8/88

GEOLOGY AND GEOCHEMISTRY ON THE AXEL 4 AND 9 CLAIMS

AXELGOLD RANGE, NORTH-CENTRAL B.C.

LOG NO: 1030 RD.
ACTION:
FILE NO: 87-685-16508

SPECIFIC CLAIMS:	Axel 4 5659 Axel 9 8696
MINING DIVISION:	Omineca
NTS:	93N/13W
LATITUDE:	55° ~~57'~~ 56'48"
LONGITUDE:	125° 55'12"
OWNER:	Imperial Metals Corporation and Equinox Resources Ltd.
OPERATOR:	Imperial Metals Corporation
AUTHOR:	Alan B. Taylor
DATE:	October 1987

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,508

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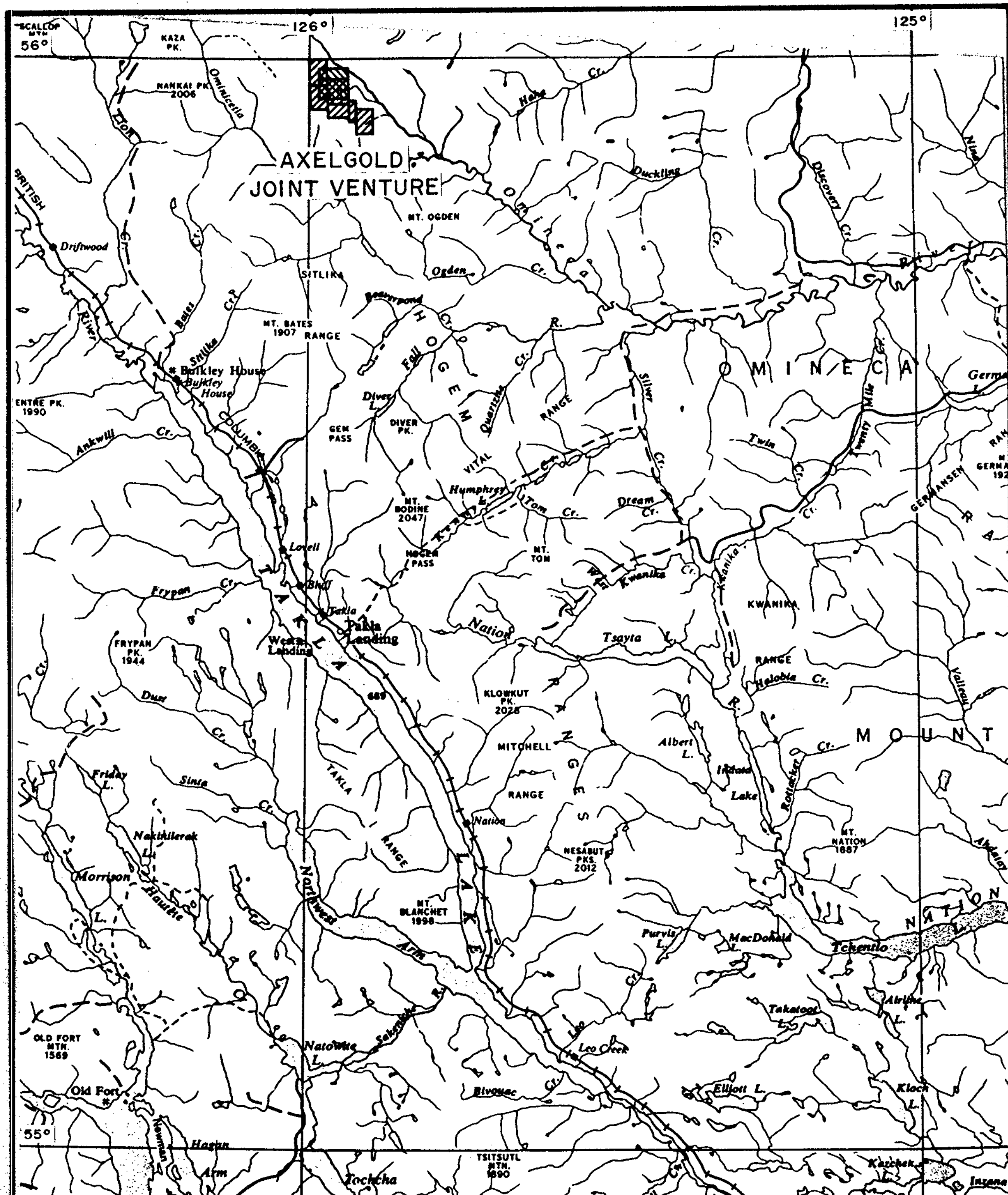
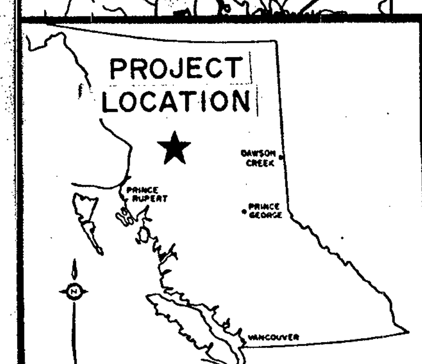
SUMMARY

The Axel 4 and 9 claims are underlain by a fault wedge of Takla metasediments and intrusives bordered by the Cache Creek Group to the southwest. The purpose of this program was to locate and sample any suspect intrusive geology that may be extensions of the syenite intrusive system found to the north. This syenitic system is highly anomalous in gold and base metals.

Suspect intrusive bodies on the claims occur strictly as dikes intruding the surrounding metasediments. Rock and soil samples were collected from the dikes of which one soil was very anomalous at 4575 ppb Au. This anomaly appears to be related to the dike contact and should be followed-up by further detailed sampling. Other more subtle gold anomalies were located and also require further follow-up to define the source of the anomalies.


126°
125°
56°
55°
KAZA PK.
NANKAI PK. 2006
Omineca
AXELGOLD JOINT VENTURE
MT. OGDEN
Duckling
Discovery Cr.
Ogden Cr.
Driftwood
BRITISH
SITLIKA
MT. BATES 1907 RANGE
Bates
Sitlika Cr.
Bulkley House
OMINECA
HOGEM
GEM PASS
DIVER PK.
Diver L.
Quartzite Cr.
RANGE
Silver Cr.
Twin Cr.
Ankwill Cr.
COLUMBIA
VITAL
Humphrey L.
MT. BODINE 2047
HOGEM PASS
Tom Cr.
Dream Cr.
MT. TOM
Kwanika
KWANIKA
Lovell
Frypan Cr.
Takla
Takla Landing
Wests Landing
FRYPAN PK. 1944
Nation
Tsayta L.
TAKLA
RANGE
Haloblia Cr.
KLOWKUT PK. 2028
Dust
MITCHELL
RANGE
RANGES
Albert L.
MOUNT
Friday L.
Sinta Cr.
Nakthlerak L.
Morrison L.
Hautete
Northwest Arm
MT. BLANCHET 1998
NESABUT PKS. 2012
MT. NATION 1887
Purvis L.
MacDonald L.
NATION
Tchentlo
Takatoot L.
Leo Creek
OLD FORT MTN. 1569
Old Fort
Natowite L.
Sakeniche R.
Bivouac Cr.
Elliott L.
Kloch L.
Hagan Arm
TSITSUTL MTN. 1890
Tochcha
Inzana



IMPERIAL METALS CORPORATION

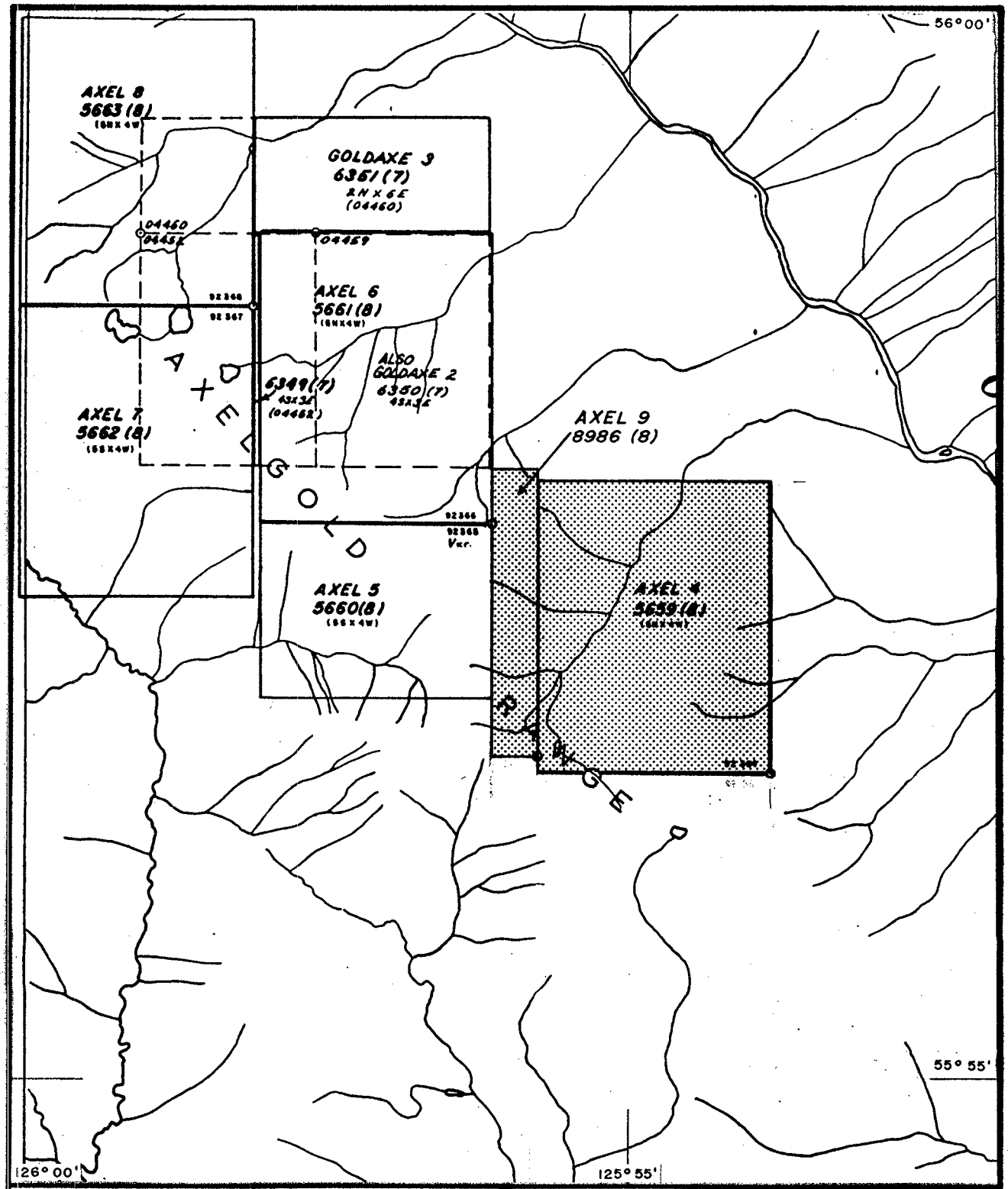
AXELGOLD

FIGURE I	MAP IF

LOCATION MAP

Km 10 0 10 20 Km

SCALE: 1: 600 000	GEOLOGIST: A.B. TAYLOR
DATE: OCTOBER 1987	DRAWN BY: S. HAWORTH



IMPERIAL METALS CORPORATION

AXELGOLD

FIGURE 2 — N.T.S. 93N/13W

CLAIM MAP

Km 1 0 1 2 Km

SCALE: 1:50 000	GEOLOGIST: A.B. TAYLOR
DATE: OCTOBER 1987	DRAWN BY: S. HAWORTH

1.1 General Geographic and Physiographic Position

The Axel 4 and 9 claims are situated in the southeastern portion of the Axelgold Range north central B.C. (Figure 1, 2). Topographically the area of the claims is very rugged with peaks up to 2000m and easterly draining valleys down to 900m at the Omineca River. The area above 1600m contains mostly alpine-type vegetation and scrub with spruce forest occurring below in the valleys.

Access to the area is by helicopter and the nearest road is at Mount Ogden, 10 km south of the property. The closest town is Takla Landing located 55km south of the property.

1.2 Property Definition

The Axel 9 claim was staked in July 1987 to tie in the southerly Axel 4 claim in with the main Axelgold claim group to the north. The Axel 4 and 9 claims have been grouped together and consist of the following:

Claim	Record No.	No. of Units
Axel 4	5659	20
Axel 9	8696	5

SUMMARY OF WORK COMPLETED

A total of 103 soil samples were collected and analysed by ICP methods (see Appendix 1) and gold was further analysed for by atomic absorption techniques to obtain accurate ppb levels. Soils were collected from the B horizon at approximately 15-20cm depth where possible and all sample locations were flagged. A total of 21 rocks were collected and similarly analysed by ICP and AA methods.

Further geological mapping at a 1:12500 scale was done in more detail than the previous report to delineate intrusive dikes within the fault wedge.

TECHNICAL DATA AND INTERPRETATION

The purpose of the 1987 program was to define and sample the southerly extensions of anomalous intrusive rocks found to the north. Intrusive rocks on the Axel 4 and 9 claims occur entirely in dike-like bodies within metasediments of the Takla group.

The results of two contour soil sample lines (16+50H, 17+50H) taken above previous 1986 soil lines shows moderate Au amomalies on the lower line with overall higher magnitude Au anomalies on the upper line, especially grouping around 17+50H 2+25N which analysed a high of 1390 ppb Au. The cause of this anomaly is thought to be an intrusive dike but follow-up work is required to pinpoint the reason for the anomaly. The geology on the ridge line to the north consists of variably carbonatized conglomerate intruded by variably ankertized syenitic dikes.

A ridge line traverse was completed on the Axel 4 claim to define the location and sample the intrusive dikes. Geology along this ridge line (see figure 3) is not well understood due to complex faulting and steep topography.

Sample AX-87-4-18SL is a soil sample taken from the contact area between a thick granitic dike and meta-shales and analysed 4575 ppb Au. Rock samples from the dike itself (19R, 20R) were slightly anomalous at 128 and 26 ppb Au. This may indicate a concentration of gold along the contact area and follow-up work is necessary to further define the extent and nature of the anomaly.

Other dikes sampled do not appear to be anomalous in gold. Lithologically the dikes appear to be similar to northerly dikes in that some exhibit ankeritized syenitic-type textures (19R, 20R). Although lithologic variations do exist these intrusives are most likely directly related to the syenite intrusive stock found to the north.

RECOMMENDATIONS

1. Follow-up work is required on AX-87-4-18SL to delineate the source of the 4575 ppb gold anomaly.

2. Follow-up detailed mapping and sampling of dikes on the ridge above and to the north of the two contour soil lines to define the source of gold anomalies in soils.

BIBLIOGRAPHY

Armstrong, J.E. 1949: Fort St. James Map Area, British Columbia Map 907A Geological Survey of Canada, Memoir 252.

Morton, J.W. 1985: A Reconnaissance Geochemical Follow-Up, Assessment Report submitted by Imperial Metals Corporation.

Page, J.W. and Culbert, R.R. 1984: Report on a Geochemical Survey of The Axel Property, Axelgold Range, Assessment Report submitted by Beaty Geological Ltd.

Paterson, I.A. 1974: Geology of the Cache Creek Group and Mesozoic rocks in the Northern end of the Stuart Lake Belt, Central, B.C., in Report of Activities, Geological Survey of Canada 74-1, Part B, p. 31-42.

Taylor, A.B. 1986: Geology of the Southern Axelgold Range Assessment Report submitted by Imperial Metals Corporation.

COST STATEMENT

Labour

A. Taylor July 25 - Aug. 11-12	3 @ 165/day	$ 495	
J. Walker July 25	1 @ 125/day	$ 125	
D. Johanneson Aug. 11-12	2 @ 95/day	$ 190	
		$ 810	
Room & Board - 6 Man days @ $40/day		$ 240	
	Total Labour:		$ 1,050

Transportation

Helicopter - 5.6 hrs @ $500 plus fuel and oil	$ 3,000	
Airfare (AT & DJ) one way Smithers to Vancouver	$ 387	
Company truck use	$ 200	
Total Transportation:		$ 3,587

Geochemical Analysis

103 soils samples @ $11.00	$ 1,133	
21 rocks @ $13.25	$ 278	
Shipping	$ 40	
Total Geochemical:		$ 1,451

Miscellaneous

Camp Supplies	$ 500	
Expediting Costs	$ 500	
Report writing, drafting and expense account	$ 2,000	
Total Miscellaneous:		$ 3,000
GRAND TOTAL:		**$ 9,088**

CERTIFICATE

I, Alan B. Taylor, geologist, residing at #15 - 8720 Maplegrove Crescent in the Municipality of Burnaby, Province of British Columbia, hereby certify that:

1. I graduated from Brock University in 1979 with an Honours Bachelor of Science in Geology.

2. I graduated from the University of Western Ontario in 1984 with a Master of Science in Geology.

3. I have worked for various mining companies and government geological surveys since 1977.

4. I am presently a permanent staff geologist with Imperial Metals Corporation of #800 - 601 West Hastings Street, in the City of Vancouver, Province of British Columbia.

5. The work described in this report on the Axel 4 and 9 claims was undertaken under my direct supervision.

DATED at the City of Vancouver this 16 day of October, 1987.

Alan B. Taylor

ALAN B. TAYLOR, Geologist

APPENDIX I

GEOCHEMICAL DATA

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-7 SOIL P8-9 ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 20 1987 DATE REPORT MAILED: Aug 29/87 ASSAYER. D. Toye .DEAN TOYE, CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT-4120 File # 87-3470 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
AU 16+50H 13+00N	1	73	15	130	.8	103	21	1808	5.66	29	5	ND	2	16	1	24	5	51	.05	.113	9	132	.45	161	.01	2	1.38	.01	.09	1	2
AU 16+50H 12+75N	2	41	15	68	1.5	43	6	277	2.45	25	5	ND	1	10	1	30	2	41	.02	.083	9	90	.33	67	.01	4	1.55	.01	.05	1	3
AU 16+50H 12+50N	1	58	18	104	.3	178	13	468	6.43	53	5	ND	1	9	1	18	2	98	.03	.128	7	232	1.83	96	.01	2	2.26	.01	.05	1	4
AU 16+50H 12+25N	2	58	18	113	.2	111	14	1081	4.70	56	5	ND	1	11	1	40	2	72	.02	.173	8	158	.98	105	.01	2	2.04	.01	.05	1	9
AU 16+50H 12+00N	4	48	15	111	1.4	85	11	905	3.14	48	5	ND	1	13	1	48	2	54	.02	.143	8	134	.54	128	.01	8	1.44	.01	.05	2	3
AU 16+50H 11+75N	3	56	16	133	3.2	113	18	1179	3.94	89	5	ND	1	16	2	169	2	54	.04	.121	9	145	.66	93	.01	2	1.58	.01	.05	1	14
AU 16+50H 11+50N	1	44	15	128	.8	172	12	528	4.10	68	5	ND	1	12	1	53	2	83	.03	.076	9	271	1.65	208	.02	2	1.90	.01	.05	2	15
AU 16+50H 11+25N	2	46	14	106	.8	141	10	503	3.73	73	5	ND	1	13	1	147	2	59	.01	.105	8	240	.86	91	.01	16	1.43	.01	.04	1	4
AU 16+50H 11+00N	5	56	14	135	.7	115	10	354	3.45	37	5	ND	1	19	1	44	2	56	.08	.129	10	181	1.02	113	.01	2	1.19	.01	.08	1	3
AU 16+50H 10+75N	1	49	17	131	.5	185	19	1918	5.03	70	5	ND	1	14	1	35	4	84	.08	.114	7	326	1.88	110	.02	2	1.99	.01	.05	1	4
AU 16+50H 10+50N	2	61	11	123	1.6	141	12	443	4.94	54	5	ND	1	11	1	18	3	81	.01	.102	8	216	1.61	59	.02	2	2.46	.01	.05	1	4
AU 16+50H 10+25N	1	31	15	79	.8	110	9	440	3.02	40	5	ND	1	12	1	14	2	89	.01	.068	9	263	1.83	66	.02	3	1.99	.01	.05	1	1
AU 16+50H 10+00N	1	39	11	87	.5	141	11	591	3.55	53	5	ND	1	11	1	16	2	93	.02	.074	7	263	1.93	67	.03	7	2.10	.01	.05	1	3
AU 16+50H 9+75N	1	54	15	85	.2	147	16	636	4.24	56	5	ND	1	15	1	2	2	106	.01	.082	9	255	1.86	49	.02	2	2.18	.01	.06	1	10
AU 16+50H 9+50N	1	66	14	99	.8	159	16	900	4.23	51	5	ND	1	9	1	5	2	110	.01	.087	7	268	1.99	54	.02	2	2.45	.01	.04	1	10
AU 16+50H 9+25N	1	64	11	102	.6	180	19	826	5.18	78	5	ND	1	16	1	5	2	111	.01	.094	8	218	1.47	59	.02	12	1.62	.01	.07	1	1
AU 16+50H 9+00N	1	52	13	102	.2	141	15	1172	4.57	98	5	ND	1	17	1	10	2	84	.01	.130	9	188	.87	115	.01	2	1.75	.01	.07	1	13
AU 16+50H 8+75N	1	60	15	106	.1	148	24	4147	4.19	121	5	ND	1	25	1	25	4	92	.02	.098	11	120	.33	231	.01	2	.85	.01	.08	1	9
AU 16+50H 8+50N	1	70	10	122	.7	240	19	975	6.87	364	5	ND	2	42	1	46	2	106	.02	.094	9	147	.22	152	.01	3	1.14	.01	.09	1	6
AU 16+50H 8+25N	1	62	15	122	.1	190	37	5702	5.31	256	5	ND	1	36	1	36	2	76	.01	.098	12	115	.28	250	.01	17	.99	.01	.09	1	6
AU 16+50H 8+00N	1	88	22	144	.1	311	46	3037	7.17	255	5	ND	1	78	1	43	2	66	.05	.190	8	196	.51	239	.01	2	1.05	.01	.09	1	4
AU 16+50H 7+75N	2	68	16	121	.2	232	39	2619	5.67	63	5	ND	2	20	1	7	2	101	.01	.169	8	333	1.41	81	.01	13	2.19	.01	.05	1	4
AU 16+50H 7+50N	2	111	25	135	.1	234	34	1820	6.69	274	5	ND	3	59	1	142	2	59	.02	.104	22	104	.56	99	.02	2	1.28	.01	.08	1	70
AU 16+50H 7+25N	1	95	21	122	.2	196	29	1724	5.68	235	5	ND	3	46	1	119	2	52	.01	.099	18	91	.45	97	.01	13	1.12	.01	.06	1	49
AU 16+50H 7+00N	2	98	22	148	.1	229	46	3300	7.24	105	5	ND	1	29	1	16	2	119	.04	.185	10	226	1.23	166	.01	3	2.05	.01	.07	1	29
AU 16+50H 6+75N	2	67	12	103	.5	138	15	870	6.28	337	5	ND	1	27	1	24	2	81	.01	.109	9	93	.24	84	.01	2	1.28	.01	.07	1	47
AU 16+50H 6+50N	1	121	72	187	.4	89	37	3355	9.69	282	5	ND	11	46	1	55	2	54	.06	.303	68	43	.16	97	.01	4	.96	.01	.04	1	41
AU 16+50H 6+25N	2	126	21	115	.6	162	27	1147	6.76	216	5	ND	2	22	1	48	2	42	.01	.129	11	48	.10	71	.01	2	1.18	.01	.05	2	14
AU 16+50H 6+00N	1	73	20	107	.3	135	17	958	6.08	121	5	ND	1	27	1	10	2	101	.01	.112	9	114	.85	99	.02	6	1.75	.01	.06	1	12
AU 16+50H 5+75N	1	61	18	103	.1	92	19	2710	5.63	109	5	ND	1	23	1	9	2	86	.01	.119	11	117	.57	122	.02	2	1.98	.01	.07	1	7
AU 16+50H 5+50N	1	49	17	70	.1	75	14	1300	3.79	79	5	ND	1	24	1	6	2	75	.01	.098	13	120	.54	88	.01	16	1.78	.01	.07	1	6
AU 16+50H 5+25N	1	42	13	68	.2	67	8	328	3.52	56	5	ND	1	13	1	3	2	77	.01	.067	11	136	.55	90	.02	10	2.17	.01	.05	1	9
AU 16+50H 5+00N	11	135	22	172	.7	203	25	990	8.46	358	5	ND	2	60	1	64	2	61	.01	.115	16	91	.27	125	.01	7	1.06	.01	.07	1	80
AU 16+50H 4+75N	2	63	14	69	.3	80	10	306	3.82	131	5	ND	2	24	1	23	2	54	.01	.067	19	48	.10	91	.01	2	1.02	.01	.07	1	24
AU 16+50H 4+50N	3	77	26	142	.1	116	40	4933	5.98	170	5	ND	2	31	1	17	2	53	.01	.166	15	61	.26	230	.01	10	1.54	.01	.09	1	9
AU 16+50H 4+25N	3	75	27	133	.4	108	21	2003	7.85	219	5	ND	1	20	1	15	2	66	.02	.147	15	71	.29	152	.01	3	1.22	.01	.09	1	12
AU 16+50H 4+00N	2	65	21	128	.2	111	21	2208	5.12	181	5	ND	2	26	1	13	2	65	.05	.126	19	80	.42	165	.01	14	1.21	.01	.14	1	17
STD C/AU-S	16	60	40	131	6.9	68	27	1035	3.88	40	25	7	38	50	18	15	20	58	.45	.085	37	60	.82	177	.08	33	1.69	.06	.13	11	53

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
AU 16+50H 3+75N	3	58	17	84	1.0	96	12	871	4.84	163	5	ND	2	79	1	16	2	76	.14	.086	20	89	.32	107	.05	2	1.30	.01	.11	1	11
AU 16+50H 3+50N	4	140	46	170	1.9	182	33	2049	7.67	363	5	ND	4	55	1	51	2	55	.04	.131	21	95	.40	191	.02	5	1.88	.01	.09	1	108
AU 16+50H 3+25N	4	62	19	121	1.0	134	26	2551	5.11	119	5	ND	2	30	1	9	3	74	.09	.134	12	129	.55	284	.02	2	1.55	.01	.10	1	32
AU 16+50H 3+00N	6	69	22	147	.8	171	27	2120	6.21	139	5	ND	1	38	1	10	2	81	.15	.108	14	168	.70	265	.03	2	1.91	.01	.12	1	6
AU 16+50H 2+75N	5	72	20	129	.4	131	29	3168	6.64	93	5	ND	2	27	1	12	2	68	.11	.142	11	132	.51	164	.02	2	2.32	.01	.11	1	1
AU 16+50H 2+50N	5	59	33	166	.4	56	26	1717	6.46	27	5	ND	5	229	1	2	2	138	.75	.203	43	110	2.20	190	.19	13	3.16	.02	.42	1	1
AU 16+50H 2+25N	4	65	14	123	.3	194	27	2653	7.17	162	5	ND	1	14	1	14	3	57	.05	.162	10	138	.32	151	.01	2	1.40	.01	.08	1	2
AU 16+50H 2+00N	2	63	16	104	.4	170	19	1401	5.80	45	5	ND	2	7	1	5	4	91	.03	.072	9	253	1.43	83	.05	2	3.21	.01	.07	2	1
AU 16+50H 1+75N	2	68	11	124	.7	156	16	923	6.54	67	5	ND	2	11	1	4	2	92	.06	.085	11	219	1.04	151	.04	4	2.83	.01	.11	1	1
AU 16+50H 1+50N	5	37	11	115	.6	964	91	1718	9.30	57	5	ND	2	51	1	10	3	76	.32	.104	5	1455	8.64	71	.03	17	1.17	.01	.04	1	1
AU 16+50H 1+25N	2	30	9	76	.3	1442	51	544	6.47	11	5	ND	1	21	1	12	2	47	.15	.054	4	1187	15.52	41	.03	32	1.04	.01	.02	1	1
AU 16+50H 1+00N	3	35	17	95	.4	392	25	641	6.02	20	5	ND	1	12	1	4	2	80	.08	.079	8	703	4.48	151	.04	6	1.98	.01	.05	1	8
AU 16+50H 0+75N	3	38	14	99	.3	279	20	640	6.50	23	5	ND	1	10	1	2	2	85	.06	.089	8	562	2.75	100	.04	2	2.56	.01	.07	1	1
AU 16+50H 0+50N	1	37	16	90	.4	167	20	1141	5.89	23	5	ND	2	10	1	2	2	91	.05	.106	11	377	1.29	90	.04	7	1.86	.01	.08	1	1
AU 16+50H 0+25N	1	14	12	44	.6	51	5	230	1.89	17	5	ND	1	12	1	2	2	74	.04	.043	14	189	.62	134	.04	2	2.00	.01	.07	1	7
AU 16+50H 0+00N	3	55	13	110	.3	222	25	1291	8.03	33	5	ND	1	8	1	4	3	115	.06	.096	9	415	1.72	79	.04	2	3.15	.01	.07	1	1
AU 17+50H 11+00N	4	89	12	179	1.2	35	11	424	5.65	21	5	ND	3	12	1	5	3	35	.06	.118	11	39	.74	67	.01	2	2.87	.01	.03	1	11
AU 17+50H 10+75N	6	97	26	168	.9	55	13	687	7.01	47	5	ND	1	18	1	34	2	47	.05	.215	9	67	.47	100	.01	3	2.06	.01	.05	1	4
AU 17+50H 10+50N	6	94	21	164	1.1	55	12	954	6.77	55	5	ND	2	16	1	44	2	42	.03	.233	8	73	.46	72	.01	2	2.46	.01	.06	1	5
AU 17+50H 10+25N	9	103	23	215	1.1	67	14	1994	6.69	45	5	ND	2	23	1	68	4	53	.07	.244	9	82	.53	121	.01	2	2.39	.01	.06	1	1
AU 17+50H 10+00N	10	110	22	223	1.4	58	16	995	6.19	29	5	ND	2	20	1	47	2	39	.03	.146	11	68	.41	95	.01	2	2.80	.01	.04	1	1
AU 17+50H 9+75N	9	88	18	192	1.5	71	13	1105	5.19	45	5	ND	2	23	1	143	3	47	.06	.214	11	81	.34	115	.01	3	1.06	.01	.06	1	5
AU 17+50H 9+50N	6	33	21	95	.8	80	7	1066	2.25	35	5	ND	1	21	1	260	4	42	.10	.133	10	164	.56	124	.01	5	1.10	.01	.07	1	4
AU 17+50H 9+25N	7	48	21	109	1.1	136	14	1744	3.55	54	5	ND	2	22	1	398	2	61	.02	.166	10	289	1.10	163	.01	3	1.69	.01	.06	1	1
STD C/AU-S	19	62	44	132	6.9	69	29	1048	4.10	41	18	7	37	51	16	18	22	61	.47	.089	38	63	.85	178	.09	34	1.77	.06	.13	15	52

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
AU 17+50M 0+00N	3	87	14	104	.1	253	28	1673	5.49	136	5	ND	4	21	1	5	4	50	.05	.080	14	103	.71	115	.02	2	1.25	.01	.15	1	13
AU 17+50M 9+00N	6	49	25	123	2.0	225	18	933	4.44	86	5	ND	1	26	1	635	2	79	.05	.148	10	430	1.81	137	.02	2	1.90	.01	.06	1	17
AU 17+50M 8+75N	3	33	26	92	.9	205	11	358	3.28	58	5	ND	2	24	1	474	2	76	.06	.091	11	464	1.90	109	.02	3	1.96	.01	.05	1	16
AU 17+50M 8+50N	1	53	16	122	.6	382	18	280	5.44	41	5	ND	1	7	1	77	2	124	.03	.050	8	595	4.20	41	.05	5	3.29	.01	.04	1	5
AU 17+50M 8+25N	1	43	15	101	.2	401	22	711	4.73	16	5	ND	1	12	1	25	2	115	.10	.041	7	506	5.60	45	.16	4	3.36	.01	.05	1	2
AU 17+50M 8+00N	2	55	22	113	.7	376	29	1949	5.80	101	5	ND	1	32	1	31	2	145	.15	.073	12	592	3.77	121	.10	8	2.72	.01	.06	1	15
AU 17+50M 7+75N	1	51	15	93	1.0	246	15	311	4.38	23	5	ND	1	10	1	8	2	122	.08	.035	9	408	4.13	59	.20	2	3.07	.01	.06	1	8
AU 17+50M 7+50N	1	68	14	118	.6	268	18	935	5.26	35	5	ND	1	13	1	17	2	137	.08	.054	8	335	3.47	86	.23	3	3.11	.01	.10	1	6
AU 17+50M 7+25N	3	95	18	132	.2	264	29	1506	6.17	93	5	ND	2	24	1	18	2	141	.04	.060	11	298	2.82	78	.11	8	2.75	.01	.14	1	9
AU 17+50M 7+00N	3	100	20	117	.1	268	26	1575	5.51	91	5	ND	3	40	1	8	2	87	.05	.061	13	190	1.78	58	.03	2	1.77	.01	.10	1	16
AU 17+50M 6+75N	1	94	15	110	.1	248	26	1240	5.48	119	5	ND	3	38	1	8	2	75	.04	.053	11	159	1.34	74	.04	14	1.48	.01	.16	1	19
AU 17+50M 6+50N	4	117	15	133	.1	333	37	1513	6.36	126	5	ND	3	37	1	11	2	104	.05	.060	13	262	2.04	95	.05	8	2.24	.01	.14	1	13
AU 17+50M 6+25N	2	112	14	129	.1	295	34	1647	6.62	94	5	ND	2	35	1	13	2	128	.06	.074	14	283	1.97	87	.06	4	2.65	.01	.15	1	9
AU 17+50M 6+00N	2	66	19	105	.1	172	16	1005	4.68	114	5	ND	2	30	1	18	2	118	.03	.135	13	218	.66	152	.01	3	1.43	.01	.11	1	6
AU 17+50M 5+75N	3	54	17	106	.2	140	15	1191	4.57	114	5	ND	1	38	1	18	2	100	.09	.146	13	190	.69	192	.01	2	1.45	.01	.12	1	8
AU 17+50M 5+50N	2	76	23	146	.2	180	37	5052	5.88	182	5	ND	2	35	1	29	2	82	.06	.198	11	159	.49	362	.01	2	1.34	.01	.14	1	14
AU 17+50M 5+25N	2	49	13	101	.1	116	19	2586	4.27	166	5	ND	2	44	1	21	2	80	.04	.159	14	126	.34	344	.01	4	1.21	.01	.13	1	13
AU 17+50M 5+00N	1	75	20	136	.1	159	20	1532	6.80	230	5	ND	3	46	1	32	2	75	.09	.140	13	122	.40	169	.01	2	1.22	.01	.12	1	15
AU 17+50M 4+75N	1	85	27	128	.1	158	31	2949	6.61	222	5	ND	2	59	2	37	2	79	.02	.161	19	117	.54	147	.02	2	1.57	.01	.11	1	27
AU 17+50M 4+50N	3	79	21	141	.1	153	25	2570	6.44	277	5	ND	1	79	1	51	2	74	.07	.214	17	95	.24	271	.01	2	.89	.01	.12	1	21
AU 17+50M 4+25N	3	121	28	144	.2	250	38	1990	7.33	351	5	ND	5	107	1	148	2	59	.04	.106	27	97	.42	161	.02	5	1.21	.01	.09	1	93
AU 17+50M 4+00N	2	116	20	144	.2	288	42	2754	7.10	252	5	ND	3	80	1	46	2	66	.06	.127	16	139	.65	200	.02	2	1.71	.01	.14	1	41
AU 17+50M 3+75N	1	80	22	118	.2	193	30	2675	6.04	190	5	ND	2	64	1	25	2	78	.02	.139	14	141	.60	174	.02	5	1.62	.01	.12	1	31
AU 17+50M 3+50N	1	121	24	134	.4	332	37	1757	6.94	255	5	ND	4	63	1	34	2	71	.02	.089	16	154	.95	143	.03	3	1.56	.01	.13	1	43
AU 17+50M 3+25N	4	129	27	140	1.1	231	35	1738	7.06	194	5	ND	3	104	1	21	2	70	.12	.132	22	110	.67	178	.02	2	1.76	.01	.11	1	84
AU 17+50M 3+00N	1	136	23	148	1.5	303	38	1931	7.75	637	5	ND	3	81	1	42	2	73	.08	.107	21	94	.55	148	.03	4	1.61	.01	.11	1	167
AU 17+50M 2+75N	1	94	29	150	.1	125	25	3114	6.15	166	5	ND	2	57	1	20	2	79	.04	.196	22	92	.52	157	.02	2	1.84	.01	.14	1	29
AU 17+50M 2+50N	3	86	22	124	.3	89	13	876	5.72	160	5	ND	3	49	1	18	2	84	.06	.130	22	65	.37	111	.07	2	1.37	.01	.12	1	34
AU 17+50M 2+25N	5	142	36	153	.6	179	35	2176	6.87	310	5	ND	6	110	1	43	2	62	.08	.122	34	94	.67	201	.04	12	1.50	.01	.13	1	1390
AU 17+50M 2+00N	2	122	26	135	.3	145	31	1588	6.40	302	5	ND	4	126	1	23	2	77	.20	.136	36	88	.85	226	.06	5	1.54	.01	.20	2	111
AU 17+50M 1+75N	2	109	27	125	.3	142	27	1750	5.99	93	5	ND	5	121	1	16	2	90	.26	.160	31	100	1.01	173	.10	2	1.83	.01	.19	1	34
AU 17+50M 1+50N	1	127	15	120	3.4	147	19	908	7.38	361	5	ND	1	33	1	78	3	42	.02	.167	10	54	.15	82	.01	2	1.08	.01	.04	1	45
AU 17+50M 1+25N	6	89	23	126	.4	162	20	1295	8.07	230	5	ND	1	45	1	36	2	68	.03	.108	13	87	.26	135	.04	4	1.65	.01	.09	1	27
AU 17+50M 1+00N	3	111	31	142	.1	186	43	3957	8.07	216	5	ND	1	43	2	21	2	109	.11	.200	14	144	.47	267	.01	3	1.76	.01	.09	1	88
AU 17+50M 0+75N	1	67	22	133	.2	29	23	833	5.94	16	5	ND	10	345	1	2	2	153	1.67	.342	58	72	2.63	89	.33	2	2.57	.02	.99	1	15
AU 17+50M 0+50N	2	53	11	94	.2	82	10	649	3.30	143	5	ND	2	41	1	13	2	44	.07	.146	27	43	.10	144	.01	2	.65	.01	.10	1	33
AU 17+50M 0+25N	3	67	33	112	.1	126	21	2212	5.96	622	5	ND	2	22	1	30	2	50	.04	.151	21	99	.25	150	.02	3	1.72	.01	.08	1	295
STD C/AU-S	19	63	42	132	7.4	72	29	1057	4.19	38	15	8	40	52	19	18	20	61	.49	.093	39	63	.87	180	.09	34	1.82	.06	.13	12	49

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
AI-87-4-1R	1	8	2	13	.1	12	1	77	1.02	3	5	ND	2	28	1	2	2	7	.03	.004	5	9	.32	100	.01	8	.35	.01	.04	1	2
AI-87-4-2R	2	43	10	93	.1	31	22	726	6.95	5	5	ND	2	76	1	2	2	196	4.29	.028	2	48	2.22	43	.45	7	4.46	.03	.02	1	1
AI-87-4-5R	1	67	40	80	.1	17	11	619	3.19	9	5	ND	21	280	1	2	2	85	1.75	.112	50	35	.86	351	.14	2	.99	.06	.47	1	1
AI-87-4-6R	1	22	25	64	.1	13	8	416	2.71	4	7	ND	21	164	1	2	2	62	.76	.114	39	20	.78	545	.19	2	.85	.08	.35	1	1
AI-87-4-7R	1	13	46	69	.1	23	6	705	2.52	9	25	ND	21	2307	1	2	3	44	1.93	.067	38	27	.45	145	.07	5	.53	.09	.23	1	2
AI-87-4-8R	1	56	11	55	.2	69	18	678	4.06	18	5	ND	4	626	1	5	2	87	7.41	.180	17	270	3.93	308	.09	2	1.90	.01	.43	1	3
AI-87-4-9R	2	17	86	69	.3	22	5	633	2.39	19	6	ND	15	642	1	2	2	8	2.29	.046	28	7	.34	76	.01	9	.18	.05	.07	1	17
AI-87-4-11R	1	8	2	12	.1	10	1	157	.62	11	5	ND	1	960	1	10	2	2	5.57	.010	2	6	.08	14	.01	13	.04	.01	.02	1	2
AI-87-4-12R	2	7	2	80	.1	25	8	256	1.46	15	5	ND	2	404	1	10	2	8	2.82	.077	6	19	.35	32	.01	2	.08	.01	.05	1	4
AI-87-4-13R	1	6	2	19	.1	14	5	295	1.58	13	5	ND	2	1148	1	4	2	6	2.97	.051	4	20	1.01	21	.01	3	.06	.01	.03	1	1
AI-87-4-14R	3	79	4	66	.1	66	25	956	4.70	48	8	ND	4	2464	1	22	2	44	10.81	.278	21	124	3.48	183	.02	5	.44	.03	.23	3	5
AI-87-4-16R	4	73	20	72	.1	7	9	766	4.15	52	5	ND	14	775	1	2	2	54	4.85	.130	33	15	1.41	100	.02	10	.36	.05	.11	1	20
AI-87-4-17R	1	11	51	70	.1	4	3	519	1.77	41	5	ND	4	367	1	3	2	10	2.70	.216	13	8	.21	24	.01	13	.07	.04	.02	1	4
AI-87-4-19R	1	6	15	13	.1	8	2	59	.84	100	5	ND	12	65	1	4	2	5	.05	.015	18	8	.02	49	.01	4	.13	.04	.06	1	128
AI-87-4-20R	1	8	24	32	.1	12	2	206	.99	91	6	ND	10	89	1	4	3	4	.07	.022	17	7	.02	82	.01	14	.18	.07	.09	1	36
AI-87-4-21R	1	5	4	11	.1	3	2	209	1.03	46	5	ND	1	55	1	3	2	2	.75	.031	2	3	.02	33	.01	5	.13	.03	.03	1	12
AI-87-4-22R	1	25	5	79	.2	9	8	562	3.49	27	5	ND	2	98	1	17	2	9	2.22	.059	6	9	.67	83	.01	4	.41	.09	.07	1	2
AI-87-4-23R	10	51	4	86	.1	16	15	706	5.24	13	5	ND	2	66	1	2	2	72	3.34	.063	4	23	1.63	59	.18	5	2.46	.04	.10	1	1
AU 200N 475ER	1	36	29	13	.1	10	10	23	3.56	16	5	ND	20	31	2	3	2	5	.05	.073	45	4	.04	38	.01	4	.29	.04	.17	1	8
AU 1650S 650WR	1	5	10	9	.1	314	28	1565	2.54	2	5	ND	1	2	1	5	2	7	.04	.005	2	347	18.77	3	.01	6	.19	.01	.01	1	1
AU 1650S 650WR A	1	2	5	6	.1	285	27	1130	2.32	2	5	ND	1	1	1	7	2	7	.01	.003	2	269	17.51	4	.01	6	.16	.01	.01	2	2
STD C/AU-R	19	59	38	133	7.0	68	27	1038	3.89	43	21	7	39	49	18	17	22	57	.45	.088	37	58	.89	173	.08	36	1.85	.06	.12	13	510
AI 1600 6+50E-R	4	110	16	78	.8	28	17	791	6.07	43	5	ND	20	537	1	62	2	47	3.76	.254	54	29	2.65	107	.01	16	.43	.02	.26	1	11
AI 1600 7+00E-R	13	32	41	42	2.5	208	11	126	3.25	744	5	ND	9	208	1	56	2	25	.22	.024	15	119	.15	105	.01	3	.26	.07	.19	1	620
AI 1700 7+00E-R	1	4	3	3	.1	88	5	181	.73	6	5	ND	1	4	1	2	3	8	.02	.005	2	68	.61	7	.01	2	.36	.01	.01	2	1
STD C/AU-R	19	61	41	131	7.1	68	28	1053	4.10	44	24	7	39	51	18	18	19	59	.47	.088	38	63	.86	180	.08	31	1.79	.06	.14	13	490

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
AI-87-4-3SL	6	73	18	164	.3	138	26	1018	6.49	68	5	ND	11	53	1	5	2	90	.53	.110	41	106	1.86	165	.18	2	2.18	.01	.12	1	43
AI-87-4-4SL	9	112	83	265	.6	102	34	2305	10.81	96	13	ND	32	107	1	42	7	158	.68	.187	139	85	1.51	490	.23	2	2.20	.01	.28	1	73
AI-87-4-10SL	5	48	63	152	.3	181	35	1862	5.17	133	6	ND	16	108	1	28	2	25	.50	.086	33	53	.51	134	.01	5	.80	.01	.08	1	80
AI-87-4-15SL	19	99	46	221	.8	146	63	1408	18.90	159	9	2	9	1014	1	114	6	59	4.19	.357	24	146	1.03	134	.01	6	.32	.01	.17	2	172
AI-87-4-16SL	17	165	88	279	2.4	128	52	3239	14.77	2837	6	5	51	201	1	161	10	154	.70	.379	124	94	1.03	120	.02	2	.88	.01	.08	1	4575
AI SPRING	3	52	13	171	.8	19	8	3438	40.36	39	5	ND	5	228	4	5	2	6	.63	.024	3	9	.18	197	.01	4	.26	.01	.03	1	70