TAILING	59.6	0.019	6.6	1.31	17.1	0.01	1.6	0.1	-0.0	100.0
1. CL. CONC.	3.3	6.471	88.2	139.45	71.7	12.32	92.3	12.7	12.8	68.5
1. CL. TAIL.	0.2	0.127	4.3	6.95	6.8	0.25	5.0	0.4	0.3	95.3
2. CL. CONC.	0.9	17.700	65.8	250.00	35.1	31.07	55.7	51.2	24.8	24.0
2. CL. TAIL.	2.4	2.260	22.4	98.00	36.7	6.67	33.6	6.5	6.2	85.2

TEST 33 107+103 1:1
Grinding 26 min
Conditioning 3+2+1-1
pH 8.8
NAX+ABROPHINE 60+20 g/t
Dowfroth 210 30+20 g/t

	WEIGHT %	CU		AU		S		CUK	SE	MOOT
		ASSAY %	RECOV. %	ASSAY g/t	RECOV. %	ASSAY %	RECOV. %			
FEED	100.0	1.872	100.0	4.45	100.0	0.79	100.0	4.8	2.1	93.1
PRECONC.	13.8	13.773	97.2	25.66	75.5	19.92	96.5	34.0	13.1	50.9
PRETAIL.	20.2	0.024	2.8	3.06	20.5	0.05	1.5	0.2	-0.0	99.5
SCAV. CONC.	4.7	1.263	0.7	2.26	2.4	0.35	0.7	0.4	0.2	93.0
TAILING	51.3	0.042	2.3	0.99	12.7	0.06	0.9	0.1	-0.0	99.5
1. CL. CONC.	7.4	10.780	93.0	39.96	65.4	34.37	90.7	60.1	26.3	13.7
1. CL. TAIL.	0.4	1.372	3.2	5.12	13.3	0.51	3.8	4.0	2.1	51.9
2. CL. CONC.	4.9	24.800	73.7	30.40	33.4	19.46	69.3	31.7	27.1	1.2
2. CL. TAIL.	2.5	10.400	19.3	52.70	32.9	23.16	22.4	37.3	24.7	35.6

OUTORUNFO
Mining Services
Geoanalytical Laboratory

Appendix 4.

Project: Bidsjovagge ores 99C, 10F and 10J

TEST 34 99C

Grinding 26 min
Conditioning 3-2-141
pH 5.0
NAX-Sateri 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT %	Cu		Au		S		CuK	SK	MUOT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
		%	%	g/t	%	%	%			
FEED	100.0	0.242	100.0	7.29	100.0	0.51	100.0	0.7	0.5	96.6
PRECONC.	13.3	1.594	93.0	40.02	73.0	3.74	57.3	4.9	3.8	91.3
PRETAIL.	26.7	0.030	7.0	2.27	27.0	0.02	2.7	0.1	-0.0	100.0
SCAV. CONC.	7.2	0.027	0.6	4.33	4.3	0.08	1.1	0.1	0.1	99.5
TAILING	39.5	0.019	6.2	2.06	22.7	0.01	1.5	0.1	-0.0	100.0
1. CL. CONC.	2.4	7.334	87.8	155.62	67.9	16.02	90.6	23.2	16.2	66.9
1. CL. TAIL.	10.4	0.120	5.1	7.78	11.1	0.32	6.5	0.3	0.4	99.3
2. CL. CONC.	1.6	12.700	63.6	242.00	53.1	27.00	84.4	36.7	26.6	36.7
2. CL. TAIL.	1.3	0.740	4.0	49.30	3.8	2.32	6.4	2.1	3.3	94.5

TEST 35 10F+10J 1:1

Grinding 26 min
Conditioning 3+3+141
pH 5.5
NAX-Sateri 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT %	Cu		Au		S		CuK	SK	MUOT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
		%	%	g/t	%	%	%			
FEED	100.0	1.582	100.0	4.23	100.0	2.74	100.0	4.6	2.3	97.5
PRECONC.	15.7	4.227	97.5	23.93	61.3	1.72	35.7	2.4	12.7	67.5
PRETAIL.	24.3	0.051	2.0	0.94	16.7	0.04	1.3	0.1	-0.0	100.0
SCAV. CONC.	2.0	0.186	0.6	2.03	2.6	0.23	0.5	0.5	0.7	99.4
TAILING	28.5	0.037	1.8	0.66	16.0	0.06	0.9	0.1	-0.0	100.0
1. CL. CONC.	2.0	14.460	53.2	76.00	16.3	7.18	84.1	56.1	25.0	15.5

OUTOKUMPU
Mining Services
Geoanalytical Laboratory

Appendix 4.

Project: Bidjovagge ores 99C, 10F and 12G

TEST 34 99C

Grinding 26 min
Conditioning 3-2+1+1
pH 9.0
NAX-Säteri 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT	Cu		Au		S		CuS	SK	MUT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
	%	%	%	g/t	%	%	%	%	%	%
FEED	100.0	3.242	100.0	7.29	100.0	0.51	100.0	0.7	0.5	98.8
PRECONC.	18.3	1.694	93.0	40.02	73.0	3.74	97.3	4.9	3.8	91.3
PRETAIL.	60.7	0.020	7.0	2.27	27.0	0.02	2.7	0.1	-0.0	100.0
SCAV. CONC.	7.2	0.027	0.8	4.33	4.3	0.06	1.1	0.1	0.1	99.8
TAILING	75.5	0.019	6.2	2.02	22.7	0.01	1.6	0.1	-0.0	100.0
1. CL. CONC.	2.9	7.339	87.8	155.62	61.9	16.03	90.8	21.2	16.2	82.9
1. CL. TAIL.	10.4	0.120	5.1	7.78	11.1	0.32	6.5	0.3	0.4	95.3
2. CL. CONC.	4.6	12.700	62.8	242.00	53.1	27.00	84.4	36.7	26.6	36.7
2. CL. TAIL.	1.3	0.140	4.0	49.30	8.6	2.52	6.4	2.1	3.3	94.8

TEST 35 10F+12G 1-1

Grinding 26 min
Conditioning 3-2+1+1
pH 8.5
NAX-Säteri 100 g/t
Dowfroth 210 30+20 g/t

	WEIGHT	Cu		Au		S		CuS	SK	MUT
		ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
	%	%	%	g/t	%	%	%	%	%	%
FEED	100.0	1.562	100.0	4.23	100.0	2.74	100.0	4.6	2.1	93.3
PRECONC.	15.7	9.627	97.5	21.92	81.3	17.22	96.7	19.4	13.7	87.9
PRETAIL.	84.3	0.047	2.5	0.94	16.7	0.04	1.3	0.1	-0.0	95.8
SCAV. CONC.	5.8	0.146	0.8	2.03	2.6	0.25	0.5	0.5	0.1	99.4
TAILING	76.8	0.037	1.8	0.66	16.0	0.03	0.9	0.1	-0.0	100.0
1. CL. CONC.	7.6	19.400	93.2	36.89	69.8	33.56	94.2	50.1	27.0	16.3
1. CL. TAIL.	8.1	0.843	4.3	0.01	11.5	1.30	4.4	2.4	1.0	87.3
2. CL. CONC.	5.8	23.000	84.3	34.70	47.5	35.13	62.8	66.5	19.8	2.8
2. CL. TAIL.	1.3	7.800	8.9	52.40	22.3	17.40	11.8	22.8	17.5	15.6

GUDONUMFU
Mining Services
Geoanalytical Laboratory

Appendix 6.

Project: Bridgevillage ores 990, 107 and 123

TEST 37 107-123 3:1
Grinding 20+20 min
Conditioning 3+2-1/2+1 min
pH 8.9
Aerophine 40 g/t
Dowfiroth 210 30-20 g/t

	WEIGHT %	CU		AU		S		CU*	SE	MUMT
		ASSAY %	RECON. %	ASSAY g/t	RECON. %	ASSAY %	RECON. %			
FEED	100.0	1.72	100.0	4.30	100.0	2.72	100.0	5.0	1.6	95.2
PRECONC.	15.5	10.71	96.4	20.86	75.3	16.51	480.2	31.0	10.7	96.3
PRETAIL.	84.5	0.07	3.6	1.23	24.7	1.20	33.1	0.2	0.2	99.6
-37	28.4	0.12	1.9	0.75	5.0	0.25	13.3	0.3	0.2	99.4
+37	56.1	0.05	1.7	1.51	19.7	0.37	17.8	0.1	0.2	99.6
SCAV. CONC.	3.2	0.54	1.0	14.04	10.5	1.47	8.6	1.6	1.7	96.7
SCAV. TAIL.	52.9	0.02	0.7	0.75	9.2	0.09	6.9	0.1	0.1	99.6
FINAL TAILING	81.3	0.06	2.6	0.75	14.2	0.15	22.3	0.2	0.2	99.7
1. CL. CONC.	6.0	20.09	93.3	35.23	65.6	30.05	451.2	56.1	18.4	23.6
1. CL. TAIL.	7.5	0.71	3.1	5.56	9.7	2.06	29.0	2.1	2.5	95.4
2. CL. CONC.	6.5	23.90	90.2	37.40	56.6	33.83	412.7	69.1	18.2	12.7
2. CL. TAIL.	1.5	3.55	3.1	25.80	9.0	13.66	36.5	10.3	18.9	20.3
SCAV. CL. CONC.	0.4	3.76	0.9	81.2	7.6	7.83	5.9	10.3	7.6	61.6
SCAV. CL. TAIL.	2.8	0.06	0.1	4.44	2.9	0.56	2.9	0.2	0.9	96.9
SCAV. TAILING										
- 105	1.4	0.035	2.6	1.55	3.6	0.38	4.4	0.1	0.6	95.3
74	4.9	0.019	5.4	1.56	10.1	0.19	7.6	0.1	0.3	99.6
37	27.4	0.012	19.0	1.11	40.1	0.15	33.7	0.0	0.3	99.7
-37	66.3	0.019	72.6	0.53	46.3	0.10	54.3	0.1	0.2	99.8
	100.0	0.017	100.0	0.76	100.0	0.12	100.0	0.1	0.2	99.8

OUTORUMFU
Mining Services
Geoanalytical Laboratory

Appendix 7.

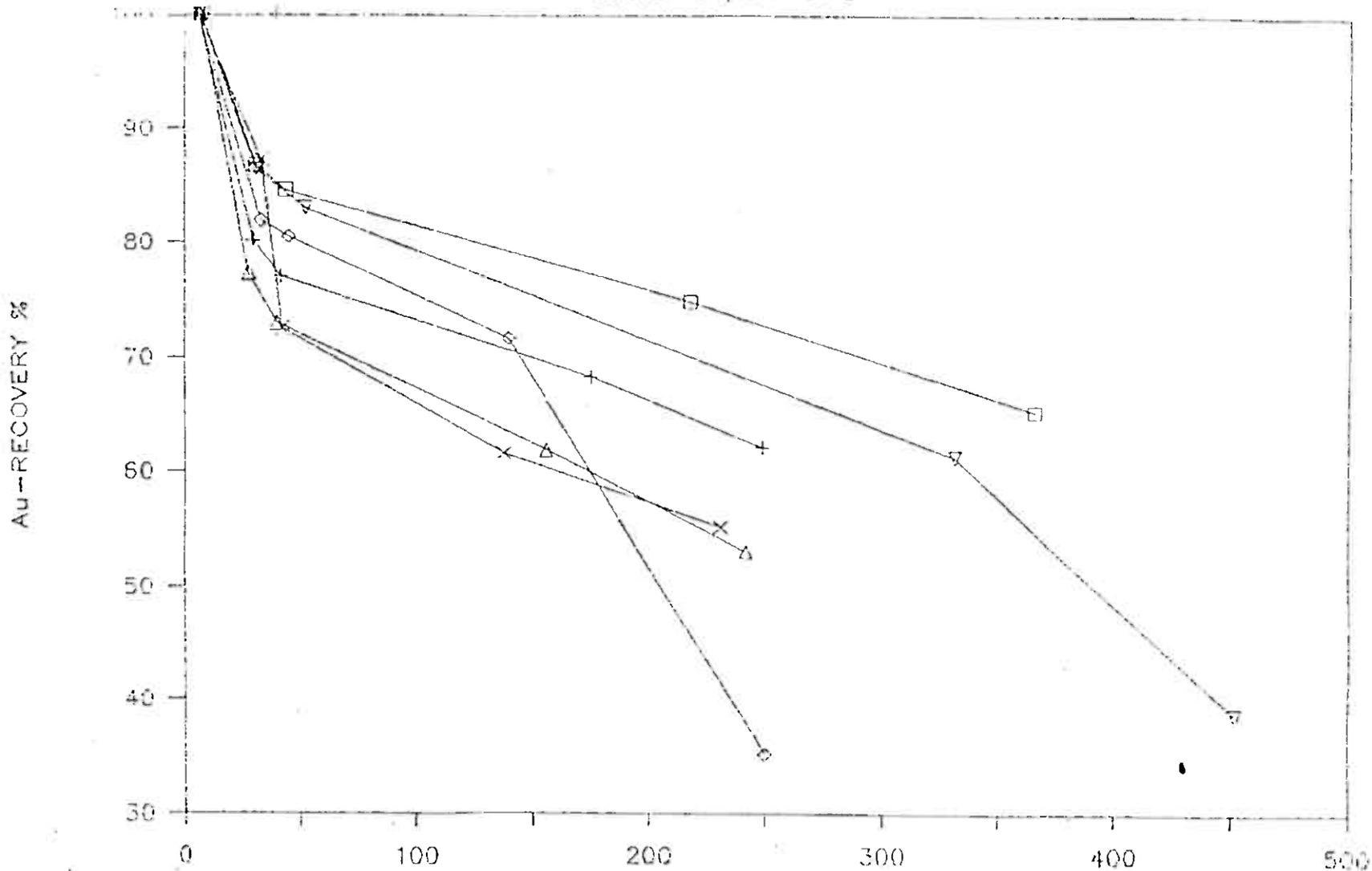
Project: Bjövegga ores 550, 107 and 120

TEST 38	550	Grinding 40 min Conditioning 3+2+1+1 pH 9.0 AEROPHINE 40 g/t Dowfroth 210 30-20 g/t									
		WEIGHT	Cu		Au		S		CuK	SS	MUUF
			ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
%	%	%	g/t	%	%	%	%	%	%	%	
FEED	100.0	0.235	100.0	7.02	100.0	0.45	100.0	0.7	0.5	99.8	
PRECONC.	11.2	1.956	91.6	52.05	89.0	3.25	24.7	5.7	2.5	93.9	
PRETAIL.	55.8	0.023	8.4	1.54	17.0	0.14	25.3	0.1	0.2	99.7	
SCAV. CONC.	8.3	0.056	2.0	2.52	3.3	0.14	2.4	0.2	0.2	99.7	
TAILING	60.5	0.015	6.4	1.15	13.6	0.14	22.9	0.1	0.2	99.7	
1. CL. CONC.	1.3	14.777	60.3	331.36	61.3	15.59	51.6	42.7	8.9	43.5	
1. CL. TAIL.	9.9	0.273	11.3	15.40	21.7	1.14	22.9	0.6	1.6	91.6	
2. CL. CONC.	0.6	26.330	65.0	452.00	38.6	26.75	33.1	26.0	4.2	19.7	
2. CL. TAIL.	0.7	4.900	14.1	228.00	22.7	11.73	16.7	14.2	10.7	73.1	
TAILING:											
-149	0.0	0.000	0.0	0.00	0.0	0.00	0.0	0.00	0.00	100.0	
+105	1.5	0.026	2.3	4.50	5.0	0.43	4.0	0.06	0.74	99.2	
+ 74	5.0	0.018	5.9	4.20	15.5	0.39	12.5	0.05	0.70	99.3	
+ 37	22.5	0.015	22.0	2.57	42.7	0.17	24.5	0.04	0.29	99.7	
- 37	71.0	0.015	65.5	0.70	36.7	0.13	59.0	0.04	0.22	99.7	
	100.0	0.015	100.0	1.35	100.0	0.16	100.0	0.04	0.25	99.7	

TEST 39	107+120 1:1	Grinding 40 min Conditioning 3+2+1+1 pH 9.0 AEROPHINE 40 g/t Dowfroth 210 30-20 g/t									
		WEIGHT	Cu		Au		S		CuK	SS	MUUF
			ASSAY	RECOV.	ASSAY	RECOV.	ASSAY	RECOV.			
%	%	%	g/t	%	%	%	%	%	%	%	
FEED	100.0	1.684	100.0	4.71	100.0	2.78	100.0	4.9	2.0	98.1	
PRECONC.	17.8	9.110	96.3	22.19	83.6	14.83	55.1	26.3	10.5	63.1	
PRETAIL.	82.2	0.075	3.7	0.93	16.2	0.16	4.9	0.2	0.2	99.6	
SCAV. CONC.	8.8	0.273	1.4	1.66	3.1	0.54	1.7	0.8	0.5	98.7	
TAILING	73.4	0.052	2.3	0.64	13.1	0.12	3.2	0.2	0.1	99.7	
1. CL. CONC.	6.3	23.786	65.0	49.31	65.9	34.52	79.0	69.7	20.3	10.5	
1. CL. TAIL.	11.5	1.070	7.3	7.33	17.9	3.66	16.1	3.1	5.3	91.7	
2. CL. CONC.	3.6	30.630	65.4	42.20	32.2	36.96	48.0	69.4	11.5	0.7	
2. CL. TAIL.	2.7	14.700	23.6	58.80	33.7	31.94	31.1	42.5	32.1	15.4	
TAILING:											
+149	0.0	0.000	0.0	0.00	0.0	0.00	0.0	0.00	0.00	100.0	
+105	2.3	0.045	2.3	2.05	5.7	0.23	3.1	0.14	0.34	99.5	
+ 74	6.8	0.034	4.9	1.66	13.9	0.13	7.5	0.10	0.29	99.6	
+ 37	23.4	0.028	13.9	1.58	45.0	0.11	14.9	0.08	0.15	99.3	
- 37	67.5	0.055	78.6	0.43	35.3	0.19	74.5	0.16	0.25	99.6	
	100.0	0.047	100.0	0.52	100.0	0.17	100.0	0.14	0.23	99.5	

BIDJOVAGGE ORE 99C *CAu*

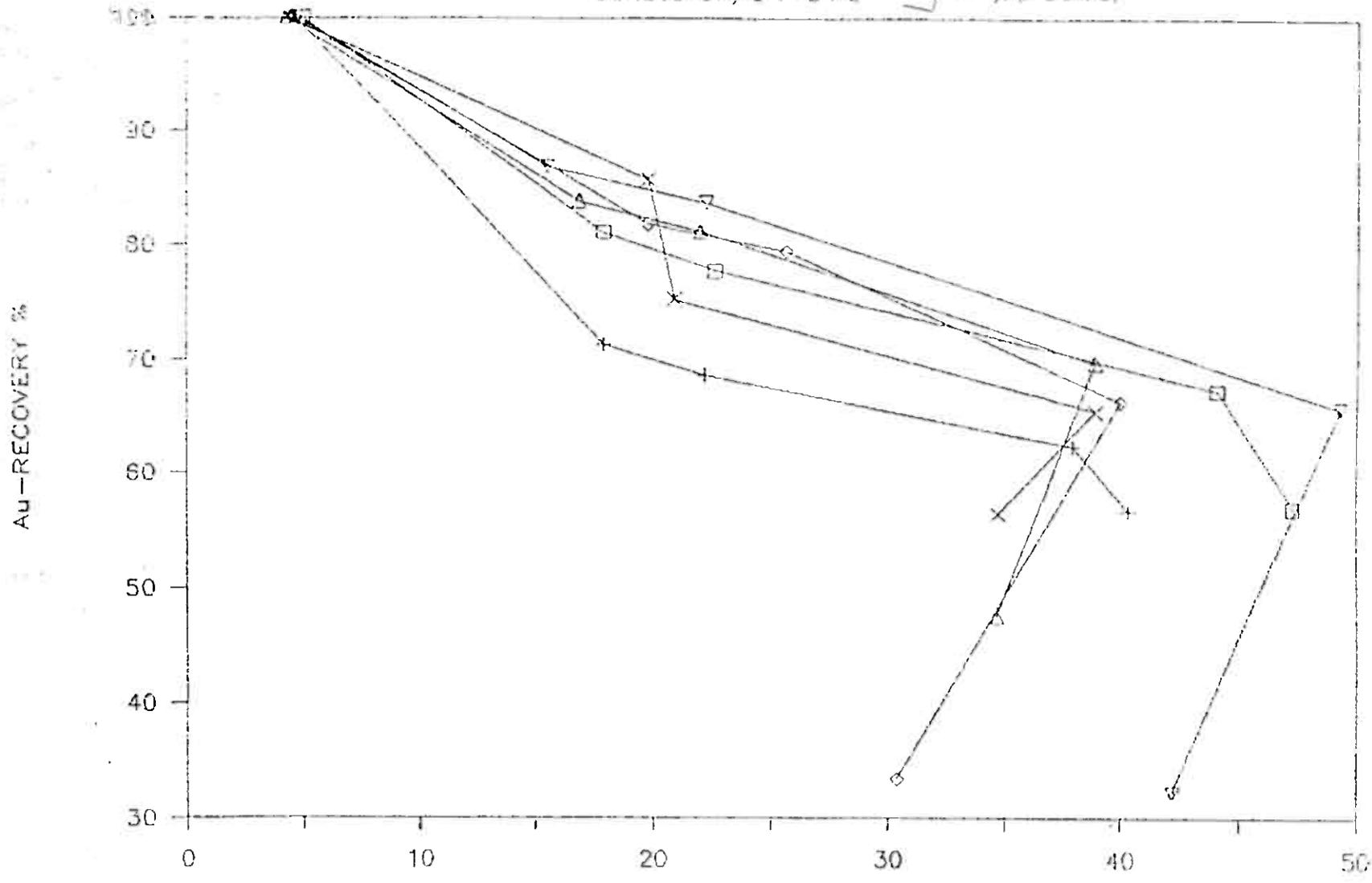
COLLECTOR/GRINDING



TEST	15	30	32	34	36	38
COLLECTOR	AEROPHINE	NaEx	NAX + AEROPH.	NAX	AEROPHINE	AEROPHINE
g/t	40	100	60 + 20	100	40	40
GRINDING (MIN)	26	26	26	26	20 + 20	40

BIDJOVAGGE ORE 10F+12J 1:1

COLLECTOR/GRINDING] - malms



TEST	□	16	+	31	◇	33	Δ	35	×	37	▽	39
COLLECTOR		AEROPHINE		NaEx		NAX + AEROPH.		NAX		AEROPHINE		AEROPHINE
g/t		40		100		60 + 20		100		40		40
GRINDING (MIN)		26		26		26		26		20 + 20		40