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99_4386

NEWNHAM EXPLORATION & MINING SERVICES

EL 28/88 - TRIAL HARBOUR AREA

ANNUAL REPORT

Prepared For:

Allegiance Mining NL
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99_4386

Annual Report - Trial Harbour Area - EL 28/88
Allegiance Mining NL*; Newnham Exploration & Mining
Newnham, L.A.
EL28/88

615002

CONTENTS

1. INTRODUCTION

EL 28/88 of 29 square kilometres to the west of Zeehan is subject to a joint venture agreement between Allegiance Mining NL and Rio Tinto Exploration Pty Limited.

Allegiance is the operator and is incurring all expenditure.

Substantial exploration programs have highlighted the potential of the area for metasomatic nickel sulfide deposits, sediment hosted zinc deposits and base metal skarn deposits.

Exploration to date has focused on the Avebury prospect where drilling has located a substantial occurrence of nickel sulfides, and Stonehenge where drilling has intersected significant zinc in a sedimentary host.

Major exploration programs are planned for this licence in the coming year.

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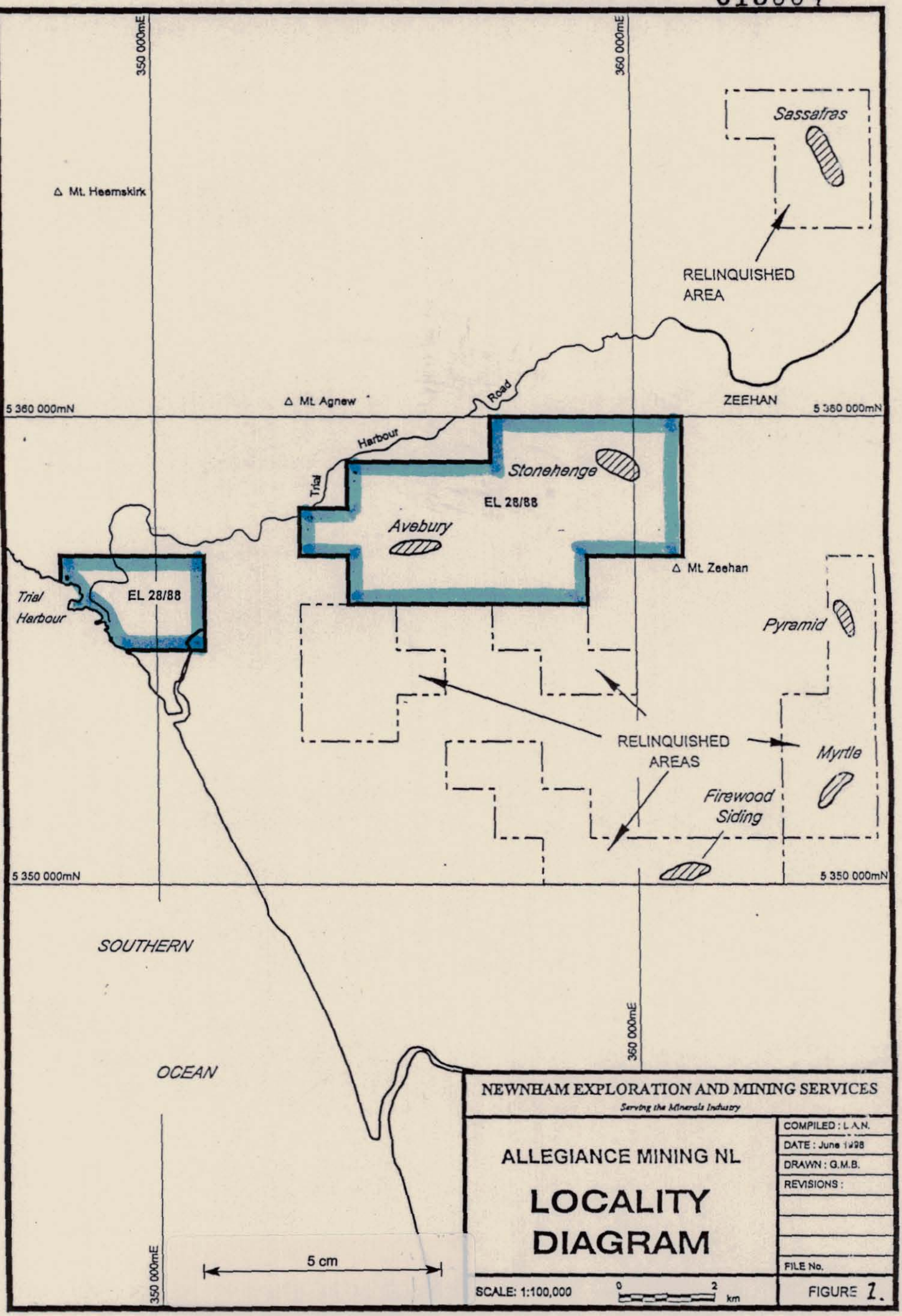
350 000mE
360 000mE
Sassafras
Mt. Heemskirk
RELINQUISHED AREA
5 360 000mN
Mt Agnew
Road
ZEEHAN
Harbour
Trial
Stonehenge
EL 28/88
Avebury
Mt Zeehan
Trial Harbour
EL 28/88
Pyramid
RELINQUISHED AREAS
Myrtle
Firewood Siding
5 350 000mN
SOUTHERN
OCEAN
5 cm
NEWNHAM EXPLORATION AND MINING SERVICES
Serving the Minerals Industry
ALLEGIANCE MINING NL
LOCALITY DIAGRAM
COMPILED : L.A.N.
DATE : June 1998
DRAWN : G.M.B.
REVISIONS :
FILE No.
SCALE: 1:100,000
0 2 km
FIGURE 1.

2. WORK COMPLETED DURING YEAR

The following work was completed in the 12-month period to end September 1999:

2.1 Avebury Project:

- a two kilometre access road was developed from the Trial Harbour Road to the project area
- four cored drill holes, plus the extension of a previous hole, were completed for a total length of 1,466 m
- geochemical soil sampling was completed over the drilled area
- a gradient array IP survey and an EM survey were completed over the drilled area
- a down-hole EM survey was completed on holes drilled during the year
- surveying of all access roads and drill collars was completed

Results of the drilling program were presented in a report titled:

> *"Diamond Drilling on the Avebury Grid EL 28/88 by Allegiance Mining NL June 1999"* prepared by Michael V McKeown (TCR 99-436A)

A copy of this report is attached.

Results of the surface and down-hole EM surveys were presented in a report titled:

> *"Report for Allegiance Mining NL Avebury Prospect Zeehan, Tasmania. Results of Surface and Borehole EM Survey, April 1999"* prepared by Flagstaff GeoConsultants (TCR 99-436B)

A copy of this report is attached.

Results of the soil geochemical survey are attached as Appendix 1, and data is presented as Maps 3 (a) and 3 (b).

Results of the IP survey are presented as Maps 4 (a), 4 (b) and 4 (c).

Anomalies are summarised on the geological map attached as Map 2.

2.2 Stonehenge Project:

- a two-hole drilling program was planned and designed
- permitting and tendering for this drilling were completed
- drilling of the first hole commenced late in the year and was in progress at year end

3. WORK PROPOSED FOR COMING YEAR

The following work programs, estimated to cost $500,000, are planned for the coming year (see Fig 5):

3.1 Avebury Project:

- drilling program consisting of five (5) cored holes totalling 2,100 m - if results from these holes are encouraging, a further three holes totalling 900 m are planned
- geological mapping and lithogeochemical sampling of the complete Avebury Magnetic Anomaly area
- geochemical soil sampling and IP surveying of the same area
- down-hole EM surveys on drill holes
- access development and further surveying of new roads and drill collars
- aerial photographic and photogrammetric surveys

3.2 Stonehenge Project:

- complete two cored drill holes to further test the sediment hosted zinc potential in this area
- plan additional follow-up drilling if results encouraging

3.3 District Exploration:

- complete detailed mapping and lithogeochemical survey in Tenth Legion area
- relog and sample previous drill core from Tenth Legion area
- complete detailed mapping and lithogeochemical survey in Trial Harbour area

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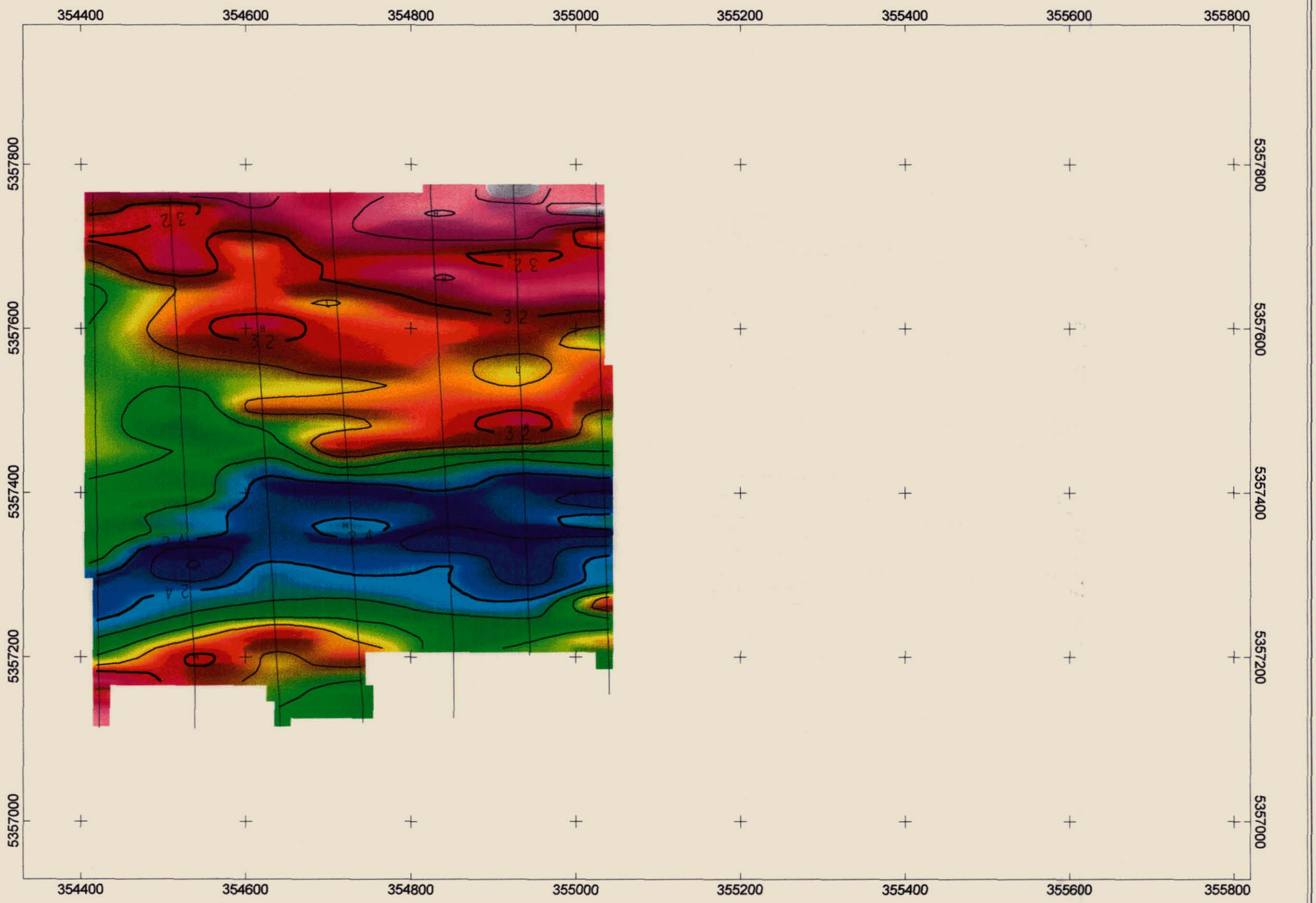


Scale 1:5000

50 0 50 100 150 200 250

metre

AGD84 / AMG zone 55

5 cm

ALLEGIANCE MINING NL

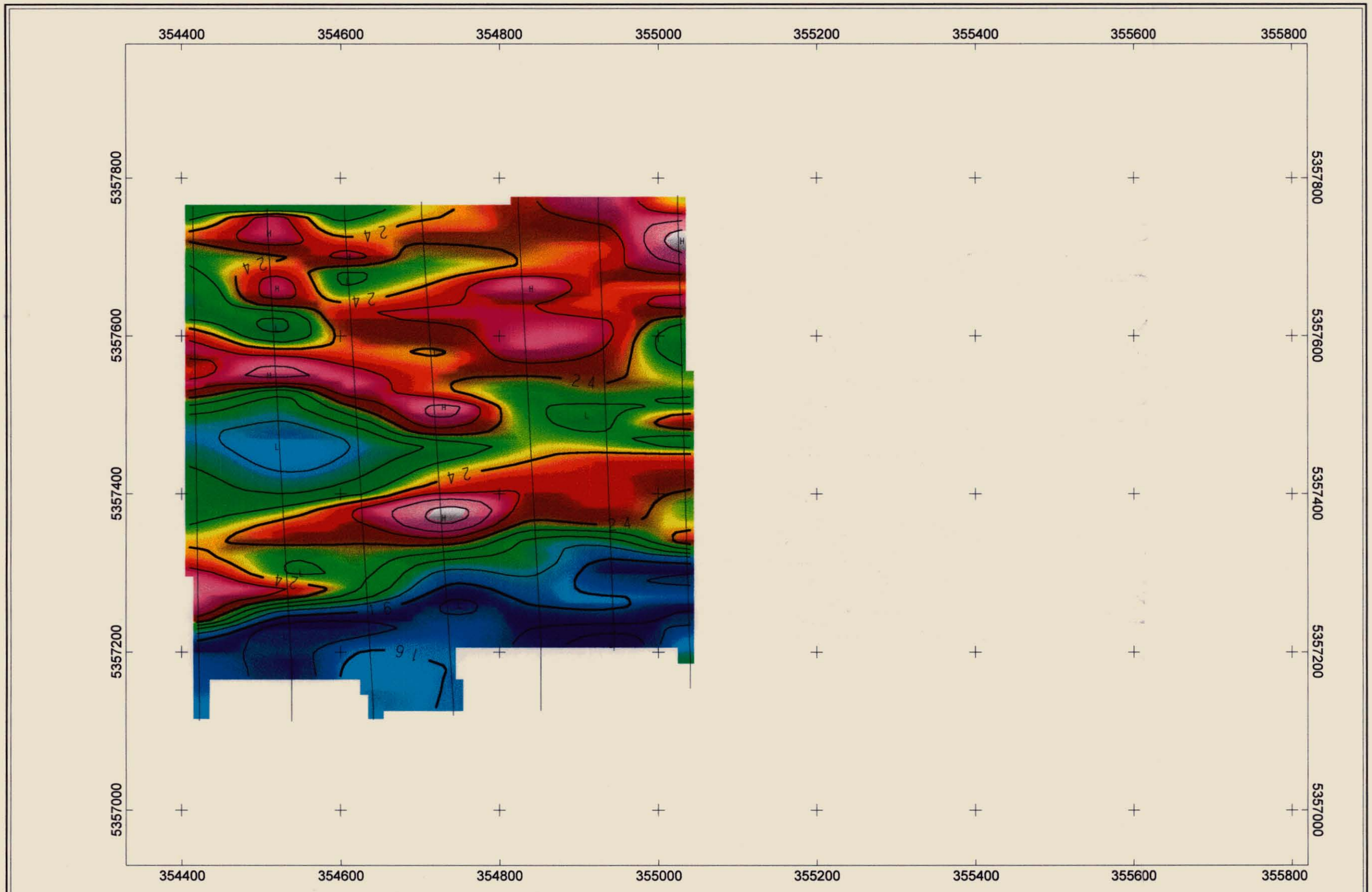
AVEBURY PROSPECT, SW TASMANIA; EL 28/88
GRADIENT IP SURVEY; SCINTREX 1998

LOG_RESISTIVITY; SUN FROM NORTH; CELL=25m
CONTOURS:2,8 ohm-m
CURRENT ELECTRODES@ 58000,56800N ALONG 54700E

FLAGSTAFF GEO-CONSULTANTS (NH); 11/99

Fig 4(a)

615009



Scale 1:5000

50 0 50 100 150 200 250

metre

AGD84 / AMG zone 55

5 cm

ALLEGIANCE MINING NL

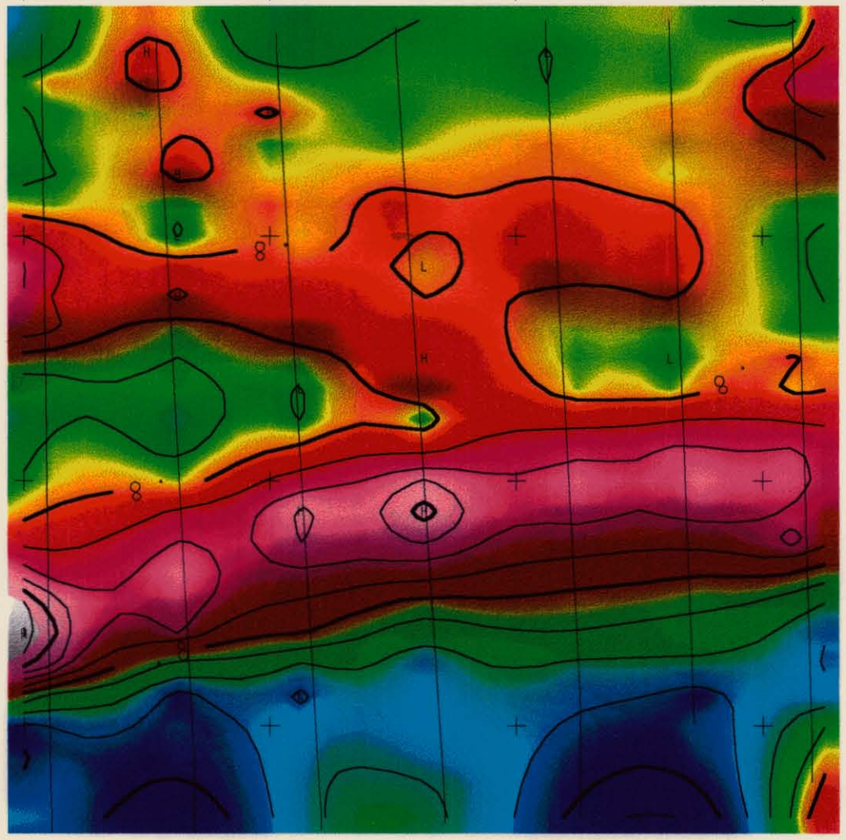
AVEBURY PROSPECT, SW TASMANIA; EL 28/88
GRADIENT IP SURVEY; SCINTREX 1998

CHARGEABILITY(840-1050ms); SUN FROM NORTH; CELL=25m
CONTOURS:2,8 mv/v
CURRENT ELECTRODES@ 58000,56800N ALONG 54700E

FLAGSTAFF GEO-CONSULTANTS (NH); 11/99

Fig 4(b)

615010



354400 354600 354800 355000 355200 355400 355600 355800

5357800 5357600 5357400 5357200 5357000

Scale 1:5000

50 0 50 100 150 200 250

metre

AGD84 / AMG zone 55

5 cm

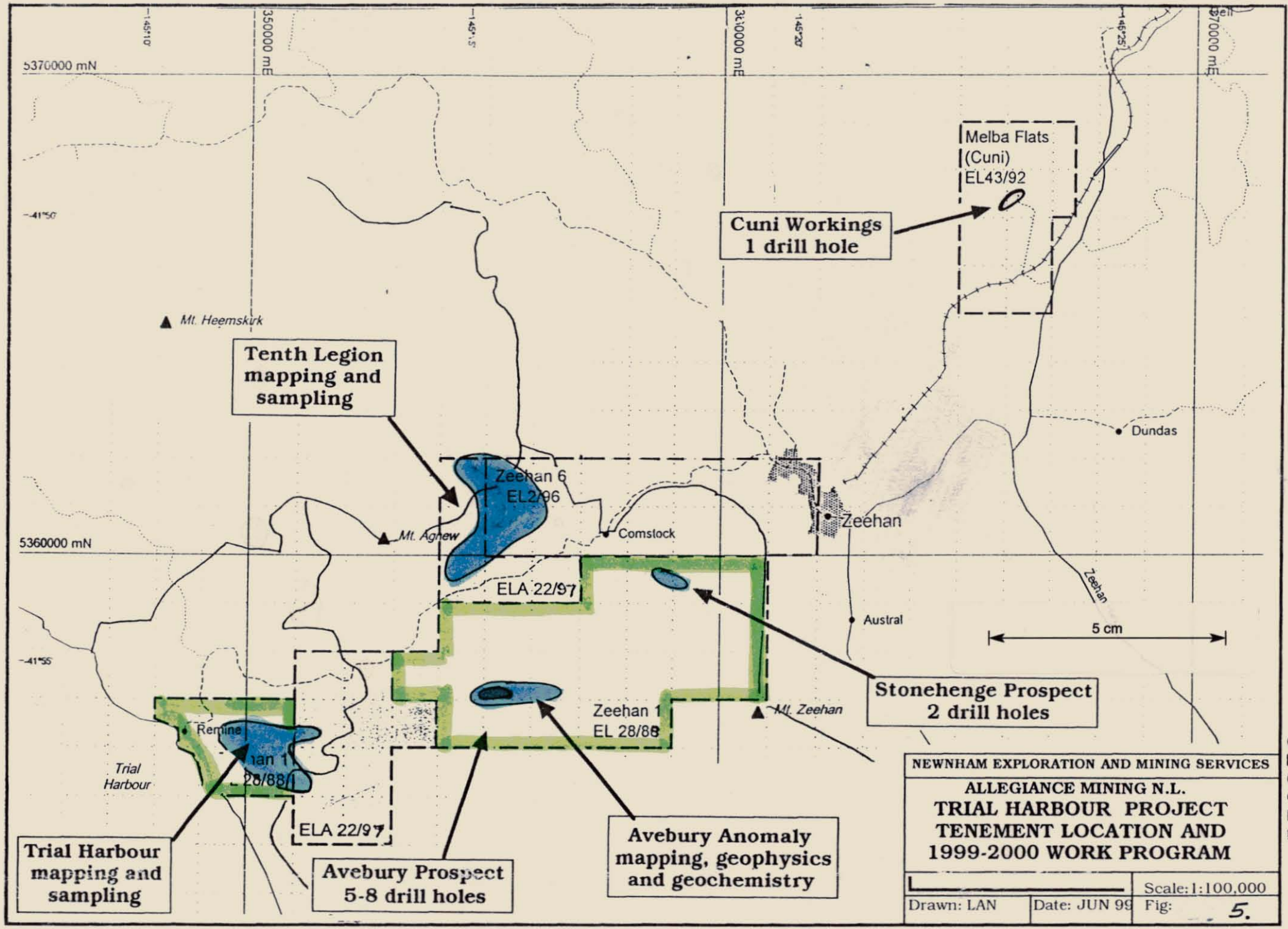
ALLEGIANCE MINING NL

AVEBURY PROSPECT, SW TASMANIA; EL 28/88
GRADIENT IP SURVEY; SCINTREX 1998

METAL FACTOR; SUN FROM NORTH; CELL=25m
CONTOURS:.1,.4

FLAGSTAFF GEO-CONSULTANTS (NH); 11/99

Fig 4(c)


5370000 mN
350000 mE
360000 mE
370000 mE
Melba Flats
(Cuni)
EL43/92
Cuni Workings
1 drill hole
Mt. Heemskirk
Tenth Legion
mapping and
sampling
Zeehan 6
EL2/96
Mt. Agnew
Comstock
Zeehan
Dundas
5360000 mN
ELA 22/97
Austral
Zeehan
5 cm
Stonehenge Prospect
2 drill holes
Zeehan 1
EL 28/88
Mt. Zeehan
Remine
Trial
Harbour
ELA 22/97
Trial Harbour
mapping and
sampling
Avebury Prospect
5-8 drill holes
Avebury Anomaly
mapping, geophysics
and geochemistry
NEWNHAM EXPLORATION AND MINING SERVICES
ALLEGIANCE MINING N.L.
TRIAL HARBOUR PROJECT
TENEMENT LOCATION AND
1999-2000 WORK PROGRAM
Scale:1:100,000
Drawn: LAN
Date: JUN 99
Fig: 5.

615011

615012

APPENDIX 1

AVEBURY GRID

SOIL GEOCHEMICAL RESULTS

Grid_E	Grid_N	AMG_E	AMG_N	Ni	Cu	Pb	Zn	As	Fe
4400E	7050N	354422.23	5357113.47	126	64	48	113	5	67000
4400E	7075N	354421.83	5357138.52	148	114	51	91	9	97500
4400E	7100N	354421.45	5357163.57	224	232	27	140	12	93000
4400E	7125N	354421.11	5357188.42	213	330	56	125	17	178000
4400E	7150N	354420.76	5357213.27	320	203	29	121	4	148000
4400E	7175N	354420.47	5357238.44	34	268	25	122	75	233000
4400E	7200N	354420.18	5357263.62	53	69	14	35	7	95500
4400E	7225N	354420.02	5357288.48	151	148	17	57	9	102000
4400E	7250N	354419.86	5357313.37	63	79	9	31	7	191000
4400E	7275N	354419.37	5357338.28	128	100	9	50	25	134000
4400E	7300N	354418.87	5357363.22	162	87	9	67	13	93000
4400E	7325N	354418.61	5357388.32	141	135	13	52	5	124000
4400E	7350N	354418.35	5357413.47	119	95	9	56	4	155000
4400E	7375N	354418.21	5357438.47	93	73	9	51	14	236000
4400E	7400N	354418.07	5357463.47	138	56	9	124	4	124000
4400E	7425N	354417.54	5357488.56	121	30	9	36	9	110000
4400E	7450N	354417.01	5357513.67	149	106	10	36	9	95500
4400E	7475N	354416.66	5357538.46	82	82	9	35	4	161000
4400E	7500N	354416.32	5357563.26	60	46	10	34	6	109000
4400E	7525N	354416.05	5357588.28	30	44	11	25	4	64500
4400E	7550N	354415.77	5357613.31	63	125	16	89	6	62000
4400E	7575N	354415.37	5357638.44	57	64	26	62	4	45000
4400E	7600N	354414.96	5357663.57	58	104	13	22	4	117000
4400E	7625N	354414.85	5357688.39	14	6	9	23	4	76500
4400E	7650N	354414.73	5357713.22	69	39	10	42	29	94500
4400E	7675N	354414.46	5357738.54	36	47	10	31	4	91000
4400E	7700N	354414.18	5357763.88	59	16	9	35	4	113000
4500E	7100N	354535.92	5357162.90	51	79	38	47	10	59000
4500E	7125N	354534.67	5357188.03	42	37	28	37	21	52500
4500E	7150N	354533.42	5357213.18	119	133	26	48	16	83500
4500E	7175N	354532.16	5357238.03	38	61	54	55	24	76500
4500E	7200N	354530.91	5357262.90	102	96	18	71	14	85500
4500E	7225N	354529.64	5357287.85	140	80	14	69	23	75500
4500E	7250N	354528.36	5357312.82	117	66	11	47	14	91000
4500E	7275N	354527.06	5357337.52	133	94	14	64	36	102000
4500E	7300N	354525.76	5357362.23	65	72	17	90	15	89000
4500E	7325N	354524.30	5357387.16	90	95	25	80	10	148000
4500E	7350N	354522.84	5357412.10	53	38	29	49	17	83500
4500E	7375N	354521.20	5357436.62	59	37	17	42	16	113000
4500E	7400N	354519.56	5357461.15	144	15	62	166	111	35500
4500E	7425N	354518.62	5357485.80	69	17	14	31	25	83000
4500E	7450N	354517.68	5357510.46	107	114	13	38	35	87500
4500E	7475N	354516.88	5357535.91	72	35	19	36	6	98500
4500E	7500N	354516.09	5357561.37	44	136	13	38	18	144000
4500E	7525N	354514.90	5357585.77	52	46	15	56	6	90500
4500E	7550N	354513.72	5357610.18	43	32	14	45	14	90000
4500E	7575N	354512.98	5357635.53	35	107	20	81	28	141000
4500E	7600N	354512.24	5357660.89	53	32	27	107	4	79500
4500E	7625N	354510.97	5357685.73	49	109	18	52	13	109000
4500E	7650N	354509.70	5357710.57	52	73	16	74	14	111000
4500E	7675N	354509.05	5357735.95	21	8	12	43	4	95500
4500E	7700N	354508.39	5357761.33	37	10	16	49	4	70000
4600E	7050N	354641.06	5357115.42	117	40	76	108	4	88000

Grid_E	Grid_N	AMG_E	AMG_N	Ni	Cu	Pb	Zn	As	Fe
4600E	7075N	354639.88	5357140.43	175	132	145	172	6	99500
4600E	7100N	354638.71	5357165.44	135	88	38	109	4	97500
4600E	7125N	354637.36	5357190.48	184	26	87	134	4	136000
4600E	7150N	354636.00	5357215.52	153	19	49	108	4	171000
4600E	7175N	354634.44	5357240.19	93	58	36	63	7	83500
4600E	7200N	354632.88	5357264.88	115	14	35	92	6	35500
4600E	7225N	354631.60	5357290.03	122	14	52	113	4	31500
4600E	7250N	354630.32	5357315.20	184	32	9	141	4	38000
4600E	7275N	354628.81	5357340.21	55	27	30	53	11	106000
4600E	7300N	354627.30	5357365.22	58	214	11	137	4	93500
4600E	7325N	354626.00	5357389.57	98	27	48	74	6	70500
4600E	7350N	354624.70	5357413.92	70	37	37	104	20	156000
4600E	7375N	354623.29	5357439.39	68	22	155	203	27	77000
4600E	7400N	354621.88	5357464.86	65	24	43	53	47	113000
4600E	7425N	354620.30	5357490.49	113	45	48	46	39	144000
4600E	7450N	354618.72	5357516.13	81	90	51	100	4	82000
4600E	7475N	354617.05	5357540.43	69	42	43	65	6	108000
4600E	7500N	354615.37	5357564.73	33	38	29	65	7	68500
4600E	7525N	354614.03	5357589.77	65	33	14	72	4	85000
4600E	7550N	354612.68	5357614.82	93	61	11	40	4	79500
4600E	7575N	354611.49	5357639.84	100	14	18	68	6	114000
4600E	7600N	354610.29	5357664.86	24	8	18	21	4	60000
4600E	7625N	354608.97	5357690.08	11	24	29	35	8	154000
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4600E	7675N	354606.38	5357740.35	10	10	13	37	4	31000
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4700E	7100N	354738.96	5357170.88	95	35	230	215	30	134000
4700E	7125N	354737.55	5357195.88	80	13	83	79	5	112000
4700E	7150N	354736.15	5357220.90	98	16	115	97	4	97000
4700E	7175N	354734.53	5357245.90	57	7	44	43	4	70500
4700E	7200N	354732.93	5357270.92	93	87	96	105	4	161000
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4700E	7275N	354728.84	5357345.23	262	68	77	146	9	132000
4700E	7300N	354727.35	5357369.89	558	12	41	272	41	234000
4700E	7325N	354725.97	5357394.94	122	56	50	81	4	104000
4700E	7350N	354724.59	5357420.02	116	88	20	120	4	97000
4700E	7375N	354722.97	5357444.91	76	75	26	54	4	161000
4700E	7400N	354721.36	5357469.83	28	157	40	52	10	221000
4700E	7425N	354719.12	5357494.83	17	60	58	19	4	91000
4700E	7450N	354716.88	5357519.85	61	56	39	80	4	98500
4700E	7475N	354715.50	5357544.80	32	57	26	78	18	130000
4700E	7500N	354714.13	5357569.78	36	57	30	53	11	142000
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4700E	7550N	354711.23	5357620.28	43	101	12	35	4	125000
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4700E	7675N	354704.04	5357745.00	83	41	9	46	4	79500
4700E	7700N	354702.38	5357770.02	94	68	11	129	6	106000

Grid_E	Grid_N	AMG_E	AMG_N	Ni	Cu	Pb	Zn	As	Fe
4800E	7150N	354848.14	5357225.66	73	93	34	43	4	88000
4800E	7175N	354847.07	5357250.75	67	37	29	35	4	118000
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4800E	7250N	354843.44	5357325.81	28	21	59	47	4	106000
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4800E	7350N	354837.66	5357424.63	65	25	21	13	4	100000
4800E	7375N	354836.82	5357449.97	93	69	39	44	4	140000
4800E	7400N	354835.97	5357475.32	109	40	12	80	4	86000
4800E	7425N	354835.36	5357500.25	119	77	66	56	20	140000
4800E	7450N	354834.75	5357525.19	129	85	27	73	8	97000
4800E	7475N	354833.52	5357549.88	47	63	29	49	17	117000
4800E	7500N	354832.29	5357574.57	52	69	53	61	22	119000
4800E	7525N	354831.12	5357599.84	101	76	68	103	5	110000
4800E	7550N	354829.95	5357625.12	68	54	28	46	41	83000
4800E	7575N	354828.71	5357650.06	22	26	16	64	4	35500
4800E	7600N	354827.47	5357675.01	43	41	18	37	4	87500
4800E	7625N	354826.52	5357699.91	57	64	14	25	4	126000
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4800E	7675N	354824.61	5357750.06	49	21	19	34	15	105000
4800E	7700N	354823.65	5357775.32	63	62	14	33	18	127000
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4900E	7150N	354942.95	5357227.00	138	168	32	94	4	120000
4900E	7175N	354942.13	5357251.88	96	90	25	58	4	119000
4900E	7200N	354941.32	5357276.77	105	77	31	73	5	113000
4900E	7225N	354940.35	5357301.94	64	44	24	33	4	102000
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4900E	7300N	354937.80	5357376.78	71	103	26	176	26	93000
4900E	7325N	354937.04	5357401.53	97	123	38	45	12	132000
4900E	7350N	354936.28	5357426.29	67	166	31	41	14	115000
4900E	7375N	354935.44	5357451.53	78	71	23	68	4	109000
4900E	7400N	354934.60	5357476.78	79	54	63	76	4	117000
4900E	7425N	354933.67	5357501.63	93	42	18	40	6	109000
4900E	7450N	354932.75	5357526.49	99	54	25	51	7	123000
4900E	7475N	354932.06	5357551.01	70	351	52	80	85	210000
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4900E	7525N	354930.34	5357600.48	81	93	23	69	21	113000
4900E	7550N	354929.31	5357625.43	52	62	23	51	15	95500
4900E	7575N	354928.61	5357650.61	30	36	11	44	8	100000
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4900E	7625N	354926.88	5357700.59	26	30	12	31	4	75500
4900E	7650N	354925.85	5357725.39	82	74	18	42	4	100000
4900E	7675N	354925.02	5357750.44	74	49	19	60	10	91000
4900E	7700N	354924.20	5357775.50	35	27	17	48	7	64000
5000E	7050N	355040.33	5357129.51	111	47	65	135	12	110000
5000E	7075N	355039.65	5357154.22	85	35	51	113	4	81500
5000E	7100N	355038.96	5357178.94	90	12	49	112	4	96000
5000E	7125N	355038.56	5357204.26	53	42	81	135	4	73000
5000E	7150N	355038.16	5357229.60	23	16	29	45	4	70000
5000E	7175N	355037.53	5357254.69	21	14	27	39	4	67000

Grid_E	Grid_N	AMG_E	AMG_N	Ni	Cu	Pb	Zn	As	Fe
5000E	7200N	355036.90	5357279.80	14	15	54	37	4	114000
5000E	7225N	355036.27	5357304.69	55	38	64	83	4	107000
5000E	7250N	355035.63	5357329.59	66	494	225	174	33	175000
5000E	7275N	355035.05	5357354.65	64	38	34	54	4	76000
5000E	7300N	355034.48	5357379.73	22	20	45	48	9	40500
5000E	7325N	355034.17	5357404.57	39	38	25	29	4	91500
5000E	7350N	355033.88	5357429.42	18	30	28	47	4	41500
5000E	7375N	355033.30	5357454.36	54	61	26	78	9	94500
5000E	7400N	355032.71	5357479.31	69	88	27	103	25	98000
5000E	7425N	355031.99	5357504.02	85	37	25	146	4	80000
5000E	7450N	355031.27	5357528.74	78	75	39	80	6	103000
5000E	7475N	355030.54	5357553.66	58	24	13	61	4	66500
5000E	7500N	355029.81	5357578.60	70	33	15	49	4	92500
5000E	7525N	355029.15	5357603.58	66	84	14	50	7	81500
5000E	7550N	355028.50	5357628.57	57	73	26	52	7	92500
5000E	7575N	355027.67	5357653.77	22	12	19	48	4	35000
5000E	7600N	355026.83	5357678.99	32	27	17	42	10	77500
5000E	7625N	355026.13	5357703.43	91	50	25	54	30	64000
5000E	7650N	355025.43	5357727.89	35	54	12	21	4	47500
5000E	7675N	355024.85	5357753.05	40	37	18	55	4	75000
5000E	7700N	355024.28	5357778.21	76	85	21	66	8	89000

180

99_4386

Annual Report - Trial Harbour Area - EL 28/88

Allegiance Mining NL*; Newnham Exploration & Mining
Newnham, L.A. EL28/88

LEGEND

QUATERNARY
- Qha — Stream alluvium, swamp and marsh deposits

SILURIAN
- SDc — Crotty Quartzite

ORDOVICIAN
- Og — Gordon Limestone

CAMBRIAN
- €Oz — Mt. Zeehan Conglomerate
- €tu — Chert, siltstone and lithicwacke
- €ts — Siltstone and lithicwacke

IGNEOUS ROCKS

DEVONIAN
- Dqm — Quartz bodies

IGNEOUS ROCKS

CAMBRIAN
- €bau — Basalt and gabbro
- €bab — Basalt flows with interbedded breccia flows
- €sm — Massive serpentinite

Strike and dip of bedding

Vertical bedding

A009 — Proposed drill hole

Proposed Avebury Grid

NOTE

Topographic contours are form lines only. Small differences will exist between these contours and accurate surveyed spot heights.

615017

Allegiance Mining N.L.

NEWNHAM EXPLORATION AND MINING SERVICES
Serving the Minerals Industry

ALLEGIANCE MINING N.L.
AVEBURY PROJECT
GEOLOGY
(TAKEN FROM STATE 1:25,000 SHEET)

SCALE 1:2000 (0, 40, 80 m)

COMPILED : L.A.N.
DATE : June 199
DRAWN : G.M.B.
REVISIONS :

FILE No. Avebury Geology

FIGURE No. 2.

5 358 000mN

354 500mE

355 000mE

355 500mE

5 357 500mN

5 357 000mN

4300E 4400E 4500E 4600E 4700E 4800E 4900E 5000E 5100E 5200E 5300E 5400E 5500E 5600E 5800E

Baseline

A001 A002 A003 A004 A005 A006 ZA1 ZA2 ZA3

1880 2000 1942 1963 1853 1992

KEY

>100ppm Cu

>200ppm Cu

5 cm

NEWNHAM EXPLORATION AND MINING SERVICES
Serving the Minerals Industry

ALLEGIANCE MINING N.L.
AVEBURY PROJECT
SOIL SAMPLING
ASSAY RESULTS
Cu, Pb and Zn
ppm

COMPILED : L.A.N.
DATE : May 1999
DRAWN : G.M.B.
REVISIONS :

FILE : Avebury Soils Cu Pb Zn

SCALE 1:2000 0 40 80 m

FIGURE No. 3(b)

5 358 000mN

5 357 500mN

5 357 000mN

354 500mE

355 000mE

355 500mE

Baseline

A001 A002 A003 A004 A005 A006

ZA1 ZA2 ZA3

1925 1942 1953 1965 1980 1992 2000

99_4386

Annual Report - Trial Harbour Area - EL 28/88

Allegiance Mining NL*; Newnham Exploration & Mining
Newnham, L.A. EL28/88

KEY

- >100ppm Ni
- >200ppm Ni
- >300ppm Ni
- 25 >25ppm As
- 50 >50ppm As

5 cm

615019

NEWNHAM EXPLORATION AND MINING SERVICES
Serving the Minerals Industry

ALLEGIANCE MINING N.L.
AVEBURY PROJECT
SOIL SAMPLING
ASSAY RESULTS
Ni, As and Fe
ppm

COMPILED : L.A.N.
DATE : May 1999
DRAWN : G.M.B.
REVISIONS :
FILE : Avebury Soils Ni As Fe

SCALE 1:2000 0 40 80 m

FIGURE No. 3(a)

615020

Flagstaff GeoConsultants

ALLEGIANCE MINING GEOPHYSICAL DATA

FROM FLAGSTAFF GEOCONSULTANTS, MAY 2000.

MELBA FLATS:

APPLIED POTENTIAL: 2150_appl.XYZ (line 2150N)

Downhole_IP: Dhmf11.xyz (hole MF11)
Dhmf12.xyz (hole MF12)

Downhole EM: mf11_L1_all.tem (hole MF11, Loop 1)
mf11_L2_all.tem (hole MF11, Loop2)
mf12_L1_all.tem (hole MF12, Loop1)
mf12_L2_all.tem (hole MF12, Loop 2)
Data are in AMIRA format.

Gradient_IP: Melb_gradip.xyz

Tem2000: *.tem (Fixed loop PEM survey)
Data are in AMIRA format.
Each line surveyed with west and east loops.

AVEBURY
Gradient_IP: Tas134.Lst

Mmr: Ave_mmr.xyz

Tem: Archive 1999: *.tem (Downhole and surface)
Archive 2000: *.tem (Downhole)

99_4386

Report for Allegiance Mining NL - Avebury Prospect, Zeehan. - Results of Surface and Borehole EM Allegiance Mining NL"; Flagstaff Geo-Consultants
Asten, M.W. EL28/88

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RESULTS OF

DIAMOND DRILLING ON THE AVEBURY GRID EL 28/88

BY ALLEGIANCE MINING N.L.

JUNE 1999

Prepared by

MICHAEL V. McKEOWN

MEngSc (Ballarat), Grad Dip Mining (Ballarat),
BSc (Melbourne), Ass Dip Ag Bus Man (Launceston),
Fellow AusIMM

for

McKEOWN MINING PTY LTD
RIDGLEY, TASMANIA
(phone 03 6435 7560)

on behalf of

ALLEGIANCE MINING N.L.

IMPORTANT NOTE

This report is not intended for use as a public document or, in whole or in part, in a public document.

This report has been prepared using information and data available to the author at the time of writing.

CONTENTS

TABLES

FIGURES

Note that all figures appear at the end of the text before the appendices

1 INTRODUCTION

Allegiance Mining N.L. (Allegiance), in its own right or in Joint Venture with Rio Tinto Exploration Pty Ltd, has been exploring on three Exploration Licences in the Zeehan to Trial Harbour area:

EL28/88 in several parts, one of which lies immediately south-west of Zeehan, another at Trial Harbour

EL2/96 immediately to the north-west of Zeehan

EL22/97 in two parts, to the west and south-west of Zeehan.

Early in 1998, Allegiance completed two diamond drill holes, A001 and A002 at the Avebury prospect on EL28/88. A001 intersected significant nickel sulphide mineralisation, the zone exceeding 10 metres down-hole length at over 1% Ni (McKeown, 1998b). Allegiance considered that this result was sufficiently encouraging for more drilling to be undertaken and, in January 1999, the first of two planned holes was commenced.

A003, the first hole to be drilled this year, also intersected significant nickel mineralisation, including 57.3m at 0.82% Ni, and so three more holes were added to this year's program: A005, A006 and the deepening of A001. Table 1 lists the holes which have been drilled by Allegiance at the Avebury prospect. The total length drilled this year was 1465.6 metres.

2 1998 DRILLING PROGRAM

2.1 PROBLEMS WITH NICKEL ANALYSES

A003 intersected significant sulphide mineralisation but when the nickel analyses of apparently higher grade part of this hole were received the author considered that the nickel assays did not reflect the amount of sulphide visible in the core (McKeown, 1999a). There are four possible explanations for this:

- not all the sulphide is pentlandite,
- some of the nickel is occurring as a non-sulphide mineral,
- there was a problem with sample preparation,
- there was a problem with sample analyses.

A series of checks was initiated to resolve this apparent discrepancy.

TABLE 1

ALLEGIANCE MINING NL

DIAMOND DRILLING AT THE AVEBURY PROSPECT

		collar co-ordinates					
year	hole no	east	north	rl	brg	dip	final depth m
1998	A001	354,648	5,357,225	152	005	-50	316.3
	A002	355,225	5,357,586	175	180	-50	307.0
1999	A001	354,648	5,357,225	152	005	-50	532.6
	A003	354,730	5,357,282	163	005	-50	339.0
	A004	354,625	5,357,372	146	353	-50	226.3
	A005	354,521	5,357,467	171	354	-50	202.5
	A006	354,736	5,357,190	150	000	-45	481.5

Notes: - all co-ordinates and bearings are AMG
- co-ordinates of all holes except A002 were based on trig survey; A002 was picked up using differential GPS

Petrological examination confirmed that the only sulphide present in A003 is pentlandite (Fander, 1999a).

Extensive re-assaying at three separate laboratories using different methods of nickel analysis resolved this problem (Appendix 3). The method decided upon for the nickel analyses for the 1999 drilling program is outlined in Table 2.

TABLE 2

ALLEGIANCE MINING NL
ANALYTICAL PROCESS
1999 DRILLING PROGRAM

NQ drill core sawn in half longitudinally

whole sample crushed

whole sample pulverised (for samples less than 3kg), or
sample split in riffle, then pulverised (for samples more than 3kg)

small sample digested in hydrofluoric, perchloric, hydrochloric and nitric acids

Ni, As, S, analyses by ICP

2.2 UPDATE OF 1998 ASSAY RESULTS

A plot of nickel vs sulphur for the final nickel and sulphur assays for the part of the A003 intersection which was re-assayed indicates a nickel to sulphur ratio of about 1.0 (Figure 16). A similar plot for the 1998 assays for the A001 intersection indicates a nickel to sulphur ratio of about 0.67 (Figure 15). This suggested to the author that the 1998 nickel analyses of the A001 intersection were under-estimated (McKeown, 1999a). Consequently, pulps of relevant A001 samples were submitted for re-assay (Appendix 4) with the result that the nickel grade of the A001 intersection has been increased :

intersection	**length**	**analyses**	
A001 243.9m to 273.6m	29.7m	0.93% Ni	0.89% S
including			
A001 243.9m to 255.6m	10.7m	1.64% Ni	1.49% S
including			
A001 243.9m to 244.3m	0.4m	24.8% Ni	20.4% S

Note that the nickel to sulphur ratio for these intersections is about 1.0; this ratio is in concordance with the composition of pentlandite, for which the Fe:Ni:S ratio is about 1:1:1.

3 1999 DRILLING PROGRAM

3.1 INTRODUCTION

As discussed above (see 1 INTRODUCTION), four diamond drill holes, totalling 1465.6 metres in length were drilled early this year. All holes were drilled using a Longyear 38 rig supplied by Diamond Drilling Tasmania Pty Ltd and access was by way of a track off the Zeehan to Trial Harbour Road. After the completion of the holes, down-hole geophysics was undertaken, so, to maintain physical integrity of the holes, they were lined to the bottom with plastic pipe.

In previous years, there were five holes drilled on the Avebury grid: holes ZA1 to ZA3 drilled by CRA Exploration Pty Ltd (CRAE) and A001 and A002 by Allegiance in 1998 (McKeown, 1998b). During this drilling program, the collars of all holes drilled so far were surveyed by staff of Campbell Smith, Phelps, Pedley Pty Ltd of Launceston (Table 1 and Appendix 6).

The locations of all the holes are shown in Figure 1, and cross-sections of holes A001 to A006, which have been drilled by Allegiance, in Figures 2, 3, 5, 6, 7 and 8.

The core was logged, and split and assayed where warranted. In addition, the magnetic susceptibility of the core was measured. Copies of drill logs (Appendix 1), final assay data (Appendix 5) and magnetic susceptibility data (Appendix 7) are attached.

3.2 NEW GEOLOGICAL MODEL

At the end of the 1998 drilling program, a geological model to explain the various nickel occurrences in the Zeehan to Trial Harbour area was proposed (Figure 4). The results of this drilling program and mapping along and around the drilling access track have led to changes in the model.

It now appears clear that, in the area on and around the Avebury grid, serpentinite is more extensive than has been indicated by previous mapping. The serpentinite is generally covered by deep clay, up to 15 or 20 metres thick, and, so, in general there is no serpentinite rock

outcrop (Figures 9 and 10). However, zones of siliceous serpentinite have been intersected by the diamond drill holes and an isolated outcrop of this type of serpentinite has been identified just off the drilling access track between the collars of holes A003 and A004. The identification of some serpentinite outcrop, together with the results of a new soil sampling program over part of the Avebury grid (Newnham, 1999), suggest a slightly different geological model which has serpentinite present at the surface over large part of the Avebury grid (Figure 11).

3.3 ROCK TYPES

The rock types intersected in the Allegiance drill holes appear to belong to the four main groupings outlined in Table 3 and a geological history of the area is presented in Table 4.

The oldest rocks are Cambrian hornfels, chert and limestone which probably belong to the Crimson Creek Formation. These rocks were intruded by ultramafic rocks during the Cambrian.

The Cambrian rocks were metamorphosed and metasomatised during the Devonian as a result of the intrusion of the Devonian Heemskirk granite. Some Cambrian sedimentary rocks were metamorphosed to hornfels, and metasomatised with the development of axinite and schorl skarns, and calc-silicate breccias, and the replacement of some limestone or dolomite by pyrrhotite. For example, axinite-schorl skarns were logged in A001 between about 150 and 225 metres; calc-silicate breccias, logged as hornstone in A006 from 437.5 metres to 481.5 metres, were described by Fander (1999d) as quartz-diopside-hedenbergite rocks; tin bearing pyrrhotite replacing carbonate rock was logged in A001 at about 60 metres.

It is probable that the Cambrian ultramafic rocks were serpentinised during the intrusion of the granite. The serpentinites contain chromite and magnetite, which is semi-massive in places, and there is a second generation of magnetite stringers and veinlets cutting serpentine and earlier massive magnetite, suggesting a late stage of magnetite formation possibly related to serpentinisation (Fander, 1999a). Parts of the serpentinite complex appear to be layered (Fander, 1999e)

In core logs, two principal types of serpentinite have been described: very dark olive green to black serpentinite with varying amounts of magnetite, and light coloured siliceous serpentinite with traces of magnetite. In places, both types of serpentinite carry nickel sulphide and arsenide mineralisation particularly near contacts with the host hornfels and chert. It is most

likely that the source of the sulphur and arsenic was the underlying granite and that it was during the re-mobilisation stage that nickel was concentrated into nickel sulphides and arsenides (see also 3.5 NICKEL MINERALOGY).

TABLE 3

ALLEGIANCE MINING NL
AVEBURY PROSPECT - ROCK TYPES

Recent	**weathering products**
	clay
	claystone
	ironstone
Devonian	**skarn and metasomatic rocks resulting from Heemskirk granite intrusion**
	massive pyrrhotite zones replacing Cambrian limestone or dolomite
	skarns containing axinite and/or schorl
	hornstone: hard diopside quartz rock
Cambrian	**serpentinite related to McIvor Hill Ultramafic Complex**
	semi-massive magnetite
	serpentinite
	siliceous serpentinite
	chrysotilic serpentinite
	pre-serpentinite (gabbro?)
Cambrian	**chert/hornfels association, probably Crimson Creek Formation**
	hornfels
	chert
	limestone

TABLE 4

ALLEGIANCE MINING NL
AVEBURY PROSPECT
A GEOLOGICAL HISTORY

erosion to present land surface

uplift

deposition of sulphides and arsenides in serpentinites
serpentinisation of Cambrian ultramafic rocks
metasomatism of Cambrian sedimentary rocks

intrusion by Devonian Heemskirk granite

Tabberabberan folding

intrusion of Cambrian ultramafic rocks

deposition of Cambrian sedimentary rocks

3.4 1999 ASSAY RESULTS

The five holes drilled in this program were A001, which was deepened, and A003 to A006. Individual cross-sections of all Allegiance holes showing nickel and sulphur assays are attached (Figures 2, 3, 5, 6, 7 and 8). Core from these holes was split and analysed for nickel, sulphur, arsenic, cobalt, copper, lead and zinc. In past years, some parts of some holes were analysed for other elements including: silver, tin, tungsten, gold, and platinum group elements but the only metal of value which has been identified at the Avebury prospect is nickel.

All assay results have been incorporated into drill logs (Appendix 1) and the original final assay data are attached (Appendix 5).

Last year, A001 intersected significant nickel sulphide mineralisation from 243.9m to 273.6m (see 2.2 UPDATE OF 1998 ASSAY RESULTS) and was stopped in serpentinite at 316.3m. This year, the hole was deepened to 529.7m and was again stopped in serpentinite. A second zone of significant nickel mineralisation was intersected from 466.7m to 489.7m. Both these intersections and all this year's intersections are listed in Table 5.

TABLE 5

ALLEGIANCE MINING NL

SUMMARY OF INTERSECTIONS AT THE AVEBURY PROSPECT

all intersection lengths are down-hole lengths

A001 243.9m to 273.6m	29.7m	0.93% Ni	67ppM Cu
		0.89% S	17ppM Pb
		17ppM As	103ppM Zn
			157ppM Co
including			
A001 243.9m to 255.6m	10.7m	1.64% Ni	67ppM Cu
		1.49% S	33ppm Pb
		20ppM As	154ppM Zn
			245ppM Co
including			
A001 243.9m to 244.3m	0.4m	24.8% Ni	1150ppM Cu
		20.4% S	<5ppM Pb
		64ppM As	700ppM Zn
			3400ppM Co
A001 466.7m to 489.7m	23.0m	0.43% Ni	29ppM Cu
		0.61% S	<125ppM Pb
		<25ppM As	115ppM Zn
			139ppM Co
including			
A001 473.7m to 480.7m	7.0m	0.73% Ni	45ppM Cu
		1.13% S	<125ppM Pb
		<25ppM As	140ppM Zn
			204ppM Co

A002 no significant nickel sulphide mineralisation

TABLE 5 CONTINUED

A003 221.7m to 280.0m	58.3m	0.81% Ni	26ppM Cu
		0.85% S	10ppM Pb
		267ppM As	85ppM Zn
			146ppM Co
including			
A003 223.7m to 246.9m	23.2m	1.02% Ni	40ppM Cu
		1.16% S	3ppM Pb
		25ppM As	90ppM Zn
			190ppM Co
and			
A003 262.0m to 274.1m	12.1m	1.14% Ni	23ppM Cu
		1.01% S	3ppM Pb
		96ppM As	46ppM Zn
			176ppM Co
A004 54.3m to 55.3m	1.0m	0.55% Ni	<50ppM Cu
		0.42% S	<50ppM Pb
		200ppM As	200ppM Zn
		<2ppM Ag	<20ppM Co
A004 130.1m to 179.9m	49.8m	0.70% Ni	212ppM Cu
		1.09% S	<50ppM Pb
		1283ppM As	123ppM Zn
		<2ppM Ag	212ppM Co
including			
A004 137.3m to 146.3m	9.0m	1.02% Ni	<50ppM Cu
		1.20% S	<50ppM Pb
		100ppM As	144ppM Zn
		<2ppM Ag	229ppM Co
and			
A004 151.1m to 157.1m	6.0m	1.29% Ni	50ppM Cu
		1.45% S	<50ppM Pb
		2833ppM As	108ppM Zn
		<2ppM Ag	357ppM Co

TABLE 5 CONTINUED

A005 no serpentinite intersected			
A006 318.0m to 445.5m	127.5m	0.35% Ni	29ppM Cu
		0.50% S	<125ppM Pb
		<25ppM As	66ppM Zn
			103ppM Co
including			
A006 348.3m to 388.0m	39.7m	0.46% Ni	29ppM Cu
		0.63% S	<125ppM Pb
		<25ppM As	71ppM Zn
			114ppM Co

3.5 NICKEL MINERALISATION

Nickel sulphides and arsenides have been identified in the zones of significant nickel mineralisation (Fander, 1998, 1999a, 1999b, 1999c). The sulphides and arsenides which have been reported so far are listed in Table 6.

Three separate sulphide assemblages have been intersected.

Pentlandite mineralisation was intersected in A001 on the southern margin of the serpentinite complex and in A003 on the northern margin (Table 5). Petrological descriptions and assays suggest that, apart from traces of pyrite and chalcopyrite, pentlandite was the dominant sulphide mineral present in both these intersections (Fander, 1998, 1999a). With one exception, the arsenic content of these intersections is very low, generally less than 100ppM. The exception is the interval A003 from 279.1m to 280.0m, on the northern serpentinite contact, which returned an assay of 1.36% As.

Pyrrhotite, pentlandite and nickel arsenide mineralisation was intersected in A004 on the northern margin of the serpentinite complex (Table 5). This is the only intersection to date with significant arsenic content, exceeding 1% As in places and niccolite, gersdorffite and maucherite have been identified (Fander, 1999b).

TABLE 6

ALLEGIANCE MINING NL
AVEBURY PROSPECT
SULPHIDE AND ARSENIDE MINERALS

pyrite	FeS_2
pyrrhotite	FeS
valleriite	$CuFeS_2 . (Mg,Al,Fe)(OH)_2$
mackinauwite	$(Fe,Ni)_9S_8$
pentlandite	(Fe,Ni)S
millerite	NiS
niccolite	NiAs
gersdorrfite	NiAsS
maucherite	Ni_3As_2 or Ni_4As_2

Pyrrhotite, valleriite, mackinauwite, pentlandite mineralisation was intersected in A006 (Table 5) within the serpentinite complex, the location of this mineralisation relative to the margin of the complex is not known since A006 was stopped in serpentinite (Table 5, Figure 10, Fander 1999c).

Nickel sulphides and arsenides occur in both dark serpentinite and light siliceous serpentinite as grains, small patches up to several millimetres across, and stringers and veinlets up to a few millimetres across.

Naturally, there is a high correlation between the abundances of nickel and sulphur (Figures, 2, 3, 5, 6, 8 and 15). However, cross-sections showing S assays and magnetic susceptibility suggest that there is not a direct correlation between the presence of sulphides and the abundance of magnetite (Figures 9 and 10).

3.6 MAGNETITE

Two generations of magnetite have been described: early granular magnetite, often containing chromite, occurring as patches, veins and masses, and later magnetite veins. The earlier magnetite was probably a primary constituent of the original ultramafic rocks with later veins forming during serpentinisation.

Composite cross-sections showing sulphur assays and magnetic susceptibility of drill core for the holes which intersected significant nickel mineralisation are attached (Figures 9 and 10). Magnetic susceptibility was measured using a Scintrex SM5 susceptibility meter. The magnetite content of ten samples was determined by carrying out Davis Tube extractions using sample pulps from A003. The results of this testwork have enabled the construction of a calibration curve relating magnetic susceptibility to per cent magnetite content (Appendix 8).

All serpentinite contains some magnetite, the susceptibility readings and the calibration curve suggest that magnetite content of the serpentinites ranges up to about 50%. There is a high contrast between the magnetic susceptibility of the serpentinite complex and that of the enclosing rocks (Figures 9 and 10) (Appendix 7).

Both the northern and southern margins of the serpentinite complex on section 354 730m E are relatively enriched in magnetite compared to the central part of the complex, the northern margin being especially so (Figure 10). This compares with a more uniform magnetite susceptibility profile in the serpentinite complex on section 354 630mE.

3.7 ORE GENESIS

Iron and nickel sulphides and nickel arsenides occur as grains, patches and veinlets up to several millimetres across in more ore less massive granular magnetite and serpentinite. Both the early magnetite and the sulphide/arsenide phase are cut by later magnetite veining. An explanation of these mineral relationships was given by Fander following his petrographic examination of a suite of rocks from A006:

"Most of the intersections are fine- to medium-grained serpentinites with chromite, probably originating as peridotites or dunites; some appear to be layered ... The sulphides are apparently associated with a phase of magnetite formation/deposition which may be associated with the pyrometasomatic episode - this may have acted primarily as a mechanism for extracting and redistributing Ni from the original ultramafics, rather than being an actual

source of Ni (the pyrometasomatic phase could have contributed S to the system" (Fander, 1999e).

Fander's view that the sulphur source was the pyrometasomatic phase, presumably occurring during the intrusion of the Heemskirk granite, is supported by the presence of arsenic in some nickeliferous zones, the granite being the most likely the source of the arsenic.

4 CONCLUSION AND PROPOSED DRILLING

A very significant occurrence of nickel mineralisation has been discovered at the Avebury prospect. Further drilling is recommended to test for extensions of the known mineralisation and to progress the possibility of classifying the mineralisation as a Mineral Resource.

Seven diamond drill holes are proposed to test both the northern and southern margins of the serpentinite complex. Details of the planned holes are given in Table 7 and five of the proposed holes are shown in Figures 12, 13 and 14.

The holes have been planned on the basis of the results of diamond drilling undertaken to date. The design of the holes may change, depending on the results of recent geophysical and geochemical surveys on the Avebury grid. For the same reason, other holes may be required to test targets defined by the geophysical and geochemical surveys.

TABLE 7

ALLEGIANCE MINING NL

PROPOSED DIAMOND DRILLING AT THE AVEBURY PROSPECT

	collar co-ordinates					
hole	**east**	**north**	**rl**	**brg**	**dip**	**planned depth m**
"A"	354,530	5,357,455	170	180	-55	250
"B"	354,630	5,357,730	175	180	-40	500
"C"	354,630	5,357,730	175	180	-60	450
"D"	354,730	5,357,520	165	180	-50	225
"E"	354,730	5,357,385	160	180	-50	280
"F"	354, 680	to be planned after drilling "B", "C" and "D"				350
"G"	354,830	to be planned after drilling "D"				350
total proposed drilling						**2,405**

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615042

354 500mE
355 000mE
355 500mE
356 000mE
5 358 000mN
5 357 500mN
5 357 000mN

4300E
4400E
4500E
4600E
4700E
4800E
4900E
5000E
5100E
5200E
5300E
5400E
5500E
5600E
5800E

7750N
7700N
7600N
7500N
7400N
7300N
7200N
7100N
7050N

A005
A004
A001
A003
A006
ZA1
A002
ZA2
ZA3
Baseline

Section 354 530mE
Section 354 630mE
Section 354 730mE
Section 354 830mE
Section 355 225mE

5 cm

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ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

DRILLHOLE LOCATIONS

SCALE 1:5000 0 50 100 m

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : Avebury Plan A3
FIGURE No. 1

615043

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN

200mRL
100mRL
0mRL
-100mRL
-200mRL

A001

3.9% S
11.3% S
20.4% S
24.8% Ni

A001
529.7m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Nickel
10mm = 1%

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL
EL 28/88 - AVEBURY PROSPECT
A001 CROSS SECTION
ASSAY RESULTS
Ni and S

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A001_Ni_S

SCALE 1:2000 0 20 40 m

FIGURE No. 2

615044

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mRL
100mRL
0mRL
-100mRL
-200mRL

A002

A002
307.0m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Nickel
10mm = 1%

5 cm

Allegiance Mining N.L.

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ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A002 CROSS SECTION

ASSAY RESULTS

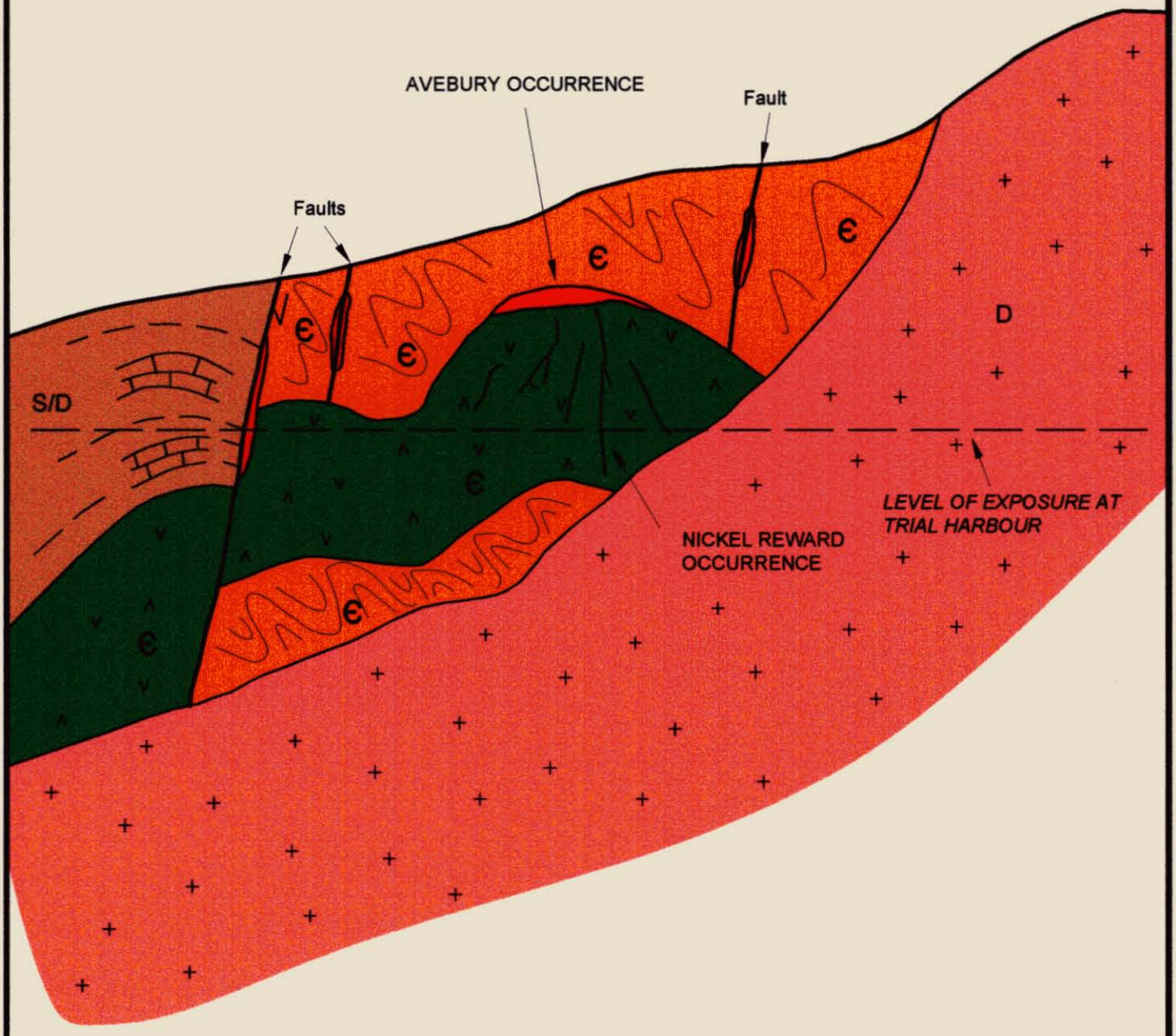
Ni and S

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A002_Ni_S

SCALE 1:2000 0 20 40 m

FIGURE No. 3

615045



LEGEND

- Massive nickel sulphide mineralisation
- Disseminated nickel sulphide mineralisation
- D — Devonian granite
- S/D — Silurian-Devonian sedimentary rocks
- Cambrian serpentinites
- Cambrian sedimentary and metamorphic rocks

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EL 28/88 - AVEBURY PROSPECT

A GEOLOGICAL MODEL AT THE END OF 1998 DRILLING PROGRAM

COMPILED :	M. McK.
DATE :	May, 1999
DRAWN :	G.M.B.
REVISIONS :	
File :	Avebury Ni S Model_98

SCALE : Not To Scale

FIGURE No. 4

615046

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.
100mR.L.
00mR.L.
-100mR.L.
-200mR.L.
-300mR.L.

A003

A003
339.0m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Nickel
10mm = 1%

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A003 CROSS SECTION

ASSAY RESULTS

Ni and S

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A003_Ni_S
FIGURE No. 5

SCALE 1:2000 0 20 40 m

615047

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.

100mR.L.

00mR.L.

-100mR.L.

-200mR.L.

A004

4.88% S

4.1% S

A004
223.6m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Nickel
10mm = 1%

5 cm

Allegiance Mining N.L.

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ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A004 CROSS SECTION

ASSAY RESULTS

Ni and S

COMPILED : M. McK.

DATE : May, 1999

DRAWN : G.M.B.

REVISIONS :

File : A004_Ni_S

SCALE 1:2000 0 20 40 m

FIGURE No. 6

615048

300mR.L.
200mR.L.
100mR.L.
00mR.L.
-100mR.L.
-200mR.L.

5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN | 5 357 800mN

A005

A005
202.5m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A005 CROSS SECTION

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A005_NI_S

SCALE 1:2000 0 20 40 m

FIGURE No. 7

615049

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.

100mR.L.

00mR.L.

-100mR.L.

-200mR.L.

-300mR.L.

A006

8.9% S

A006
481.5m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Nickel
10mm = 1%

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A006 CROSS SECTION

ASSAY RESULTS

Ni and S

COMPILED : M. McK.

DATE : May, 1999

DRAWN : G.M.B.

REVISIONS :

File : A006_Ni_S

SCALE 1:2000 0 20 40 m

FIGURE No. 8

615050

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.
100mR.L.
00mR.L.
-100mR.L.
-200mR.L.

A001
A004
CLAY
Base of weathering
3.9% S
11.3% S
Pyrrhotitic zone with cassiterite
CHERT - HORNFELS SEQUENCE
CHERT - HORNFELS/SERPENTINITE CONTACT
SERPENTINITE
20.4% S
Massive pentlandite
Siliceous rock
Pentlandite and pyrrhotite
A004 223.6m
Pentlandite and rare pyrite
CHERT - HORNFELS SEQUENCE
SERPENTINITE
Only traces of sulphide through central part of hole
Siliceous rock
A001 529.7m
Pyrrhotite, pentlandite and nickel arsenides
Hole stopped in serpentinite

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur 10mm = 1%

Magnetic Susceptibility 10mm = 1 unit

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL
EL 28/88 - AVEBURY PROSPECT
CROSS SECTION 354 630mE
A001 and A004
CURRENT INTERPRETATION

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A001and A004_MS_S

SCALE 1:2000 0 20 40 m

FIGURE No. 9

615051

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.

100mR.L.

00mR.L.

-100mR.L.

-200mR.L.

A006

A003

CLAY

CLAY

Base of weathering

CONTACT

Siliceous zone

CHERT - HORNFELS SEQUENCE

SERPENTINITE

CHERT - HORNFELS/SERPENTINITE

BASE OF ABUNDANT MAGNETITE?

SERPENTINITE WITH ABUNDANT MAGNETITE

CHERT - HORNFELS/SERPENTINITE CONTACT

CHERT - HORNFELS SEQUENCE

Pentlandite

Siliceous zone

A003
339.0m

Pyrrhotite, valleriite, mackinauwite and pentlandite

8.9% S

Narrow massive pyrrhotite vein

A006
481.5m

LEGEND

- Clay
- Claystone
- No core recovered

- Pyrrhotite
- Skarn
- Hornstone

- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?

- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

5 cm

Sulphur
10mm = 1%

Magnetic Susceptibility
10mm = 1 unit

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

CROSS SECTION 354 730mE

A003 and A006

CURRENT INTERPRETATION

COMPILED : M. McK.

DATE : May, 1999

DRAWN : G.M.B.

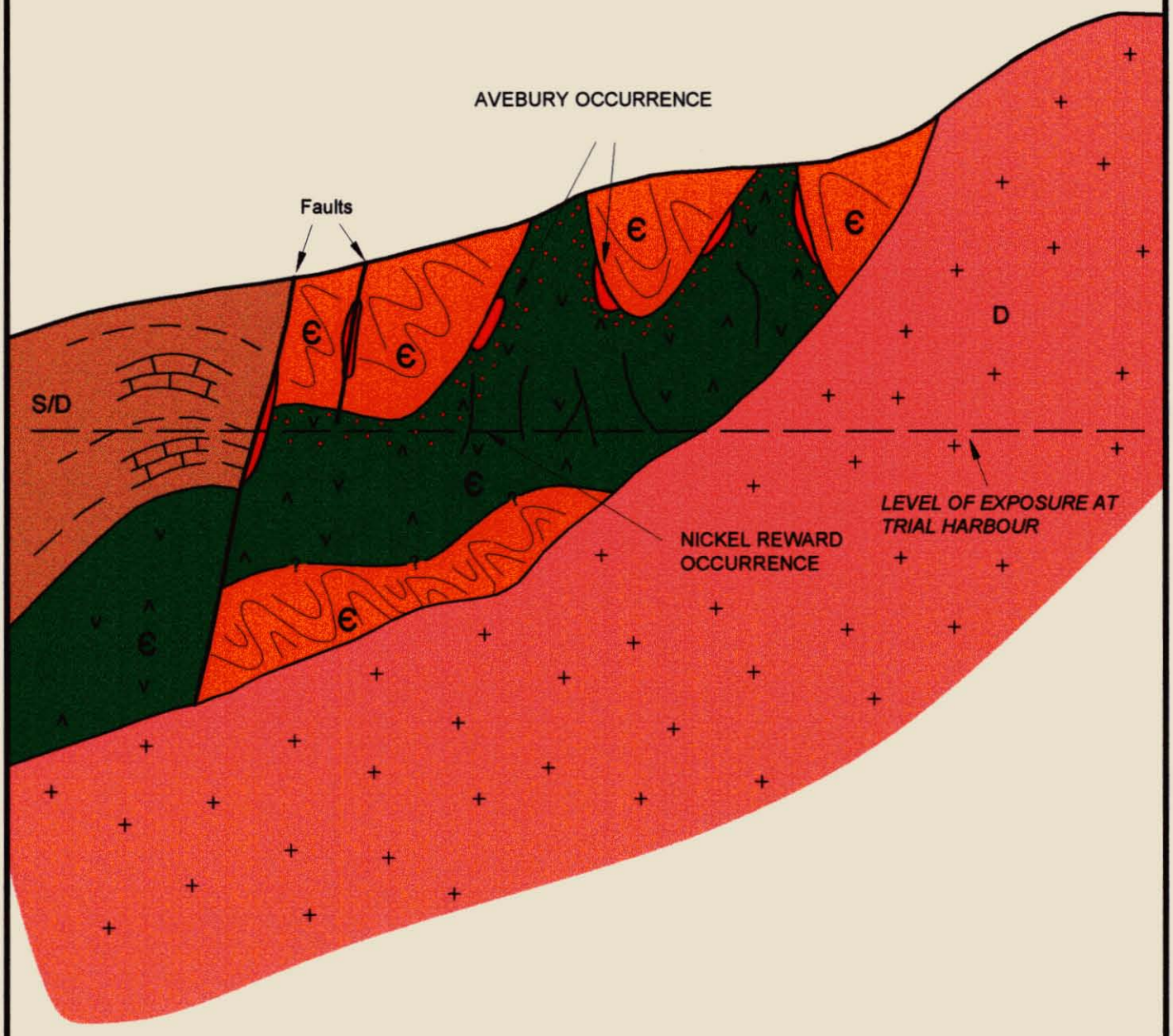
REVISIONS :

File : A003and A006_MS_S

SCALE 1:2000 0 20 40 m

FIGURE No. 10

615052



LEGEND

- Massive nickel sulphide mineralisation
- Disseminated nickel sulphide mineralisation
- D — Devonian granite
- S/D — Silurian-Devonian sedimentary rocks
- Cambrian serpentinites
- Cambrian sedimentary and metamorphic rocks

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

A GEOLOGICAL MODEL AT THE END OF 1999 DRILLING PROGRAM

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : Avebury Ni S Model_99

SCALE : Not To Scale

FIGURE No. 11

615053

5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN | 5 357 800mN

300mR.L.

200mR.L.

100mR.L.

00mR.L.

-100mR.L.

-200mR.L.

A

A005

SERPENTINITE

CHERT - HORNFELS SEQUENCE

CHERT - HORNFELS SEQUENCE

?

250m

A005
202.5m

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL

EL 28/88 - AVEBURY PROSPECT

CROSS SECTION 354 530mE

SUGGESTED DRILLHOLE

'A'

SCALE 1:2000 0 20 40 m

COMPILED : M. McK.

DATE : May, 1999

DRAWN : G.M.B.

REVISIONS :

File : A005_DDH_A

FIGURE No. 12

615054

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.
100mR.L.
00mR.L.
-100mR.L.
-200mR.L.

A001
A004
B C

CLAY
CLAY

3.9% S
11.3% S
20.4% S

CHERT - HORNFELS SEQUENCE
SERPENTINITE
CHERT - HORNFELS/SERPENTINITE CONTACT
CHERT - HORNFELS SEQUENCE
SERPENTINITE
CHERT - HORNFELS/SERPENTINITE CONTACT

A004
223.6m
A001
529.7m
500m
450m
Hole stopped in serpentinite

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Magnetic Susceptibility
10mm = 1 unit

5 cm

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL
EL 28/88 - AVEBURY PROSPECT
CROSS SECTION 354 630mE
SUGGESTED DRILLHOLES
'B' and 'C'

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A001and A004_DDH_B_C

SCALE 1:2000 0 20 40 m

FIGURE No. 13

615055

5 357 200mN | 5 357 300mN | 5 357 400mN | 5 357 500mN | 5 357 600mN | 5 357 700mN

200mR.L.
100mR.L.
00mR.L.
-100mR.L.
-200mR.L.

A006
A003
E
D
CLAY
CLAY
Base of weathering
CONTACT
BASE OF ABUNDANT MAGNETITE?
CHERT - HORNFELS/SERPENTINITE CONTACT
CHERT - HORNFELS SEQUENCE
SERPENTINITE
SERPENTINITE WITH ABUNDANT MAGNETITE
CHERT - HORNFELS SEQUENCE
CHERT - HORNFELS/SERPENTINITE
280m
225m
A003 339.0m
8.9% S
A006 481.5m
5 cm

LEGEND

- Clay
- Claystone
- No core recovered
- Pyrrhotite
- Skarn
- Hornstone
- Pentlandite
- Magnetite
- Quartz
- Chrysotilic serpentinite
- Mixed serpentinite and siliceous serpentinite
- Siliceous serpentinite
- Serpentinite
- Gabbro ?
- Breccia
- Hornfels, chert and serpentinite
- Hornfels and chert
- Hornfels
- Chert
- Limestone and chert

Sulphur
10mm = 1%

Magnetic Susceptibility
10mm = 1 unit

Allegiance Mining N.L.

McKEOWN MINING PTY LTD

ALLEGIANCE MINING NL
EL 28/88 - AVEBURY PROSPECT
CROSS SECTION 354 730mE
SUGGESTED DRILLHOLES
'D' and 'E'

COMPILED : M. McK.
DATE : May, 1999
DRAWN : G.M.B.
REVISIONS :
File : A003and A005_DDH_D_E

SCALE 1:2000 (0 20 40 m)
FIGURE No. 14

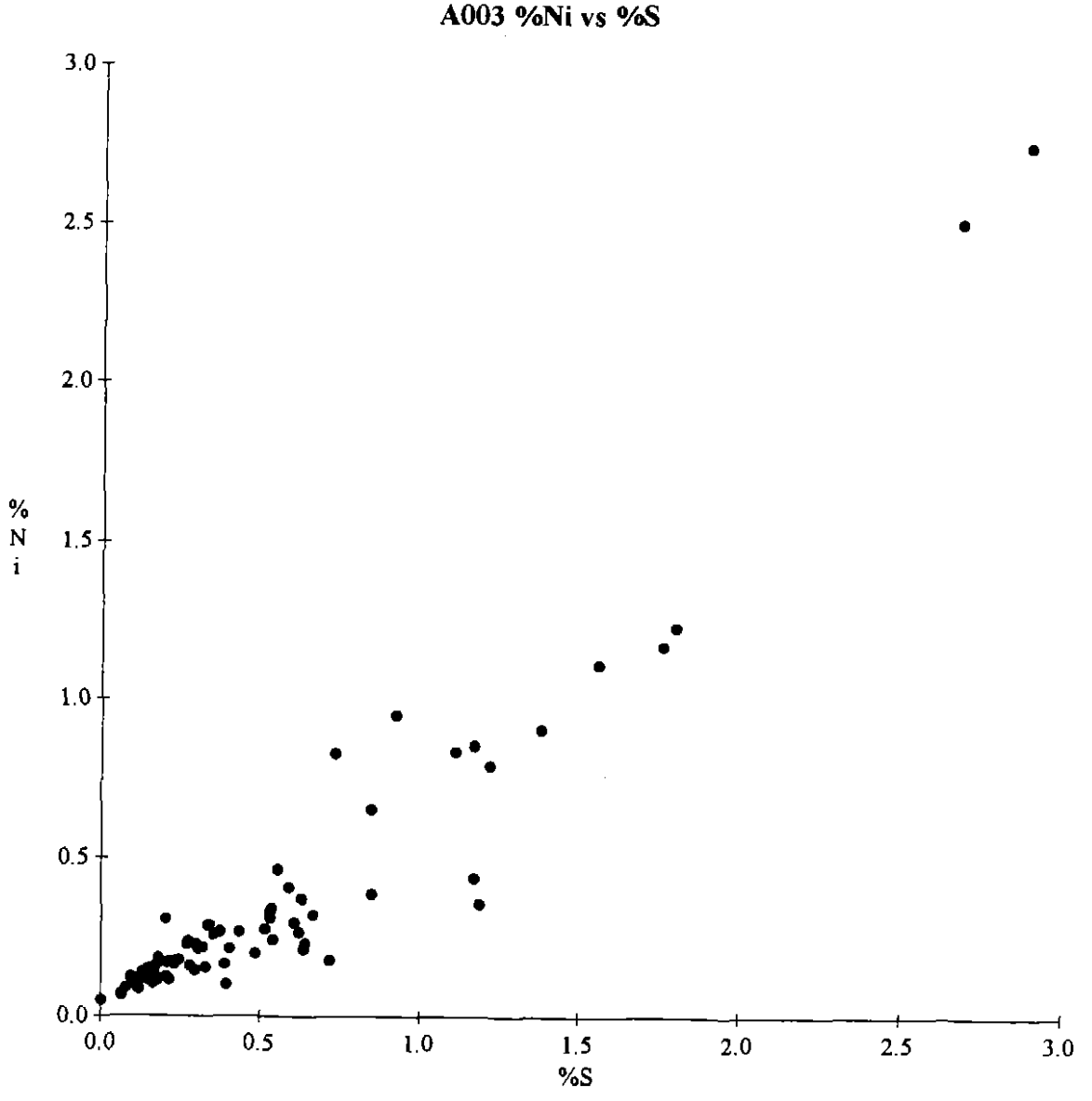


Figure 15 A003 - graph of % nickel vs % sulphur

615057

Appendix 1

Drill logs - holes A001 to A006

ALLEGIANCE MINING NL ZEEHAN JOINT VENTURE
AVEBURY PROSPECT
A001

Collar coordinates	354,648.1mE 5,357,224.9mN 152.1mRL	**Final hole depth**	**532.6m**
Collar bearing	005°		
Collar dip	-50°	**Hole details**	0.0m to 3.0m tricone
Coordinate system	AMG		3.0m to 53.8m HQ
			53.8m to 532.6m NQ

Drilled to test western end of a magnetic anomaly on the Avebury grid

Commenced	15 January 1998	**Drilled by**	Diamond Drilling Tasmania
Stopped	22 January 1998	**Logged by**	Mick McKeown (McKeown Mining)
Re-collared	9 March 1999		
Completed	24 March 1999		

SUMMARY OF RESULTS

from m	to m	description	length m	Ni	S %	Pb ppM	Zn
61.2	62.5	semi-massive pyrrhotite	1.3	0.14	11.3	75	250ppM
148.2	150.6	skarn	2.4	220ppm	0.33	315	0.40%
164.2	165.8	skarn	1.6	105ppm	0.26	145	0.40%
243.9	273.6	serepentinite	29.7	0.93%	0.89	17	103ppM
243.9	255.6	serpentinite	10.7	1.64%	1.49	20	154ppM
243.9	244.3	massive pentlandite	0.4	24.8%	20.4	33	700ppM

Down hole camera surveys

bhid	at	brg	dip
A001	0	4.8	-50.0
A001	50	4.8	-49.0
A001	100	4.8	-48.5
A001	151	4.8	-51.0
A001	202	4.8	-51.0
A001	250	4.8	-50.5
A001	300	4.8	-50.5
A001	367	4.8	-51.5
A001	423	4.8	-52.5
A001	522	4.8	-53

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	7.9	**CLAYSTONE**	0.0	3.0	0.0	0				
			3.0	4.8	1.3	72				
		Extremely broken, brown to red brown claystone (after rock) with minor brown to black brown ironstaining on fractures.	4.8	6.0	0.5	42				
			6.0	9.0	0.8	27				
		The rock fabric is generally obscure but where preserved the rock appears somewhat brecciated.								
		The contact with next interval is gradational.								
7.9	16.6	**WEATHERED HORNFELS**	9.0	10.5	1.3	87	14.6	15.6	0.01	<0.05
			10.5	12.0	1.0	67				
		Extremely broken to broken, white to dark grey hornfels with sparse to minor brown to black ironstaining on joints.	12.0	12.7	0.7	100				
			12.7	14.1	1.4	100				
			14.1	15.7	1.6	100				
		BCA is generally obscure but is typically 45 degrees towards the end of the interval.	15.7	16.7	0.9	90				
		The interval is very weathered at the start becoming fresh towards 16.6m.								
		15.1m: a 10cm zone of rock with sand size, white to green fragments: tuff?								
		The contact with the next interval is gradational.								
16.6	26.9	**CHERTY HORNFELS**	16.7	18.0	1.3	100	19.6	20.6	0.01	<0.05
			18.0	19.6	1.6	100				
		Broken mottled white, cream, light green, grey and brown cherty hornfels, slightly weathered in part with sparse brown to black brown ironstaining on fractures, and trace quartz, serpentine and iron oxides as stringers.	19.6	21.0	1.3	93				
			21.0	22.6	1.6	100				
			22.6	24.0	1.4	100				
			24.0	25.5	1.5	100				
		The original rock appears fragmental (sand size) in part.	25.5	27.0	1.5	100				

615060

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval has an hydraulically? brecciated texture in part. BCA is irregular/obscure. The contact with the next interval is sharp but irregular.								
26.9	32.0	**CHERT BRECCIA** Grey green, grey and white chert breccia with trace to sparse dark brown iron oxides on fractures and joints (after sulphides?). Fragments are up to 10cm across, some being rounded; narrow bands of chert appear to be ruptured beds. BCA is irregular/obscure. The interval is broken. The contact with the next interval is sharp but irregular.	27.0 28.1 29.4 31.0	28.1 29.4 31.0 32.5	1.1 1.3 1.6 1.5	100 100 100 100				
32.0	41.4	**LIMESTONE AND CHERT** Light to dark grey limestone and minor grey to brown and lesser red chert with common calcite as stringers and veinlets, trace to sparse pyrite on fractures and as stringers, trace to sparse pyrrhotite as stringers, blebs and small patches, sparse graphite as stringers parallel to bedding in the limestone, and sparse quartz as stringers. The interval is banded with BCA typically in the range 50 to 60 degrees.	32.5 34.0 35.6 37.2 38.8 40.4	34.0 35.6 37.2 38.8 40.4 42.0	1.5 1.6 1.6 1.6 1.6 1.6	100 100 100 100 100 100				

6150061

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is not broken.								
		The contact with the next interval is sharp at 80 degrees to the core axis.								
41.4	48.3	**CHERTY SERPENTINITIC ROCK**	42.0	43.6	1.6	100	47.4	48.3	0.03	<0.05
			43.6	45.0	1.4	100				
		Dark green hard serpentinitic rock with brown cherty patches, sparse quartz as	45.0	46.6	1.6	100				
		stringers, and rare traces of chalcopyrite visible under a hand lens.	46.6	48.0	1.4	100				
		CA is obscure.								
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
48.3	54.3	**HARD SERPENTINITE**	48.0	49.6	1.6	100	48.3	49.3	0.12	0.10
			49.6	51.0	1.4	100	49.3	50.3	0.06	<0.05
		Intermixed light green and dark green serpentinitic rock (as in the previous interval) with	51.0	52.6	1.6	100	50.3	51.3	0.06	<0.05
		with minor schorl? as black masses of acicular crystals, sparse light green serpentine	52.6	53.8	1.2	100	51.3	52.3	0.09	0.06
		as stringers and blebs, and trace chalcopyrite flecks visible under a hand lens.	53.8	55.3	1.5	100	52.3	53.3	0.13	<0.05
							53.3	54.3	0.15	<0.05
		The interval is hydraulically? brecciated in part with a suggestion of light green fragments in a dark green matrix.								
		CA is obscure.								
		The contact with the next interval is sharp at 45 degrees to the core axis.								

6150662

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
54.3	59.2	**SERPENTINITE** Mottled light to dark green serpentinite with black stringers carrying sparse pyrrhotite, minor calcite as stringers, veinlets, veins and patches, sparse apple green serpentine, trace green serpentine as stringers carrying trace pyrrhotite, trace to sparse pyrrhotite and chalcopyrite throughout, trace black sphalerite throughout, and sparse black mineral throughout. The interval is not broken. CA is obscure. The contact with the next interval is sharp but irregular.	55.3	58.3	3.0	100	54.3 55.3 56.3 57.3 58.3	55.3 56.3 57.3 58.3 59.2	0.21 0.16 0.09 0.09 0.10	0.31 0.24 0.15 0.16 0.21
59.2	61.2	**SERPENTINITE AND MINOR PYRRHOTITE** As between 54.3m and 59.2m but with minor pyrrhotite as stringers, veinlets and patches, sparse black stylolites or fine stringers carrying sparse pyrite, trace green serpentine as stringers carrying trace pyrrhotite, and trace brown garnet? patches. CA is obscure. The interval is not broken. The contact with the next interval is gradational.	58.3	61.3	3.0	100	59.2 60.2	60.2 61.2	0.12 0.15	1.75 3.97
61.2	62.5	**SEMI-MASSIVE PYRRHOTITE** Pyrrhotite with common black serpentine and sparse vuggy pyrite (marcasite?) after pyrrhotite; the pyrrhotite occurs as a crystalline mass and as veinlets through the	61.3	64.3	3.0	100	61.2	62.5	0.14	11.3

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		serpentine. CA is obscure. The interval is not broken. The contact with the next interval is sharp but irregular.								
62.5	62.9	**SERPENTINITE** Light to mid-green, hard serpentinite with trace green serpentine as stringers, trace calcite as stringers, trace disseminated pyrrhotite visible under a hand lens, and sparse black mineral as flecks. CA is generally unclear but may be about 45 degrees. The interval is not broken. The contact with the next interval is sharp but broken but may be at 45 degrees to the core axis.					62.5	63.3	0.06	0.55
62.9	63.3	**SERPENTINITE RUBBLE** Puggy green serpentinite rubble. CA is obscure. The interval is extremely broken. The contact with the next interval is gradational and broken.								

615064

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
63.3	64.9	**SERPENTINITE** Mottled dark green and lesser light green serpentinite with sparse calcite as stringers and veinlets, and trace disseminated pyrrhotite visible under a hand lens. CA is obscure. The interval is extremely broken. The contact with the next interval is gradational.	64.3	67.3	3.0	100	63.3	64.9	0.02	0.49
64.9	66.2	**SERPENTINITE WITH MINOR SULPHIDES** As between 63.3m and 64.9m but with minor pyrrhotite and pyrite as disseminations and stringers, and trace calcite as stringers. CA is obscure. The interval is broken. The contact with the next interval is gradational.					64.9	66.2	0.01	0.42
66.2	70.0	**SERPENTINITE** Dark green serpentinite with minor light green serpentine as ruptured bands less than 1cm thick, minor epidote as occasional bands and patches less than 5cm across, and minor black silicate? mineral. CA is obscure.	67.3	69.8	2.5	100	66.2 67.2 68.2 69.2	67.2 68.2 69.2 70.0	0.02 0.03 0.04 0.04	<0.05 <0.05 0.06 0.09

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is broken.								
		The contact with the next interval is gradational.								
70.0	92.3	**INTERMIXED HORNFELS, CHERT AND SERPENTINITE**	69.8	72.9	3.1	100				
			72.9	73.9	1.0	100				
		Intermixed grey fine grained hornfels, white chert and dark green serpentinite with sparse epidote as blebs near 70.0m, trace to sparse calcite and quartz as stringers, and trace disseminated pyrite on some fractures.	73.9	74.8	0.9	100				
			74.8	76.2	1.2	86				
			76.2	78.2						
			78.2	79.0	0.5	63				
		The interval has a hydraulically? brecciated texture.	79.0	80.6	1.4	88				
			80.6	81.5	0.9	100				
		CA is obscure.	81.5	83.2	0.8	47				
			83.2	83.6	0.3	75				
		The interval is extremely broken.	83.6	84.2	0.5	83				
			84.2	84.5	0.2	67				
		The contact with the next interval is gradational.	84.5	84.8	0.3	100				
			84.8	85.2	0.4	100				
			85.2	86.6	1.4	100				
			86.6	88.3	1.7	100				
			88.3	88.5	0.1	50				
			88.5	91.3	2.7	96				
			91.3	92.4	1.1	100				
92.3	103.0	**INTERMIXED CHERT AND SERPENTINITIC ROCK**	92.4	94.3	1.9	100				
			94.3	95.9	1.6	100				
		Intermixed brown chert, dark green serpentinitic rock and minor white chert with trace quartz as stringers and veinlets, and trace disseminated pyrrhotite.	95.9	98.9	3.0	100				
			98.9	100.3	1.4	100				
			100.3	103.3	3.0	100				

615066

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PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval has a mottled, hydraulically? brecciated texture. BCA is irregular. The interval is extremely broken. The contact with the next interval is gradational.								
103.0	109.7	**INTERMIXED CHERT AND SERPENTINITIC ROCK** Intermixed brown chert and hard, green serpentinitic rock with trace to sparse pyrite and pyrrhotite as stringers and flecks, trace chalcopyrite as flecks, and rare vuggy quartz stringers. The interval has a mottled appearance and bedding has been ruptured. BCA is obscure. The interval is broken. The contact with the next interval is sharp but broken.	103.3 106.3	106.3 109.3	3.0 3.0	100 100				
109.7	113.6	**INTERMIXED CHERT AND MINOR SERPENTINITIC ROCK** As between 109.7m and 113.6m but with a more brecciated texture. The interval is very broken. The contact with the next interval is sharp but broken.	109.3 110.7 112.3	110.7 112.3 113.4	1.4 1.6 1.1	100 100 100				

615067

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PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
113.6	117.5	**BRECCIATED CHERT: FAULT?**	113.4	115.3	2.1	111				
			115.3	118.3	2.5	83				
		As between 109.7m and 113.6m but more brecciated: fault?								
		The interval is extremely broken.								
		The contact with the next interval is sharp but broken.								
117.5	126.0	**CHERT**	118.3	119.2	0.9	100				
			119.2	121.3	2.1	100				
		Brown and minor grey white chert and minor green serpentinitic rock with sparse to minor pyrite and pyrrhotite as stringers and flecks, and minor chlorite? as patches.	121.3	124.3	3.0	100				
		The interval has a brecciated texture.								
		BCA is typically 30 degrees.								
		The interval is broken.								
126.0	136.5	**CHERT**	124.3	127.3	3.0	100				
			127.3	130.3	3.0	100				
		Grey white, green and minor brown chert and lesser intermixed hard serpentinitic rock with sparse quartz and schorl as irregular stringers, trace calcite as stringers, and trace pyrrhotite and chalcopyrite as rare disseminations, e.g. at 131.2m.	130.3	133.3	3.0	100				
			133.3	136.3	3.0	100				
		The interval has a brecciated texture.								
		BCA is typically 45 degrees.								
		The interval is not broken.								

615068

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The contact with the next interval is gradational.								
136.5	145.0	**BRECCIATED CHERT**	136.3	139.3	3.0	100				
			139.3	142.3	3.0	100				
		Grey to brown, brecciated chert, slightly vuggy in part, with sparse chlorite as patches, sparse serpentine as veinlets and on fractures, and sparse calcite as stringers and as matrix to bands of breccia.	142.3	145.3	3.0	100				
		BCA is obscure.								
		The interval is broken.								
145.0	146.6	**BRECCIA**	145.3	148.3	3.0	100				
		White chert fragments in a chloritised matrix.								
		The interval is broken.								
		The contact with the next interval is sharp but broken.								
146.6	148.2	**BRECCIATED CHERT**								
		Brecciated grey, cream and white chert with trace to sparse axinite as veinlets and patches, trace calcite as veinlets, sparse chlorite as patches, sparse ragged garnet? crystals up to 4mm across, and trace pyrrhotite?								
		146.8m to 147.3m: calcite vein with rock fragments and pug; CA is 20 degrees.								
		BCA is obscure.								

615069

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is extremely broken.								
		The contact with the next interval is sharp at 40 degrees to the core axis.								
148.2	150.6	**LIMESTONE BRECCIA WITH SKARN**	148.3	151.3	3.0	100	148.2	149.4	0.02	0.46
							149.4	150.6	0.02	0.21
		Serpentinised limestone fragments in an axinite/schorl matrix with sparse vuggy quartz as stringers.								
		BCA is obscure.								
		The interval is extremely broken.								
		The contact with the next interval is sharp but broken.								
150.6	160.2	**BRECCIATED CHERT**	151.3	154.3	3.0	100	159.2	160.2	0.01	<0.05
			154.3	157.3	3.0	100				
		Brecciated cream to green chert with minor serpentinitic veins and bands and sparse slightly vuggy quartz as stringers and veinlets.	157.3	160.3	3.0	100				
		BCA is obscure.								
		The interval is extremely broken especially in the serpentinitic bands.								
		The contact with the next interval is sharp but broken.								
160.2	165.8	**AXINITE SKARN**	160.3	163.3	3.0	100	160.2	161.2	0.02	0.06
			163.3	166.3	3.0	100	161.2	162.2	0.01	0.13
		Cream to green (chloritised?) brecciated chert with common axinite as veins and					162.2	163.2	0.02	<0.05

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PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		patches with sparse brown sphalerite as flecks, trace galena as spots, and sparse schorl as small crystals up to 4mm across.					163.2	164.2	0.02	0.16
							164.2	165.8	0.01	0.26
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is gradational.								
165.8	169.6	**BRECCIATED CHERT**	166.3	167.8	1.5	100	165.8	166.8	0.02	<0.05
			167.8	169.3	1.5	100	166.8	167.8	0.02	<0.05
		As between 150.6m and 160.2m					167.8	169.6	0.01	<0.05
		The interval is broken.								
		The contact with the next interval is gradational.								
169.6	179.8	**AXINITE SKARN**	169.3	172.3	3.0	100	169.6	170.6	0.02	<0.05
			172.3	175.3	3.0	100	170.6	171.6	0.01	<0.05
		As between 160.2m and 165.8m but with minor schorl crystals as patches up to 5cm across.	175.3	178.3	3.0	100	171.6	172.6	0.01	<0.05
							172.6	173.6	0.02	<0.05
							173.6	174.6	0.01	<0.05
		The interval is broken.					174.6	175.6	0.01	<0.05
							175.6	176.6	0.01	<0.05
		The contact with the next interval is gradational.					176.6	177.6	0.02	<0.05
							177.6	178.6	0.02	<0.05
179.8	197.6	**CHERT AND HORNFELS WITH MINOR SKARN**	178.3	181.3	3.0	100	178.6	179.8	0.01	<0.05
			181.3	184.3	3.0	100	179.8	180.8	0.02	<0.05
		Cream to green chert with green serpentinitic hornfels and minor skarn veining becoming less intense towards 197.6m; the skarn consists of axinite and quartz with	184.3	187.3	3.0	100				
			187.3	190.3	3.0	100				

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HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		trace schorl and minor serpentine.	190.3	193.3	3.0	100				
			193.3	196.3	3.0	100				
		The chert has a mottled brecciated texture.								
		BCA is obscure.								
		The interval is broken.								
197.6	198.2	**AXINITE SKARN**	196.3	199.3	3.0	100				
		Quartz, chloritised? in part, with common axinite, and minor schorl crystals as patches up to 5cm across.								
		CA is obscure.								
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
198.2	208.4	**CHERT AND HORNFELS**	199.3	202.3	3.0	100				
			202.3	205.3	3.0	100				
		As between 179.8m and 197.6m with no skarn veining but with sparse calcite and quartz as stringers and veinlets.	205.3	208.3	3.0	100				
		BCA is irregular but averages 45 degrees.								
		The interval is broken.								
		The contact with the next interval is sharp at 70 degrees to the core axis.								

615072

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
208.4	213.0	**HORNFELSED ROCK**	208.3	211.3	3.0	100				
			211.3	214.3	3.0	100				
		White spotted, green hornfels with occasional large fragments up to 5cm across, rare axinite/serpentine stringers, and trace schorl as fine crystals.								
		BCA is obscure.								
		The interval is not broken.								
		The contact with the next interval is gradational.								
213.0	223.9	**CHERT WITH SPARSE SKARN**	214.3	217.3	3.0	100				
			217.3	220.3	3.0	100				
		Cream, grey and green chert with sparse axinite and lesser serpentine as veining and patches.	220.3	223.3	3.0	100				
		The interval has a brecciated texture.								
		BCA is obscure.								
		The interval is not broken.								
		The contact with the next interval is gradational.								
223.9	225.8	**HORNFELS**	223.3	226.3	3.0	100				
		Green brown chloritic? cherty hornfels with trace to sparse disseminated pyrrhotite.								
		BCA is obscure.								

615073

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is not broken.								
		The contact with the next interval is sharp but irregular.								
225.8	234.8	**ALTERED CRYSTALLINE ROCK: GABBRO?**	226.3	229.3	3.0	100				
			229.3	232.3	3.0	100				
		Very altered, dark green brown crystalline rock with common quartz as stringers, veinlets and patches, and sparse green serpentine on joints; this could be an altered gabbro.	232.3	235.3	3.0	100				
		The interval has a brecciated texture in part.								
		CA is obscure.								
		The interval is not broken.								
		The contact with the next interval is sharp but irregular.								
234.8	243.9	**HORNFELS**	235.3	238.3	3.0	100	242.9	243.9	0.13	0.06
			238.3	241.3	3.0	100				
		As between 223.9m and 225.8m plus common quartz as stringers and veinlets, sparse green serpentine on fractures, and sparse to minor flaky chlorite as patches up to 5cm across.	241.3	244.3	3.0	100				
		BCA is obscure.								
		The interval is not broken.								
		The contact with the next interval is sharp but irregular.								

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
243.9	244.3	**MASSIVE PENTLANDITE**					243.9	244.3	15.0	20.4
		Massive slightly magnetic pentlandite.								
		CA is obscure.								
		The interval is not broken.								
		The contact with the next interval is sharp but irregular.								
244.3	247.6	**SERPENTINITE**	244.3	247.3	3.0	100	244.3	245.3	0.33	0.67
							245.3	246.3	0.22	0.32
		Massive light green serpentinite with sparse to minor pentlandite as disseminations and stringers.					246.3	247.6	0.32	0.53
		CA is obscure.								
		The interval is not broken.								
		The contact with the next interval is sharp at 70 degrees to the core axis and is marked by 5cm of serpentinite breccia.								
247.6	316.3	**SERPENTINITE**	247.3	249.4	2.1	100	247.6	248.6	0.41	0.59
			249.4	250.3	0.9	100	248.6	249.6	0.23	0.30
		Black serpentinite and a zone with light green serpentinite, with sparse to minor	250.3	253.3	3.0	100	249.6	250.6	1.23	1.80
		pentlandite as disseminations, blebs and patches, sparse calcite and quartz as stingers	253.3	256.3	3.0	100	250.6	251.6	1.11	1.56
		and veinlets.	256.3	259.3	3.0	100	251.6	252.6	0.86	1.17
			259.3	262.3	3.0	100	252.6	253.6	0.84	1.11
		271.6m to 275.6m: intermixed black and harder white serpentinite; a brecciated texture	262.3	265.3	3.0	100	253.6	254.6	0.66	0.85
		suggests black serpentinite fragments in a white serpentinite matrix, with minor	265.3	268.3	3.0	100	254.6	255.6	0.24	0.28

615075

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION
		magnetite crystals throughout, and sparse to minor pyrrhotite as disseminations, stringers and patches.
		CA is obscure.
		The interval is not broken.
		HOLE ORIGINALLY STOPPED AT 316.3m.
316.3	391.7	**SERPENTINITE**
		Faintly mottled, dark green to black serpentinite with minor magnetite as flecks, blebs, stringers and small patches up to 10cm across, trace pentlandite as ragged flecks associated with magnetite, trace white serpentine as stringers, trace green serpentine as rare veinlets, and rare bright green clots (<1cm across) which may be remnant olivine crystals.
		356.3m: serpentine/magnetite vein, 10cm true thickness at 80 degrees to the core axis. 375.6m: 10cm broken zone of dark serpentine breccia with light green serpentine matrix.
		BCA is obscure.
		The interval is generally unbroken but broken in part near green serpentine veinlets.
		The contact with the next interval is sharp but irregular.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
268.3	271.3	3.0	100	255.6	256.6	0.23	0.27
271.3	274.3	3.0	100	256.6	257.6	0.47	0.56
274.3	277.3	3.0	100	257.6	258.6	0.29	0.34
277.3	280.3	3.0	100	258.6	259.6	0.29	0.34
280.3	283.3	3.0	100	259.6	260.6	0.16	0.16
283.3	286.3	3.0	100	260.6	261.6	0.15	0.15
286.3	289.3	3.0	100	261.6	262.6	0.17	0.18
289.3	292.3	3.0	100	262.6	263.6	0.19	0.18
292.3	295.3	3.0	100	263.6	264.6	0.16	0.17
295.3	298.3	3.0	100	264.6	265.6	0.17	0.21
298.3	301.3	3.0	100	265.6	266.6	0.35	0.54
301.3	304.3	3.0	100	266.6	267.6	1.17	1.76
304.3	307.3	3.0	100	267.6	268.6	0.26	0.36
307.3	310.3	3.0	100	268.6	269.6	0.18	0.25
310.3	313.3	3.0	100	269.6	270.6	0.34	0.53
313.3	316.3	3.0	100	270.6	271.6	0.91	1.38
316.3	316.7	0.4	100	271.6	272.6	0.27	0.38
316.7	319.7	3.0	100	272.6	273.6	0.80	1.22
319.7	322.7	3.0	100	273.6	274.6	0.15	0.30
322.7	325.4	2.7	100	274.6	275.6	0.22	0.64
325.4	328.1	2.7	100	275.6	277.3	0.12	0.22
328.1	330.7	2.6	100	277.3	278.3	0.12	0.18
330.7	333.8	3.1	100	278.3	279.3	0.12	0.18
333.8	336.9	3.1	100	279.3	280.3	0.18	0.22
336.9	340.0	3.1	100	280.3	281.3	0.07	0.07
340.0	343.1	3.1	100	281.3	282.3	0.07	0.07
343.1	346.1	3.0	100	282.3	283.3	0.05	<0.05
346.1	349.2	3.1	100	283.3	284.3	0.10	0.11
349.2	352.3	3.1	100	284.3	285.3	0.11	0.17
352.3	355.3	3.0	100	285.3	286.3	0.27	0.44

615076

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION
391.7	401.2	**OCCASIONALLY SILICEOUS SERPENTINITE**

As between 316.3m and 391.7m but with occasional light green siliceous serpentinite zones, with sparse to minor magnetite as flecks, blebs and small patches, trace pentlandite throughout as ragged flecks associated with magnetite, becoming more common towards 401.2m where magnetite is also more abundant, and trace quartz as stringers.

BCA is obscure.

The interval is generally unbroken but broken in part near green serpentine veinlets.

The contact with the next interval is sharp but irregular.

from m	to m	rec m	rec %
355.3	358.2	2.9	100
358.2	361.3	3.1	100
361.3	363.9	2.6	100
363.9	366.3	2.4	100
366.3	367.7	1.4	100
367.7	370.6	2.9	100
370.6	373.5	2.9	100
373.5	376.7	3.2	100
376.7	379.5	2.8	100
379.5	382.7	3.2	100
382.7	385.7	3.0	100
385.7	388.7	3.0	100
388.7	391.3	2.6	100
391.3	394.4	3.1	100
394.4	397.4	3.0	100
397.4	400.5	3.1	100

from m	to m	Ni %	S %
286.3	287.3	0.09	0.12
287.3	288.3	0.38	0.63
288.3	289.3	0.09	0.08
289.3	290.3	0.12	0.15
290.3	291.3	0.09	0.12
291.3	292.3	0.12	0.18
292.3	293.3	0.22	0.31
293.3	294.3	0.13	0.21
294.3	295.3	0.13	0.17
295.3	296.3	0.12	0.15
296.3	297.3	0.16	0.28
297.3	298.3	0.17	0.39
298.3	299.3	0.24	0.64
299.3	300.3	0.20	0.49
300.3	301.3	0.39	0.85
301.3	302.3	0.27	0.62
302.3	303.3	0.25	0.54
303.3	304.3	0.22	0.41
304.3	305.3	0.17	0.23
305.3	306.3	0.16	0.33
306.3	307.3	0.28	0.52
307.3	308.3	0.18	0.23
308.3	309.3	0.13	0.14
309.3	310.3	0.12	0.13
310.3	311.3	0.14	0.13
311.3	312.3	0.13	0.15
312.3	313.3	0.14	0.13
313.3	314.3	0.12	0.13

615077

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
401.2	401.9	**SILICEOUS ZONE**					314.3	315.3	0.13	0.10
							315.3	316.3	0.12	0.10
		401.2m to 401.5m: mottled green and pink siliceous rock with minor vuggy milky white quartz as stringers and patches, pink colour may be due to presence of triplite, with sparse cassiterite? as small patches.								
		401.5m to 401.7m: semi-massive schorl and intermixed pentlandite with interstitial white silicate mineral (tremolite?), and sparse magnetite as stringers and flecks.								
		401.7m to 401.9m: as between 401.2m and 401.5m.								
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is gradational.								
401.9	432.3	**SERPENTINITE**	400.5	403.5	3.0	100				
			403.5	406.5	3.0	100				
		Very dark olive green serpentinite with minor magnetite as stringers, flecks and small patches, trace pentlandite as disseminations and flecks associated with magnetite, and sparse green-white chrysotilic serpentine as stringers and veinlets.	406.5	409.5	3.0	100				
			409.5	412.5	3.0	100				
			412.5	414.6	2.1	100				
			414.6	417.7	3.1	100				
		Occasional remnant feldspar (from original rock) clasts occur from 430.5m to 432.3m.	417.7	420.8	3.1	100				
			420.8	423.9	3.1	100				
		The interval is partly broken where serpentine veinlets run along the core axis.	423.9	424.9	1.0	100				
			424.9	428.0	3.1	100				
		BCA is obscure.	428.0	430.5	2.5	100				
			430.5	433.5	3.0	100				
		The contact with the next interval is sharp but irregular.								

615073

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
432.3	439.0	**SILICEOUS ROCK** Intermixed grey and grey-green siliceous rock (calc-silicate rock) and lesser black siliceous rock (siliceous serpentinite?). calc-silicate rock: slightly vuggy rock with minor magnetite as flecks and small patches, sparse axinite and schorl in part, trace pentlandite as rare disseminations, and some small serpentinitic zones; the interval is coarsely crystalline in part. siliceous serpentinite: siliceous serpentinite with common magnetite as flecks and small patches. BCA is obscure. The whole interval is broken. The contact with the next interval is sharp but irregular.	433.5 436.5	436.5 439.5	3.0 3.0	100 100				
439.0	465.7	**SERPENTINITE** As between 401.9m and 432.3m with minor magnetite as flecks and patches, trace pentlandite as flecks throughout, sparse serpentine stringers becoming less common towards 465.7m. BCA is obscure. The interval is generally unbroken. The contact with the next interval is gradational (mineralogy).	439.5 442.5 445.5 448.5 451.5 454.5 457.6 463.7	442.5 445.5 448.5 451.5 454.5 457.6 460.7 466.7	3.0 3.0 3.0 3.0 3.0 3.1 3.1 3.0	100 100 100 100 100 100 100 100				

615079

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION
465.7	502.9	**SERPENTINITE** Very dark olive green to black serpentinite with minor to common magnetite as flecks, blebs and small patches throughout, sparse pentlandite as disseminations and flecks accumulating to small patches but becoming less abundant towards 502.9m, and trace white serpentine as rare stringers. 494.3m to 494.4m: puggy serpentinite zone. BCA is obscure. The interval is unbroken except from 494.3m to 494.4m. The contact with the next interval is sharp at 45 degrees to the core axis.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
466.7	469.7	3.0	100	465.7	466.7	0.236	0.4
469.7	472.7	3.0	100	466.7	467.7	0.429	0.7
472.7	475.7	3.0	100	467.7	468.7	0.203	0.3
475.7	478.7	3.0	100	468.7	469.7	0.269	0.4
478.7	481.7	3.0	100	469.7	470.7	0.336	0.5
481.7	484.0	2.3	100	470.7	471.7	0.293	0.4
484.0	487.1	3.1	100	471.7	472.7	0.322	0.4
487.1	489.8	2.7	100	472.7	473.7	0.357	0.6
489.8	492.4	2.6	100	473.7	474.7	0.606	1.1
492.4	495.5	3.1	100	474.7	475.7	0.791	1.4
495.5	497.8	2.3	100	475.7	476.7	0.754	1.2
497.8	500.9	3.1	100	476.7	477.7	1.34	2
500.9	504.0	3.1	100	477.7	478.7	0.562	0.8
				478.7	479.7	0.492	0.7
				479.7	480.7	0.566	0.7
				480.7	481.7	0.186	<0.25
				481.7	482.7	0.231	0.3
				482.7	483.7	0.175	<0.25
				483.7	484.7	0.171	<0.25
				484.7	485.7	0.16	<0.25
				485.7	486.7	0.157	0.3
				486.7	487.7	0.177	0.3
				487.7	488.7	0.693	1
				488.7	489.7	0.557	1
				489.7	490.7	0.153	<0.25
				490.7	491.7	0.153	0.3
				491.7	492.7	0.13	0.3
				492.7	493.7	0.137	<0.25
				493.7	494.7	0.139	<0.25

615080

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
							494.7	495.7	0.16	<0.25
							495.7	496.7	0.155	<0.25
							496.7	497.7	0.128	<0.25
							497.7	498.7	0.106	<0.25
							498.7	499.7	0.115	<0.25
							499.7	500.7	0.116	<0.25
							500.7	501.7	0.214	0.3
							501.7	502.9	0.112	<0.25
502.9	506.1	**SILICEOUS ROCK**	504.0	506.0	2.0	100	502.9	503.9	0.117	<0.25
							503.9	504.9	0.392	0.9
		Green and grey-green siliceous rock with trace schorl as flecks, trace to sparse pentlandite as disseminations and flecks, trace to sparse red sphalerite as flecks, trace crystalline pyrite on joints, and trace specular haematite?					504.9	506.1	0.192	0.5
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
506.1	532.6	**SERPENTINITE**	506.0	506.9	0.9	100	506.1	507.1	0.177	0.5
			506.9	510.0	3.1	100	507.1	508.1	0.158	0.6
		Very dark olive green to black serpentinite with sparse to minor magnetite as flecks, trace to sparse pentlandite as rare flecks and stringers, and trace to sparse white serpentine as stringers.	510.0	512.7	2.7	100	508.1	509.1	0.118	0.3
			512.7	515.9	3.2	100	509.1	510.1	0.092	<0.25
			515.9	519.1	3.2	100	510.1	511.1	0.105	<0.25
		In part, there is a brecciated fabric of black serpentinite fragments up to 1cm across in slightly lighter coloured matrix.	519.1	522.0	2.9	100	511.1	512.1	0.130	<0.25
			522.0	523.7	1.7	100	512.1	513.1	0.177	0.4
			523.7	526.7	3.0	100	513.1	514.1	0.230	0.4
			526.7	529.7	3.0	100	514.1	515.1	0.151	0.3

615081

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A001

from m	to m	DESCRIPTION
		BCA is obscure.
		The interval is generally unbroken.
		END OF HOLE AT 532.6m.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
529.7	532.6	2.9	100	515.1	516.1	0.144	<0.25
				516.1	517.1	0.158	0.3
				517.1	518.1	0.255	0.5
				518.1	519.1	0.157	0.3
				519.1	520.1	0.149	<0.25
				520.1	521.1	0.132	0.4
				521.1	522.1	0.144	<0.25
				522.1	523.1	0.160	0.3
				523.1	524.1	0.226	0.6
				524.1	525.1	0.181	0.6
				525.1	526.1	0.146	0.3
				526.1	527.1	0.158	0.3
				527.1	528.1	0.205	0.4
				528.1	529.1	0.255	0.7
				529.1	530.1	0.214	0.6
				530.1	531.1	0.203	0.7
				531.1	532.6	0.127	0.4

615082

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	14.6	15.6	1.0	<1	8	0.0030	0.0057	0.0100	0.0025	0.0000	0.0057
A001	19.6	20.6	1.0	<1	4	0.0022	0.0023	0.0055	0.0015	0.0000	0.0053
A001	47.4	48.3	0.9	<1	12	0.0051	0.0000	0.0320	0.0005	0.0000	0.0057
A001	48.3	49.3	1.0	7	300	0.0050	0.0007	0.1200	0.0350	0.1000	0.0400
A001	49.3	50.3	1.0	<1	20	0.0054	0.0017	0.0550	0.0060	0.0000	0.0145
A001	50.3	51.3	1.0	<1	24	0.0065	0.0130	0.0550	0.0010	0.0000	0.0105
A001	51.3	52.3	1.0	<1	34	0.0078	0.0170	0.0900	0.0015	0.0550	0.0195
A001	52.3	53.3	1.0	<1	4	0.0099	0.0057	0.1300	0.0015	0.0000	0.0380
A001	53.3	54.3	1.0	<1	38	0.0110	0.0004	0.1500	<0.0005	0.0000	0.0140
A001	54.3	55.3	1.0	6	28	0.0089	0.0240	0.2050	0.0700	0.3050	0.1350
A001	55.3	56.3	1.0	9	14	0.0076	0.0135	0.1550	0.1750	0.2350	0.0800
A001	56.3	57.3	1.0	6	4	0.0051	0.0026	0.0850	0.1400	0.1500	0.0750
A001	57.3	58.3	1.0	9	18	0.0033	0.0004	0.0850	0.1550	0.1550	0.0550
A001	58.3	59.2	0.9	5	46	0.0035	0.0052	0.1000	0.0950	0.2100	0.1150
A001	59.2	60.2	1.0	13	54	0.0052	0.0240	0.1150	0.0750	1.7500	0.1300
A001	60.2	61.2	1.0	4	32	0.0067	0.0430	0.1450	0.0230	3.9700	0.0900
A001	61.2	62.5	1.3	3	52	0.0077	0.0350	0.1400	0.0075	11.3000	0.0250
A001	62.5	63.3	0.8	1	20	0.0053	0.0054	0.0550	0.0130	0.5450	0.0430
A001	63.3	64.9	1.6	1	6	0.0076	0.0430	0.0200	0.0330	0.4850	0.1200
A001	64.9	66.2	1.3	<1	8	0.0080	0.0130	0.0145	0.0140	0.4150	0.0750
A001	66.2	67.2	1.0	<1	4	0.0110	0.0007	0.0240	0.0100	0.0000	0.0310
A001	67.2	68.2	1.0	<1	4	0.0089	0.0003	0.0270	0.0015	0.0000	0.0120
A001	68.2	69.2	1.0	<1	6	0.0085	0.0046	0.0370	0.0015	0.0600	0.0140
A001	69.2	70.2	1.0	<1	4	0.0081	0.0050	0.0350	0.0030	0.0850	0.0330
A001	148.2	149.4	1.2	5	14	0.0046	0.0082	0.0210	0.0350	0.4600	0.5850
A001	149.4	150.6	1.2	1	20	0.0043	0.0026	0.0230	0.0280	0.2050	0.2050
A001	159.2	160.2	1.0	<1	10	0.0032	0.0006	0.0105	0.0055	0.0000	0.0330

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	160.2	161.2	1.0	<1	8	0.0031	0.0019	0.0150	0.0185	0.0550	0.0700
A001	161.2	162.2	1.0	<1	12	0.0023	0.0029	0.0077	0.0550	0.1300	0.1600
A001	162.2	163.2	1.0	<1	8	0.0037	0.0003	0.0170	0.0020	0.0000	0.0079
A001	163.2	164.2	1.0	<1	8	0.0033	0.0023	0.0160	0.0140	0.1550	0.2200
A001	164.2	165.8	1.6	<1	8	0.0023	0.0025	0.0105	0.0145	0.2600	0.3950
A001	165.8	166.8	1.0	<1	6	0.0030	0.0004	0.0185	0.0030	0.0000	0.0290
A001	166.8	167.8	1.0	<1	12	0.0028	0.0016	0.0150	0.0075	0.0000	0.0550
A001	167.8	169.6	1.8	<1	8	0.0027	0.0004	0.0135	0.0065	0.0000	0.0900
A001	169.6	170.6	1.0	<1	14	0.0020	<0.0002	0.0155	0.0015	0.0000	0.0063
A001	170.6	171.6	1.0	<1	8	0.0030	0.0003	0.0145	0.0040	0.0000	0.0420
A001	171.6	172.6	1.0	<1	12	0.0023	0.0002	0.0145	0.0025	0.0000	0.0105
A001	172.6	173.6	1.0	<1	6	0.0025	<0.0002	0.0195	0.0005	0.0000	0.0076
A001	173.6	174.6	1.0	<1	10	0.0022	0.0003	0.0120	0.0005	0.0000	0.0059
A001	174.6	175.6	1.0	<1	8	0.0017	0.0004	0.0094	0.0010	0.0000	0.0120
A001	175.6	176.6	1.0	<1	12	0.0022	0.0012	0.0130	0.0050	0.0000	0.0650
A001	176.6	177.6	1.0	<1	6	0.0026	0.0005	0.0220	0.0085	0.0000	0.0097
A001	177.6	178.6	1.0	<1	10	0.0022	0.0003	0.0180	<0.0005	0.0000	0.0600
A001	178.6	179.8	1.2	<1	8	0.0022	0.0012	0.0115	0.0015	0.0000	0.0700
A001	179.8	180.8	1.0	<1	12	0.0024	0.0004	0.0190	0.0050	0.0000	0.0145
A001	242.9	243.9	1.0	<1	42	0.0046	0.0002	0.155	<0.0005	0.0600	0.0086
A001	243.9	244.3	0.4	1	64	0.3400	0.1150	24.8	<0.0005	20.40	0.0700
A001	244.3	245.3	1.0	<1	6	0.0072	0.0029	0.560	0.0010	0.6650	0.0047
A001	245.3	246.3	1.0	<1	4	0.0050	0.0017	0.310	<0.0005	0.3200	0.0034
A001	246.3	247.6	1.3	<1	8	0.0074	0.0015	0.460	<0.0005	0.5300	0.0038
A001	247.6	248.6	1.0	<1	14	0.0115	0.0017	0.610	0.0010	0.5900	0.0071
A001	248.6	249.6	1.0	<1	10	0.0068	0.0012	0.310	0.0015	0.3000	0.0086
A001	249.6	250.6	1.0	<1	24	0.0270	0.0055	1.62	0.0155	1.80	0.0330

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	250.6	251.6	1.0	<1	22	0.0240	0.0057	1.40	0.0050	1.56	0.0185
A001	251.6	252.6	1.0	<1	26	0.0185	0.0035	1.10	0.0025	1.17	0.0165
A001	252.6	253.6	1.0	<1	32	0.0190	0.0065	1.06	0.0095	1.11	0.0270
A001	253.6	254.6	1.0	<1	32	0.0145	0.0014	0.810	0.0020	0.8450	0.0150
A001	254.6	255.6	1.0	<1	26	0.0076	0.0002	0.870	0.0005	0.2750	0.0130
A001	255.6	256.6	1.0	<1	14	0.0074	0.0002	0.270	0.0010	0.2700	0.0065
A001	256.6	257.6	1.0	<1	18	0.0115	0.0003	0.575	0.0015	0.5550	0.0093
A001	257.6	258.6	1.0	<1	16	0.0085	0.0003	0.370	0.0015	0.3350	0.0082
A001	258.6	259.6	1.0	<1	14	0.0086	0.0006	0.345	0.0010	0.3400	0.0110
A001	259.6	260.6	1.0	<1	12	0.0061	0.0002	0.200	0.0005	0.1600	0.0057
A001	260.6	261.6	1.0	<1	12	0.0064	<0.0002	0.170	<0.0005	0.1450	0.0037
A001	261.6	262.6	1.0	<1	14	0.0070	<0.0002	0.200	<0.0005	0.1800	0.0051
A001	262.6	263.6	1.0	<1	16	0.0064	<0.0002	0.240	0.0010	0.1800	0.0038
A001	263.6	264.6	1.0	<1	18	0.0060	<0.0002	0.235	<0.0005	0.1700	0.0025
A001	264.6	265.6	1.0	<1	16	0.0064	0.0003	0.235	<0.0005	0.2100	0.0039
A001	265.6	266.6	1.0	<1	16	0.0094	0.0021	0.460	<0.0005	0.5350	0.0075
A001	266.6	267.6	1.0	<1	26	0.0240	0.0028	1.48	0.0010	1.76	0.0105
A001	267.6	268.6	1.0	<1	20	0.0079	0.0006	0.360	0.0005	0.3550	0.0105
A001	268.6	269.6	1.0	<1	14	0.0065	0.0004	0.235	0.0005	0.2450	0.0050
A001	269.6	270.6	1.0	<1	20	0.0096	0.0016	0.415	0.0005	0.5300	0.0090
A001	270.6	271.6	1.0	<1	16	0.0210	0.0026	1.07	0.0005	1.38	0.0115
A001	271.6	272.6	1.0	<1	10	0.0065	0.0008	0.350	<0.0005	0.3750	0.0058
A001	272.6	273.6	1.0	<1	10	0.0190	0.0024	1.17	0.0010	1.22	0.0067
A001	273.6	274.6	1.0	<1	14	0.0060	0.0007	0.1450	<0.0005	0.2950	0.0056
A001	274.6	275.6	1.0	<1	18	0.0070	0.0015	0.2150	0.0005	0.6350	0.0041
A001	275.6	277.3	1.7	<1	10	0.0058	0.0007	0.1150	0.0005	0.2150	0.0050
A001	277.3	278.3	1.0	<1	12	0.0061	0.0003	0.1150	0.0005	0.1750	0.0049

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	278.3	279.3	1.0	<1	10	0.0067	<0.0002	0.1200	<0.0005	0.1750	0.0028
A001	279.3	280.3	1.0	<1	8	0.0072	0.0002	0.1750	0.0010	0.2150	0.0051
A001	280.3	281.3	1.0	<1	8	0.0041	<0.0002	0.0700	<0.0005	0.0650	0.0025
A001	281.3	282.3	1.0	<1	8	0.0036	0.0002	0.0650	<0.0005	0.0650	0.0035
A001	282.3	283.3	1.0	<1	14	0.0023	<0.0002	0.0490	<0.0005	<0.0500	0.0030
A001	283.3	284.3	1.0	<1	42	0.0047	0.0006	0.1000	0.0005	0.1050	0.0052
A001	284.3	285.3	1.0	<1	36	0.0052	0.0007	0.1050	0.0005	0.1650	0.0056
A001	285.3	286.3	1.0	<1	16	0.0110	0.0010	0.2700	0.0005	0.4350	0.0085
A001	286.3	287.3	1.0	<1	12	0.0046	0.0004	0.0850	0.0005	0.1200	0.0036
A001	287.3	288.3	1.0	<1	14	0.0130	0.0017	0.3750	0.0015	0.6300	0.0220
A001	288.3	289.3	1.0	<1	10	0.0041	<0.0002	0.0900	<0.0005	0.0800	0.0027
A001	289.3	290.3	1.0	<1	8	0.0058	0.0019	0.1150	0.0015	0.1450	0.0045
A001	290.3	291.3	1.0	<1	8	0.0052	0.0003	0.0900	<0.0005	0.1150	0.0073
A001	291.3	292.3	1.0	<1	8	0.0065	0.0004	0.1150	0.0005	0.1800	0.0049
A001	292.3	293.3	1.0	<1	10	0.0093	0.0007	0.2150	0.0015	0.3050	0.0096
A001	293.3	294.3	1.0	<1	12	0.0069	0.0056	0.1250	0.0060	0.2050	0.0086
A001	294.3	295.3	1.0	<1	12	0.0064	0.0005	0.1300	0.0005	0.1700	0.0040
A001	295.3	296.3	1.0	<1	12	0.0059	0.0006	0.1200	0.0005	0.1500	0.0026
A001	296.3	297.3	1.0	<1	10	0.0082	0.0007	0.1600	0.0005	0.2800	0.0075
A001	297.3	298.3	1.0	<1	12	0.0081	0.0016	0.1650	0.0010	0.3900	0.0067
A001	298.3	299.3	1.0	<1	12	0.0105	0.0020	0.2350	0.0005	0.6400	0.0045
A001	299.3	300.3	1.0	<1	12	0.0092	0.0027	0.2000	0.0015	0.4850	0.0068
A001	300.3	301.3	1.0	<1	10	0.0140	0.0023	0.3900	0.0010	0.8500	0.0067
A001	301.3	302.3	1.0	<1	10	0.0110	0.0017	0.2700	0.0010	0.6200	0.0055
A001	302.3	303.3	1.0	<1	10	0.0105	0.0012	0.2450	0.0005	0.5400	0.0057
A001	303.3	304.3	1.0	<1	12	0.0091	0.0009	0.2150	0.0005	0.4050	0.0047
A001	304.3	305.3	1.0	<1	12	0.0070	0.0003	0.1650	0.0005	0.2300	0.0017

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	305.3	306.3	1.0	<1	24	0.0070	0.0041	0.1550	0.0035	0.3300	0.0039
A001	306.3	307.3	1.0	<1	135	0.0099	0.0022	0.2800	0.0015	0.5150	0.0160
A001	307.3	308.3	1.0	<1	10	0.0073	<0.0002	0.1750	<0.0005	0.2250	0.0024
A001	308.3	309.3	1.0	<1	12	0.0064	<0.0002	0.1300	<0.0005	0.1400	0.0020
A001	309.3	310.3	1.0	<1	12	0.0065	<0.0002	0.1200	0.0010	0.1250	0.0022
A001	310.3	311.3	1.0	<1	12	0.0072	<0.0002	0.1350	0.0010	0.1300	0.0021
A001	311.3	312.3	1.0	<1	10	0.0066	0.0004	0.1300	<0.0005	0.1500	0.0036
A001	312.3	313.3	1.0	<1	8	0.0068	<0.0002	0.1400	0.0005	0.1300	0.0068
A001	313.3	314.3	1.0	<1	10	0.0061	0.0062	0.1200	0.0065	0.1250	0.0022
A001	314.3	315.3	1.0	<1	8	0.0063	<0.0002	0.1250	0.0010	0.0950	0.0025
A001	315.3	316.3	1.0	<1	8	0.0061	<0.0002	0.1200	0.0010	0.0950	0.0020
A001	465.7	466.7	1.0		<25	0.0105	0.0040	0.2360	<0.0125	0.4	0.0130
A001	466.7	467.7	1.0		<25	0.0165	0.0076	0.4290	<0.0125	0.7	0.0230
A001	467.7	468.7	1.0		<25	0.0100	0.0054	0.2030	<0.0125	0.3	0.0115
A001	468.7	469.7	1.0		<25	0.0115	0.0044	0.2690	<0.0125	0.4	0.0145
A001	469.7	470.7	1.0		<25	0.0125	0.0052	0.3360	<0.0125	0.5	0.0120
A001	470.7	471.7	1.0		<25	0.0110	<0.0015	0.2930	<0.0125	0.4	0.0078
A001	471.7	472.7	1.0		<25	0.0115	<0.0015	0.3220	<0.0125	0.4	0.0100
A001	472.7	473.7	1.0		<25	0.0120	0.0044	0.3570	<0.0125	0.6	0.0088
A001	473.7	474.7	1.0		<25	0.0205	0.0054	0.6060	<0.0125	1.1	0.0120
A001	474.7	475.7	1.0		<25	0.0240	0.0064	0.7910	<0.0125	1.4	0.0120
A001	475.7	476.7	1.0		<25	0.0210	0.0046	0.7540	<0.0125	1.2	0.0265
A001	476.7	477.7	1.0		<25	0.0335	0.0076	1.34	<0.0125	2.0	0.0088
A001	477.7	478.7	1.0		<25	0.0150	0.0026	0.5620	<0.0125	0.8	0.0145
A001	478.7	479.7	1.0		<25	0.0135	0.0030	0.4920	<0.0125	0.7	0.0115
A001	479.7	480.7	1.0		<25	0.0150	0.0018	0.5660	<0.0125	0.7	0.0130
A001	480.7	481.7	1.0		<25	0.0082	<0.0015	0.1860	<0.0125	<0.25	0.0076

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	481.7	482.7	1.0		<25	0.0096	<0.0015	0.2310	<0.0125	0.3	0.0072
A001	482.7	483.7	1.0		<25	0.0082	<0.0015	0.1750	<0.0125	<0.25	0.0062
A001	483.7	484.7	1.0		<25	0.0082	0.0016	0.1710	<0.0125	<0.25	0.0090
A001	484.7	485.7	1.0		<25	0.0080	<0.0015	0.1600	<0.0125	<0.25	0.0082
A001	485.7	486.7	1.0		<25	0.0080	<0.0015	0.1570	<0.0125	0.3	0.0094
A001	486.7	487.7	1.0		<25	0.0078	<0.0015	0.1770	<0.0125	0.3	0.0060
A001	487.7	488.7	1.0		<25	0.0175	0.0028	0.6930	<0.0125	1.0	0.0115
A001	488.7	489.7	1.0		<25	0.0155	0.0034	0.5570	<0.0125	1.0	0.0125
A001	489.7	490.7	1.0		<25	0.0076	<0.0015	0.1530	<0.0125	<0.25	0.0064
A001	490.7	491.7	1.0		<25	0.0082	<0.0015	0.1530	<0.0125	0.3	0.0082
A001	491.7	492.7	1.0		<25	0.0074	0.0032	0.1300	<0.0125	0.3	0.0190
A001	492.7	493.7	1.0		<25	0.0078	<0.0015	0.1370	<0.0125	<0.25	0.0094
A001	493.7	494.7	1.0		<25	0.0078	<0.0015	0.1390	<0.0125	<0.25	0.0088
A001	494.7	495.7	1.0		<25	0.0082	<0.0015	0.1600	<0.0125	<0.25	0.0110
A001	495.7	496.7	1.0		<25	0.0086	<0.0015	0.1550	<0.0125	<0.25	0.0042
A001	496.7	497.7	1.0		<25	0.0082	<0.0015	0.1280	<0.0125	<0.25	<0.0015
A001	497.7	498.7	1.0		<25	0.0068	<0.0015	0.1060	<0.0125	<0.25	0.0038
A001	498.7	499.7	1.0		<25	0.0068	<0.0015	0.1150	<0.0125	<0.25	0.0026
A001	499.7	500.7	1.0		<25	0.0070	<0.0015	0.1160	<0.0125	<0.25	<0.0015
A001	500.7	501.7	1.0		<25	0.0105	<0.0015	0.2140	<0.0125	0.3	0.0155
A001	501.7	502.9	1.2		<25	0.0062	<0.0015	0.1120	<0.0125	<0.25	0.0050
A001	502.9	503.9	1.0		<25	0.0028	<0.0015	0.1170	<0.0125	<0.25	0.0150
A001	503.9	504.9	1.0		<25	0.0092	0.0046	0.3920	<0.0125	0.9	0.0215
A001	504.9	506.1	1.2		<25	0.0052	0.0016	0.1920	<0.0125	0.5	0.0145
A001	506.1	507.1	1.0		<25	0.0074	0.0265	0.1770	0.1210	0.5	0.1380
A001	507.1	508.1	1.0		<25	0.0082	0.0016	0.1580	<0.0125	0.6	0.0300
A001	508.1	509.1	1.0		<25	0.0064	<0.0015	0.1180	<0.0125	0.3	0.0185

615088

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A001	509.1	510.1	1.0		<25	0.0054	0.0018	0.0920	<0.0125	<0.25	0.0170
A001	510.1	511.1	1.0		<25	0.0056	<0.0015	0.1050	<0.0125	<0.25	0.0042
A001	511.1	512.1	1.0		<25	0.0066	<0.0015	0.1300	<0.0125	<0.25	0.0215
A001	512.1	513.1	1.0		<25	0.0078	0.0018	0.1770	<0.0125	0.4	0.0210
A001	513.1	514.1	1.0		<25	0.0088	<0.0015	0.2300	<0.0125	0.4	0.0145
A001	514.1	515.1	1.0		<25	0.0068	<0.0015	0.1510	<0.0125	0.3	0.0125
A001	515.1	516.1	1.0		<25	0.0068	<0.0015	0.1440	<0.0125	<0.25	0.0084
A001	516.1	517.1	1.0		<25	0.0072	<0.0015	0.1580	<0.0125	0.3	0.0120
A001	517.1	518.1	1.0		<25	0.0092	0.0016	0.2550	<0.0125	0.5	0.0098
A001	518.1	519.1	1.0		<25	0.0072	<0.0015	0.1570	<0.0125	0.3	0.0088
A001	519.1	520.1	1.0		<25	0.0070	<0.0015	0.1490	<0.0125	<0.25	0.0034
A001	520.1	521.1	1.0		<25	0.0066	0.0034	0.1320	<0.0125	0.4	0.0195
A001	521.1	522.1	1.0		<25	0.0066	0.0054	0.1440	<0.0125	<0.25	0.0115
A001	522.1	523.1	1.0		<25	0.0070	0.0034	0.1600	<0.0125	0.3	0.0100
A001	523.1	524.1	1.0		<25	0.0092	0.0048	0.2260	<0.0125	0.6	0.0165
A001	524.1	525.1	1.0		<25	0.0084	0.0018	0.1810	<0.0125	0.6	0.0180
A001	525.1	526.1	1.0		<25	0.0066	0.0058	0.1460	<0.0125	0.3	0.0140
A001	526.1	527.1	1.0		<25	0.0066	0.0024	0.1580	<0.0125	0.3	0.0060
A001	527.1	528.1	1.0		<25	0.0078	<0.0015	0.2050	<0.0125	0.4	0.0038
A001	528.1	529.1	1.0		<25	0.0088	0.0024	0.2550	<0.0125	0.7	0.0080
A001	529.1	530.1	1.0		<25	0.0084	<0.0015	0.2140	<0.0125	0.6	0.0082
A001	530.1	531.1	1.0		<25	0.0082	0.0016	0.2030	<0.0125	0.7	0.0115
A001	531.1	532.6	1.5		<25	0.0060	<0.0015	0.1270	<0.0125	0.4	0.0056

ALLEGIANCE MINING NL ZEEHAN JOINT VENTURE
AVEBURY PROSPECT
A002

Collar coordinates	355,225mE 5,357,586mN 175m RL	**Final hole depth**	**307.0m**
Collar bearing	180°		
Collar dip	-50°	**Hole details**	0.0m to 26.7m tricone
Coordinate system	AMG		26.7m to 54.4m HQ
			54.4m to 307.0m NQ

Drilled to test central part of a magnetic anomaly on the Avebury grid.

Commenced	26 January 1998	**Drilled by**	Diamond Drilling Tasmania
Completed	3 February 1998	**Logged by**	Mick McKeown (McKeown Mining)

SUMMARY OF RESULTS

from m	to m	description	length m	Ni	S %
118.3	120.3	serpentinite	2.0	0.14%	0.08

Down hole camera surveys

bhid	at	brg	dip
A002	0	180	-50.0
A002	50	182	-52.0
A002	100	182	-49.5
A002	150	183	-52.0
A002	200	179	-52.0
A002	250	179	-53.0
A002	300	181	-53.0

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A002

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	26.7	no recovery - triconed	0.0	26.7	0.0	0				
26.7	33.2	**HORNFELS**	26.7	29.7	2.0	67				
			29.7	32.8	2.7	87				
		Extremely broken, moderately weathered, grey hornfels with common limonite on joints and fractures, trace pyrite on joints, sparse quartz as veinlets and stringers; the interval is slightly vuggy due to the efffects of weathering.								
		BCA is typically 50 degrees.								
		The contact with the next interval is sharp but irregular.								
33.2	58.4	**HORNFELS AND MINOR CHERT**	32.8	35.7	2.9	100				
			35.7	38.7	3.0	100				
		Dark grey hornfels with minor brown cherty bands and occasional green chloritic? bands, with sparse chlorite as stringers and veinlets, trace to sparse pyrrhotite as disseminations, flecks and stringers, sparse limonite on joints, sparse quartz as veinlets and stringers.	38.7	41.7	3.0	100				
			41.7	44.7	3.0	100				
			44.7	47.7	3.0	100				
			47.7	49.2	1.5	100				
			49.2	50.7	1.5	100				
		Some bands appear to be tuffaceous, composed of fine rock fragments.	50.7	52.2	1.5	100				
			52.2	54.4	2.2	100				
		The interval is broken to extremely broken in part.	54.4	57.3	2.9	100				
			57.3	60.4	3.1	100				
		BCA ranges from 50 to 70 degrees.								
		The contact with the next interval is gradational.								
58.4	117.3	**ALTERED ROCK, HORNFELS AND CHERT**	60.4	63.5	2.9	94				
			63.5	66.3	2.3	82				
		Green, fine grained altered rock (tuff?) with common, ruptured, white to green white	66.3	69.3	3.0	100				

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A002

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		and brown white cherty bands, and minor intermixed grey hornfels, with sparse quartz as stringers and veinlets, trace disseminated pyrrhotite, trace fine schorl crystals.	69.3	72.4	3.1	100				
			72.4	75.5	3.1	100				
			75.5	78.3	2.8	100				
			78.3	81.3	3.0	100				
		Many cherty bands are ruptured and BCA is irregular, ranging from 30 to 70 degrees, and is typically 50 degrees.	81.3	84.4	3.1	100				
			84.4	87.5	3.1	100				
			87.5	90.6	3.1	100				
		The interval is broken.	90.6	93.1	2.5	100				
			93.1	94.0	0.9	100				
		The interval has a brecciated texture in part, particularly where cherty.	94.0	97.0	3.0	100				
			97.0	100.0	3.0	100				
		The contact with the next interval is sharp but broken.	100.0	103.0	3.0	100				
			103.0	106.0	3.0	100				
			106.0	109.0	3.0	100				
			109.0	112.0	3.0	100				
			112.0	114.8	2.8	100				
			114.8	117.9	3.1	100				
117.3	158.8	**SERPENTINITE WITH MAGNETITE**	117.9	121.0	3.1	100	117.3	118.3	0.06	0.07
			121.0	123.9	2.9	100	118.3	119.3	0.14	0.08
		Black serpentinite with minor magnetite and trace to sparse pyrrhotite as disseminations and stringers.	123.9	127.0	3.1	100	119.3	120.3	0.13	0.08
			127.0	130.0	3.0	100	120.3	121.3	0.11	0.14
			130.0	133.0	3.0	100	121.3	122.3	0.10	0.13
		CA is obscure.	133.0	136.0	3.0	100	122.3	123.3	0.08	0.11
			136.0	139.0	3.0	100	123.3	124.3	0.07	<0.05
		The interval is broken.	139.0	142.0	3.0	100				
			142.0	145.0	3.0	100	136.0	137.0	0.19	0.17
		The contact with the next interval is sharp but broken.	145.0	148.0	3.0	100				
			148.0	151.0	3.0	100	151.0	152.0	0.20	0.28
			151.0	154.0	3.0	100				
			154.0	157.0	3.0	100	157.8	158.8	0.09	<0.05

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A002

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
158.8	187.6	**CHERT AND CHERTY HORNFELS**	157.0	160.0	3.0	100	158.8	159.8	0.04	<0.05
			160.0	163.0	3.0	100				
		Green, brown and minor black chert and cherty hornfels, with sparse quartz and schorl as stringers and veinlets, sparse calcite as stringers, trace to sparse serpentine as stringers; the quartz veinlets are slightly vuggy.	163.0	166.0	3.0	100	172.0	173.0	0.02	<0.05
			166.0	169.0	3.0	100	173.0	174.0	0.02	<0.05
			169.0	172.0	3.0	100				
			172.0	175.0	3.0	100	186.6	187.6	0.16	<0.05
		The hornfels appears sandy in part; parts of the interval have a mottled pebbly texture.	175.0	178.0	3.0	100				
			178.0	181.0	3.0	100				
		Bedding in the more cherty parts is ruptured. BCA is irregular and is typically 40 degrees.	181.0	184.0	3.0	100				
			184.0	187.0	3.0	100				
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
187.6	193.1	**SERPENTINITE WITH MAGNETITE**	187.0	190.0	3.0	100	187.6	188.0	0.90	0.72
			190.0	193.0	3.0	100	188.0	189.0	0.24	0.07
		Intermixed, mottled light green and dark green to black serpentinite, with minor magnetite as patches and blebs, sparse dark green serpentine as veinlets; the black serpentinite contains more magnetite than the light green.					189.0	190.0	0.17	<0.05
		The interval is broken to extremely broken.								
		The contact with the next interval is sharp but broken, and is marked by 5cm of puggy serpentinitic breccia: a faulted contact?								
193.1	201.0	**SERPENTINITE WITH MINOR CHRYSOTILE**	193.0	196.0	3.0	100				
			196.0	198.1	2.1	100				
		Black serpentinite with minor green serpentinite as spots up to 1cm across, with minor chrysotile as veinlets.	198.1	201.2	3.1	100				

615094

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A002

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is very broken, especially near the chrysotile veinlets.								
		The contact with the next interval is gradational.								
201.0	**226.0**	**MOTTLED SERPENTINITE**	201.2	203.9	2.7	100				
			203.9	207.0	3.1	100				
		Mottled black and green serpentinite; green serpentinite occurring as spots and	207.0	208.0	1.0	100				
		patches within black serpentinite, with sparse green serpentine on fractures, trace	208.0	211.0	3.0	100				
		disseminated, fine grained pyrrhotite.	211.0	214.0	3.0	100				
			214.0	217.0	3.0	100				
		The interval is generally not broken.	217.0	220.0	3.0	100				
			220.0	223.0	3.0	100				
		The contact with the next interval is gradational.	223.0	225.0	2.0	100				
226.0	**251.0**	**SERPENTINITE WITH SPARSE CHRYSOTILE**	225.0	228.0	3.0	100				
			228.0	231.2	3.2	100				
		As between 193.1m and 201.0m with sparse chrysotile becoming more common towards	231.2	234.3	3.1	100				
		end of the interval, with rare puggy zones up to 30cm long.	234.3	237.4	3.1	100				
			237.4	240.2	2.8	100				
		The interval is broken.	240.2	243.3	3.1	100				
			243.3	246.5	3.2	100				
		The contact with the next interval is gradational.	246.5	249.6	3.1	100				
251.0	**307.0**	**SERPENTINITE WITH MINOR CHRYSOTILE**	249.6	252.7	3.1	100	301.0	302.0	0.19	0.06
			252.7	255.8	3.1	100	302.0	303.0	0.18	<0.05
		As between 226.0m and 251.0m with minor chrysotile.	255.8	258.9	3.1	100	303.0	304.0	0.19	<0.05
			258.9	262.0	3.1	100				
		The interval is broken to extremely broken.	262.0	265.0	3.0	100				
			265.0	268.0	3.0	100				
		END OF HOLE AT 307.0m	268.0	271.0	3.0	100				

615095

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A002

from m	to m	DESCRIPTION

from m	to m	rec m	rec %	from m	to m	Ni %	S %
271.0	274.0	3.0	100				
274.0	277.0	3.0	100				
277.0	280.0	3.0	100				
280.0	283.0	3.0	100				
283.0	286.0	3.0	100				
286.0	289.0	3.0	100				
289.0	292.0	3.0	100				
292.0	295.0	3.0	100				
295.0	298.0	3.0	100				
298.0	301.0	3.0	100				
301.0	304.0	3.0	100				
304.0	307.0	3.0	100				

615096

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A002	69.4	70.4	1.0	<1	8	0.0026	0.0029	0.0175	0.0025	<0.0500	0.0175
A002	73.4	74.4	1.0	<1	<3	0.0031	0.0016	0.0150	0.0010	<0.0500	0.0250
A002	90.6	91.6	1.0	<1	8	0.0036	0.0082	0.0091	0.0055	0.2850	0.0130
A002	98.0	99.0	1.0	<1	26	0.0033	0.0033	0.0105	0.0025	<0.0500	0.0185
A002	102.0	103.0	1.0	<1	8	0.0036	0.0012	0.0079	0.0010	<0.0500	0.0180
A002	115.8	117.3	1.5	<1	165	0.0086	0.0230	0.0900	0.0015	0.0550	0.0270
A002	117.3	118.3	1.0	<1	82	0.0049	0.0120	0.0600	0.0025	0.0650	0.0170
A002	118.3	119.3	1.0	<1	125	0.0035	0.0017	0.1400	0.0025	0.0750	0.0155
A002	119.3	120.3	1.0	<1	240	0.0044	0.0010	0.1250	0.0020	0.0800	0.0150
A002	120.3	121.3	1.0	<1	380	0.0037	0.0016	0.1050	0.0020	0.1350	0.0240
A002	121.3	122.3	1.0	<1	66	0.0057	<0.0002	0.0950	0.0015	0.1250	0.0125
A002	122.3	123.3	1.0	<1	61	0.0051	<0.0002	0.0800	0.0020	0.1050	0.0155
A002	123.3	124.3	1.0	<1	57	0.0045	<0.0002	0.0700	0.0010	<0.0500	0.0180
A002	136.0	137.0	1.0	<1	32	0.0080	<0.0002	0.1900	0.0020	0.1700	0.0105
A002	151.0	152.0	1.0	<1	42	0.0080	<0.0002	0.2000	0.0010	0.2750	0.0100
A002	157.8	158.8	1.0	<1	26	0.0065	0.0005	0.0850	0.0010	<0.0500	0.0160
A002	158.8	159.8	1.0	<1	52	0.0039	0.0115	0.0390	0.0045	<0.0500	0.0087
A002	172.0	173.0	1.0	<1	<3	0.0044	0.0008	0.0155	0.0015	<0.0500	0.0089
A002	173.0	174.0	1.0	<1	<3	0.0045	0.0020	0.0210	0.0020	<0.0500	0.0140
A002	186.6	187.6	1.0	<1	24	0.0097	<0.0002	0.1550	0.0010	<0.0500	0.0185
A002	187.6	188.0	0.4	<1	99	0.0260	0.0032	0.9000	0.0060	0.7200	0.0600
A002	188.0	189.0	1.0	<1	96	0.0055	<0.0002	0.2350	<0.0005	0.0700	0.0360
A002	189.0	190.0	1.0	<1	40	0.0039	<0.0002	0.1700	<0.0005	<0.0500	0.0135
A002	301.0	302.0	1.0	<1	38	0.0080	<0.0002	0.1900	0.0005	0.0550	0.0110
A002	302.0	303.0	1.0	<1	30	0.0071	<0.0002	0.1750	<0.0005	<0.0500	0.0105
A002	303.0	304.0	1.0	<1	30	0.0075	<0.0002	0.1850	0.0005	<0.0500	0.0115

ALLEGIANCE MINING NL ZEEHAN JOINT VENTURE
AVEBURY PROSPECT
A003

Collar coordinates	354,730.2mE 5,357,281.6mN 163.4mRL	**Final hole depth**	**339.0m**
Collar bearing	005°		
Collar dip	-50°	**Hole details**	0.0m to 3.0m HW
Coordinate system	AMG		3.0m to 57.0m HQ
			57.0m to 339.0m NQ

Drilled to test western end of a magnetic anomaly on the Avebury grid

Commenced	15 January 1999	**Drilled by**	Diamond Drilling Tasmania
Completed	4 February 1999	**Logged by**	Mick McKeown (McKeown Mining)

SUMMARY OF RESULTS

from m	to m	description	length m	Ni %	S %	As ppM
221.7	280.0	serepentinite	58.3	0.81	0.85	267
223.7	246.9	serpentinite	23.2	1.02	1.16	25
262.0	274.1	serpentinite	12.1	1.14	1.01	96

Down hole camera surveys

bhid	at	brg	dip
A003	0	4.5	-50
A003	52	4.5	-50.5
A003	100	4.5	-51
A003	151	4.5	-51.5
A003	201	4.5	-52
A003	252	4.5	-53
A003	301	4.5	-53

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	25.2	**CLAY AND CLAYSTONE**	0.0	7.6	0.5	7				
			7.6	16.2	1.2	14				
		Light brown, tan and white clay and claystone (after serpentinite?) with abundant ironstaining.	16.2	22.2	2.0	33				
			22.2	25.2	1.2	40				
		BCA is obscure.								
		The interval is rubbly.								
		The contact with the next interval is gradational (weathering).								
25.2	33.1	**CLAY, CLAYSTONE AND WEATHERED SERPENTINITE**	25.2	28.2	1.5	50				
			28.2	29.2	0.7	70				
		Intermixed brown and green-brown clay and claystone and green weathered serpentinite with common to abundant ironstaining.	29.2	31.2	1.0	50				
			31.2	33.1	1.0	53				
		BCA at 25.4m may be 70 degrees.								
		The interval is extremely broken.								
		The contact with the next interval is gradational (weathering).								
33.1	35.6	**DARK GREEN SERPENTINITE RUBBLE**	33.1	34.2	0.5	45				
			34.2	35.5	1.0	77				
		Dark green serpentinite rubble with common limonite as patches and on joints and fractures.								
		The interval is rubbly.								
		BCA is obscure.								

615100

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The contact with the next interval is sharp but broken.								
35.6	39.1	**PALE GREEN AND MINOR DARK GREEN SERPENTINITE**	35.5	37.2	1.7	100	35.6	36.6	0.13	0.028
			37.2	39.5	2.3	100	36.6	37.6	0.15	0.077
		Pale green and minor dark green serpentinite with sparse magnetite as flecks, blebs and stringers, minor calcite as stringers and as matrix to brecciated zones, trace vuggy quartz as stringers, trace haematite? (after magnetite?) as rare disseminations.					37.6	39.1	0.12	0.115
		The interval has a brecciated fabric in part.								
		BCA at 38.5m is 40 degrees (magnetite stringers).								
		The interval is extremely broken to rubbly.								
		The contact with the next interval is sharp but irregular.								
39.1	43.4	**BRECCIATED DARK GREEN TO BLACK SERPENTINITE**	39.5	40.2	0.7	100	39.1	40.1	0.23	0.218
			40.2	42.4	1.9	86	40.1	41.1	0.17	0.153
		Dark green to black, generally brecciated serpentinite with minor calcite as matrix to breccia and as stringers and veinlets, sparse vuggy quartz as stringers, trace magnetite throughout (the core is slightly magnetic), trace disseminated pentlandite?	42.4	43.2	0.8	100	41.1	42.1	0.17	0.147
							42.1	43.4	0.15	0.117
		BCA at 42.9m is 30 to 45 degrees (brecciated zones).								
		The interval is extremely broken to rubbly.								
		The contact with the next interval is sharp at 45 degrees to the core axis.								

615101

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
43.4	58.6	**DARK GREEN TO BLACK SERPENTINITE**
		Serpentinite as between 39.1m and 43.4m, but not brecciated, with sparse calcite as stringers and veinlets, sparse white and green serpentine on joints, sparse magnetite throughout (the core is slightly magnetic), trace disseminated pentlandite?
		BCA is obscure.
		The interval is generally not broken.
		The contact with the next interval is gradational (mineralogy).
58.6	61.7	**WHITE TO LIGHT GREEN SERPENTINITE**
		White to light green serpentinite with common to abundant magnetite as disseminations, flecks, blebs, stylolitic stringers and patches, sparse calcite as stringers and veinlets, trace to sparse white to green serpentine as stringers, trace to sparse pentlandite? as disseminations, flecks and stringers.
		BCA is obscure.
		The interval is broken.
		The contact with the next interval is sharp at 45 degrees to the core axis and is marked by a 1cm true thickness calcite veinlet.
61.7	73.0	**DARK GREEN TO BLACK SERPENTINITE**
		As between 43.4m and 58.6m but with trace crystalline pyrite on joints.
		BCA at 68.9 m is 40 to 45 degrees (alignment of lighter green serpentine flecks in black

from m	to m	rec m	rec %
43.2	46.2	3.0	100
46.2	49.1	2.9	100
49.1	52.2	3.1	100
52.2	55.2	3.0	100
55.2	57.0	1.8	100
57.0	58.2	1.2	100
58.2	61.2	3.0	100
61.2	64.2	3.0	100
64.2	67.2	3.0	100
67.2	70.2	3.0	100
70.2	71.4	1.2	100
71.4	72.0	0.6	100

from m	to m	Ni %	S %
43.4	44.4	0.18	0.184
44.4	45.4	0.18	0.173
45.4	46.4	0.17	0.214
46.4	47.4	0.18	0.179
47.4	48.4	0.16	0.186
48.4	49.4	0.16	0.168
49.4	50.4	0.17	0.237
50.4	51.4	0.17	0.23
51.4	52.4	0.16	0.207
52.4	53.4	0.16	0.213
53.4	54.4	0.18	0.196
54.4	55.4	0.16	0.139
55.4	56.4	0.18	0.161
56.4	57.4	0.19	0.162
57.4	58.6	0.17	0.096
58.6	59.6	0.12	0.036
59.6	60.6	0.13	0.028
60.6	61.7	0.15	0.047
61.7	62.7	0.16	0.094
62.7	63.7	0.19	0.102
63.7	64.7	0.28	0.202
64.7	65.7	0.19	0.04
65.7	66.7	0.13	0.045

615102

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		serpentinite).	72.0	72.3	0.3	100	66.7	67.7	0.14	0.105
			72.3	72.9	0.6	100	67.7	68.7	0.18	0.104
		72.80m to 72.85m: serpentine breccia in pug, both contacts at 70 degrees to the core axis.					68.7	69.7	0.2	0.095
							69.7	70.7	0.2	0.144
		The interval is broken to extremely broken.					70.7	71.7	0.2	0.16
							71.7	73.0	0.17	0.132
		The contact with the next interval is sharp but broken.								
73.0	85.2	**WHITE TO LIGHT GREEN SERPENTINITE**	72.9	74.8	1.9	100	73.0	74.0	0.16	0.06
			74.8	76.2	1.4	100	74.0	75.0	0.13	0.043
		As between 58.6m and 61.7m but with trace galena as rare disseminations, trace	76.2	79.2	3.0	100	75.0	76.0	0.05	0.097
		sphalerite as disseminations and flecks, trace crystalline pyrite on joints, trace to	79.2	82.2	3.0	100	76.0	77.0	0.1	0.085
		sparse pentlandite? as disseminations, flecks and stringers.	82.2	85.2	3.0	100	77.0	78.0	0.1	0.174
							78.0	79.0	0.07	0.1
		BCA is obscure.					79.0	80.0	0.11	0.167
							80.0	81.0	0.17	0.036
		The interval is generally unbroken.					81.0	82.0	0.16	0.064
							82.0	83.0	0.14	0.074
		The contact with the next interval is sharp at 60 degrees to the core axis and is marked					83.0	84.0	0.11	0.073
		by 15cm of brecciated serpentinite with calcite as matrix.					84.0	85.4	0.11	0.095
85.4	97.2	**INTERMIXED DARK GREEN TO BLACK AND WHITE TO LIGHT GREEN SERPENTINITE**	85.2	87.9	2.7	100	85.4	86.4	0.22	0.303
			87.9	91.0	3.1	100	86.4	87.2	0.13	0.103
			91.0	94.1	3.1	100	87.2	88.2	0.09	0.03
		Intermixed dark green to black and white to light green serpentinite with common to	94.1	97.2	3.1	100	88.2	89.2	0.15	0.07
		abundant to massive crystalline magnetite, sparse calcite as stringers, veinlets, veins					89.2	90.2	0.13	0.07
		and matrix to massive magnetite, sparse light green serpentine as stringers, trace					90.2	91.2	0.08	0.05
		pentlandite? as disseminations and flecks.					91.2	92.2	0.16	0.08
							92.2	93.2	0.07	0.13
		BCA is obscure.					93.2	94.2	0.09	0.10
							94.2	95.2	0.05	0.11

615103

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is generally unbroken.								
		The contact with the next interval is gradational (mineralogy).								
97.2	100.1	**MAGNETITE**	97.2	100.2	3.0	100	97.2	98.2	0.10	0.03
							98.2	99.2	0.15	0.12
		Massive crystalline magnetite with common green and minor white serpentine interstitial to magnetite crystals, trace calcite as stringers.					99.2	100.1	0.08	0.05
		BCA at 97.5m is 50 degrees (serpentine/magnetite banding).								
		The interval is generally unbroken.								
		The contact with the next interval is gradational (mineralogy).								
100.1	106.6	**INTERMIXED DARK GREEN TO BLACK AND WHITE TO LIGHT GREEN SERPENTINITE**	100.2	103.2	3.0	100	100.1	101.1	0.19	0.02
			103.2	106.2	3.0	100	101.1	102.1	0.13	0.02
							102.1	103.1	0.14	0.05
		As between 85.2m and 97.2m.					103.1	104.1	0.12	0.07
							104.1	105.1	0.13	0.05
		BCA is obscure.					105.1	106.6	0.14	0.05
		The interval is generally unbroken.								
		The contact with the next interval is gradational (mineralogy).								
106.6	127.6	**DARK GREEN TO BLACK SERPENTINITE**	106.2	107.7	1.5	100	106.6	107.6	0.20	0.11
			107.7	109.2	1.5	100	107.6	108.6	0.14	0.12
		Dark green to black serpentinite with sparse magnetite throughout as disseminations,	109.2	112.2	3.0	100	108.6	109.6	0.16	0.15
		flecks and blebs, sparse calcite as stringers, trace to sparse white to green	112.2	112.5	0.3	100	109.6	110.6	0.17	0.09
		serpentine as stringers, partly chrysotilic, no visible sulphides.	112.5	115.2	2.7	100	110.6	111.6	0.16	0.09

615104

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
		BCA is obscure.
		The interval is generally unbroken.
		The contact with the next interval is gradational (mineralogy).
127.6	152.0	**DARK GREEN TO BLACK SERPENTINITE**
		As between 106.6m and 127.6m but with sparse to minor chrysotile as stringers and veinlets.
		BCA is obscure.
		The interval is broken to very broken, especially near the chrysotile stringers and veinlets.
		The contact with the next interval is gradational (mineralogy).

from m	to m	rec m	rec %
115.2	118.2	3.0	100
118.2	121.2	3.0	100
121.2	124.2	3.0	100
124.2	127.2	3.0	100
127.2	130.2	3.0	100
130.2	133.0	2.8	100
133.0	136.2	2.8	88
136.2	139.2	3.0	100
139.2	142.2	3.0	100
142.2	145.2	3.0	100
145.2	148.2	3.0	100
148.2	151.2	3.0	100

from m	to m	Ni %	S %
111.6	112.6	0.17	0.09
112.6	113.6	0.19	0.10
113.6	114.6	0.17	0.08
114.6	115.6	0.17	0.07
115.6	116.6	0.18	0.07
116.6	117.6	0.19	0.08
117.6	118.6	0.16	0.06
118.6	119.6	0.16	0.10
119.6	120.6	0.17	0.08
120.6	121.6	0.15	0.08
121.6	122.6	0.15	0.08
122.6	123.6	0.13	0.07
123.6	124.6	0.14	0.07
124.6	125.6	0.18	0.08
125.6	126.6	0.16	0.07
126.6	127.6	0.15	0.06
127.6	128.6	0.18	0.08
128.6	129.6	0.16	0.08
129.6	130.6	0.15	0.07
130.6	131.6	0.17	0.07
131.6	132.6	0.16	0.09
132.6	133.6	0.16	0.07
133.6	134.6	0.16	0.06
134.6	135.6	0.16	0.06
135.6	136.6	0.16	0.08
136.6	137.6	0.17	0.08
137.6	138.6	0.19	0.10
138.6	139.6	0.20	0.14
139.6	140.6	0.19	0.08
140.6	141.6	0.14	0.07

615105

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
152.0	198.0	**DARK GREEN TO BLACK AND MINOR MID-GREEN SERPENTINITE**
		Dark green to black serpentinite and minor mid-green ragged patches up to 5cm across with trace to sparse chrysotilic serpentine on joints, trace to sparse calcite as stringers and veinlets, trace disseminated pentlandite.
		BCA is obscure.
		The interval is generally not broken.
		The contact with the next interval is gradational (pentlandite).

from m	to m	rec m	rec %
151.2	154.2	3.0	100
154.2	157.2	3.0	100
157.2	159.8	2.6	100
159.8	162.9	3.1	100
162.9	165.8	2.9	100
165.8	168.8	3.0	100
168.8	171.7	2.9	100
171.7	174.5	2.8	100
174.5	177.1	2.6	100
177.1	180.3	3.0	94
180.3	183.4	3.1	100
183.4	186.2	2.8	100
186.2	189.4	3.2	100
189.4	192.6	3.2	100
192.6	195.6	3.0	100
195.6	198.8	3.2	100

from m	to m	Ni %	S %
141.6	142.6	0.14	0.09
142.6	143.6	0.15	0.08
143.6	144.6	0.17	0.05
144.6	145.6	0.15	0.05
145.6	146.6	0.15	0.05
146.6	147.6	0.16	0.05
147.6	148.6	0.20	0.08
148.6	149.6	0.15	0.07
149.6	150.6	0.16	0.07
150.6	152.0	0.15	0.08
152.0	153.0	0.23	0.82
153.0	154.0	0.22	0.08
154.0	155.0	0.20	0.08
155.0	156.0	0.20	0.07
156.0	157.0	0.22	0.07
157.0	158.0	0.24	0.07
158.0	159.0	0.19	0.07
159.0	160.0	0.24	0.06
160.0	161.0	0.21	0.07
161.0	162.0	0.24	0.08
162.0	163.0	0.23	0.07
163.0	164.0	0.20	0.05
164.0	165.0	0.20	0.05
165.0	166.0	0.22	0.07
166.0	167.0	0.30	0.08
167.0	168.0	0.21	0.07
168.0	169.0	0.22	0.05
169.0	170.0	0.18	0.04
170.0	171.0	0.19	0.04
171.0	172.0	0.18	0.03

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
							172.0	173.0	0.17	0.07
							173.0	174.0	0.19	0.04
							174.0	175.0	0.19	0.04
							175.0	176.0	0.21	0.07
							176.0	177.0	0.19	0.05
							177.0	178.0	0.20	0.04
							178.0	179.0	0.19	0.04
							179.0	180.0	0.20	0.05
							180.0	181.0	0.20	0.04
							181.0	182.0	0.20	0.04
							182.0	183.0	0.19	0.04
							183.0	184.0	0.20	0.04
							184.0	185.0	0.18	0.04
							185.0	186.0	0.20	0.06
							186.0	187.0	0.22	0.06
							187.0	188.0	0.22	0.05
							188.0	189.0	0.21	0.05
							189.0	190.0	0.22	0.05
							190.0	191.0	0.18	0.04
							191.0	192.0	0.19	0.03
							192.0	193.0	0.22	0.08
							193.0	194.0	0.23	0.09
							194.0	195.0	0.18	0.07
							195.0	196.0	0.19	0.05
							196.0	197.0	0.19	0.07
							197.0	198.0	0.25	0.11
198.0	218.7	**BLACK SERPENTINITE WITH MINOR MAGNETITE**	198.8	201.7	2.9	100	198.0	199.0	0.49	0.27
			201.7	204.2	2.5	100	199.0	200.0	0.40	0.24
		Black serpentinite with minor magnetite as patches, stringers and veinlets, trace calcite	204.2	206.8	2.6	100	200.0	201.0	0.38	0.25
		as stringers, trace to sparse green sparsely chrysotilic serpentine on joints, trace	206.8	210.0	3.2	100	201.0	202.0	0.27	0.14

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
		disseminated pentlandite.
		BCA is obscure.
		The interval is generally not broken.
		The contact with the next interval is sharp but broken.
218.7	228.2	**BLACK AND MINOR WHITE TO GREEN SERPENTINITE**
		Black and minor intermixed white to green serpentinite with rare puggy zones up to 20cm long, minor magnetite as patches, sparse green serpentine and white chrysotilic serpentine as stringers, trace to sparse calcite as stringers and lace veining, trace pentlandite as disseminations, blebs and flecks.
		BCA is obscure.
		The interval is very broken to extremely broken.
		The contact with the next interval is sharp but broken.

from m	to m	rec m	rec %
210.0	213.1	3.1	100
213.1	216.5	3.4	100
216.5	219.6	3.1	100
219.6	222.7	3.1	100
222.7	225.2	2.5	100
225.2	228.2	3.0	100

from m	to m	Ni %	S %
202.0	203.0	0.37	0.25
203.0	204.0	0.33	0.21
204.0	205.0	0.58	0.39
205.0	206.0	0.37	0.24
206.0	207.0	0.30	0.24
207.0	208.0	0.23	0.12
208.0	209.0	0.21	0.13
209.0	210.0	0.21	0.15
210.0	211.0	0.19	0.13
211.0	212.0	0.18	0.09
212.0	213.0	0.16	0.12
213.0	214.0	0.25	0.19
214.0	215.0	0.24	0.18
215.0	216.0	0.24	0.21
216.0	217.4	0.25	0.16
217.4	218.7	0.25	0.34
218.7	219.7	0.24	0.18
219.7	220.7	0.25	0.17
220.7	221.7	0.27	0.21
221.7	222.7	0.37	0.29
222.7	223.7	0.46	0.42
223.7	224.7	1.02	0.96
224.7	225.7	0.56	0.55
225.7	227.0	1.04	1.09
227.0	228.2	0.50	0.50

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
228.2	244.9	**BLACK AND MINOR BLACK AND WHITE SERPENTINITE** Black and minor intermixed black and white serpentinite with minor magnetite as irregular patches and irregular veins, trace to sparse calcite as stringers, sparse pentlandite as disseminations, flecks and small patches, the pentlandite tends to be associated with magnetite in places. BCA is obscure. The interval is broken in part. The contact with the next interval is gradational (lithology).
244.9	263.3	**LIGHT GREEN AND GREY GREEN SERPENTINITE** Intermixed light green and grey green and lesser black serpentinite, the light green serpentinite is possibly siliceous, with no visible magnetite in the green serpentinite but sparse to minor magnetite as patches and irregular veins in the black serpentinite, and sparse pentlandite? as flecks and blebs throughout. BCA is obscure. The interval is unbroken. The contact with the next interval is gradational (lithology).

from m	to m	rec m	rec %
228.2	231.3	3.1	100
231.3	234.2	2.9	100
234.2	237.3	3.1	100
237.3	240.4	3.1	100
240.4	243.4	3.0	100
243.4	246.6	3.2	100
246.6	249.6	3.0	100
249.6	252.8	3.2	100
252.8	255.9	3.1	100
255.9	259.0	3.1	100
259.0	262.1	3.1	100

from m	to m	Ni %	S %
228.2	229.2	0.82	0.84
229.2	230.2	0.62	0.61
230.2	231.2	0.72	0.73
231.2	232.2	1.12	1.13
232.2	233.2	0.61	0.67
233.2	234.2	0.82	0.86
234.2	235.2	0.59	0.67
235.2	236.2	0.53	0.61
236.2	237.2	0.93	1.06
237.2	238.2	1.64	2.07
238.2	239.2	0.82	1.02
239.2	240.2	1.80	2.29
240.2	241.2	0.99	1.23
241.2	242.2	0.87	1.03
242.2	243.2	1.84	2.21
243.2	244.2	0.72	0.82
244.2	244.9	1.22	1.24
244.9	245.9	2.08	2.34
245.9	246.9	1.83	2.30
246.9	247.9	0.36	0.75
247.9	248.7	0.19	0.33
248.7	249.7	0.18	0.48
249.7	250.7	0.42	0.69
250.7	251.7	0.58	1.31
251.7	252.7	0.25	0.76
252.7	253.7	0.38	1.09
253.7	254.7	0.32	0.29
254.7	255.7	0.40	0.28
255.7	256.7	0.17	0.15
256.7	257.7	0.12	0.07

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
263.3	279.1	**BLACK SERPENTINITE** Black serpentinite with common magnetite as irregular patches and veins, sparse to minor pentlandite? as flecks and irregular, ragged crystalline patches, and trace to sparse calcite as stringers. BCA is obscure. The interval is unbroken. The contact with the next interval is sharp but irregular at about 45 degrees to the core axis.
279.1	280.4	**INTERMIXED SERPENTINITE AND HORNFELS** Intermixed black serpentinite, grey siliceous serpentinite, and grey and mottled green and white hornfels(annealed breccia?) with sparse to minor pentlandite? as flecks and patches. BCA at 279.4m = 45 degrees (serpentinite/hornfels banding).

from m	to m	rec m	rec %
262.1	264.9	2.8	100
264.9	268.0	3.1	100
268.0	271.1	3.1	100
271.1	274.2	3.1	100
274.2	277.2	3.0	100
277.2	280.2	3.0	100

from m	to m	Ni %	S %
257.7	258.7	0.24	0.19
258.7	259.7	0.15	0.09
259.7	260.7	0.20	0.14
260.7	262.0	0.20	0.13
262.0	263.3	0.74	0.67
263.3	264.3	1.47	1.40
264.3	265.3	0.19	0.14
265.3	266.3	0.42	0.37
266.3	267.3	0.61	0.52
267.3	268.3	1.02	0.93
268.3	269.3	0.67	0.61
269.3	270.1	0.92	0.78
270.1	271.1	0.89	0.76
271.1	272.1	2.98	2.68
272.1	273.1	1.06	0.94
273.1	274.1	2.83	2.35
274.1	275.1	0.34	0.24
275.1	276.1	0.26	0.13
276.1	277.1	0.35	0.24
277.1	278.1	0.90	0.73
278.1	279.1	1.31	1.31
279.1	280.0	1.63	0.77

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A003

from m	to m	DESCRIPTION
		The interval is unbroken.
		The contact with the next interval is sharp at 45 degrees to the core axis.
280.4	339.0	**HORNFELS**
		Mottled grey, light and dark green and lesser white and pink chert and hornfels, an altered rock, the lighter coloured chert intervals are internally brecciated; with trace pyrite on some joints, trace haematite on some joints, trace axinite as poorly developed crystalline patches, for example at 303.3m, trace pentlandite and green serpentinite on a joint at 284.2m.
		The interval is microfaulted in part, for example at 319.5m.
		BCA is obscure in part but BCA at 293.0m = 45 degrees (bedding) BCA at 306.5m = 45 degrees (bedding) BCA at 316.0m = 45 degrees (bedding) BCA at 320.0m = 45 degrees (bedding).
		The interval is unbroken.
		END OF HOLE AT 339.0m.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
280.2	283.2	3.0	100	280.0	281.0	0.08	0.07
283.2	286.2	3.0	100	281.0	282.0	0.06	0.06
286.2	289.2	3.0	100	282.0	283.0	0.04	0.06
289.2	292.2	3.0	100	283.0	284.0	0.03	0.09
292.2	295.2	3.0	100				
295.2	298.2	3.0	100				
298.2	301.2	3.0	100				
301.2	304.2	3.0	100				
304.2	307.2	3.0	100				
307.2	310.2	3.0	100				
310.2	313.2	3.0	100				
313.2	316.8	3.6	100				
316.8	319.9	3.1	100				
319.9	323.0	3.1	100				
323.0	326.1	3.1	100				
326.1	326.4	0.3	100				
326.4	329.4	3.0	100				
329.4	331.2	1.8	100				
331.2	334.2	3.0	100				
334.2	335.4	0.9	75				
335.4	339.0	3.2	89				

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bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	36.6	37.6	1.0			0.01	<0.01	0.15	0.02	0.077	0.01
A003	37.6	39.1	1.5			<0.01	<0.01	0.12	0.04	0.115	0.03
A003	39.1	40.1	1.0			0.01	<0.01	0.23	0.03	0.218	0.04
A003	40.1	41.1	1.0			0.01	<0.01	0.17	0.01	0.153	0.01
A003	41.1	42.1	1.0			0.01	<0.01	0.17	0.01	0.147	0.01
A003	42.1	43.4	1.3			0.01	<0.01	0.15	<0.01	0.117	0.01
A003	43.4	44.4	1.0			0.01	<0.01	0.18	<0.01	0.184	0.01
A003	44.4	45.4	1.0			0.01	<0.01	0.18	0.01	0.173	0.02
A003	45.4	46.4	1.0			0.01	<0.01	0.17	0.01	0.214	0.02
A003	46.4	47.4	1.0			0.01	<0.01	0.18	0.01	0.179	0.02
A003	47.4	48.4	1.0			0.01	<0.01	0.16	0.02	0.186	0.01
A003	48.4	49.4	1.0			0.01	<0.01	0.16	0.01	0.168	0.01
A003	49.4	50.4	1.0			0.01	<0.01	0.17	0.02	0.237	0.01
A003	50.4	51.4	1.0			0.01	<0.01	0.17	0.02	0.230	0.02
A003	51.4	52.4	1.0			0.01	<0.01	0.16	0.03	0.207	0.02
A003	52.4	53.4	1.0			0.01	<0.01	0.16	<0.01	0.213	0.01
A003	53.4	54.4	1.0			0.01	<0.01	0.18	0.01	0.196	0.02
A003	54.4	55.4	1.0			0.01	<0.01	0.16	<0.01	0.139	0.01
A003	55.4	56.4	1.0			0.01	<0.01	0.18	<0.01	0.161	0.01
A003	56.4	57.4	1.0			0.01	<0.01	0.19	<0.01	0.162	0.01
A003	57.4	58.6	1.2			0.01	<0.01	0.17	<0.01	0.096	0.01
A003	58.6	59.6	1.0			0.01	<0.01	0.12	<0.01	0.036	0.02
A003	59.6	60.6	1.0			0.01	<0.01	0.13	<0.01	0.028	0.02
A003	60.6	61.7	1.1			0.01	<0.01	0.15	<0.01	0.047	0.01
A003	61.7	62.7	1.0			0.01	<0.01	0.16	0.01	0.094	0.01
A003	62.7	63.7	1.0			0.01	<0.01	0.19	<0.01	0.102	0.02
A003	63.7	64.7	1.0			0.01	<0.01	0.28	<0.01	0.202	0.02

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	64.7	65.7	1.0			0.01	<0.01	0.19	<0.01	0.040	0.01
A003	65.7	66.7	1.0			<0.01	<0.01	0.13	<0.01	0.045	0.01
A003	66.7	67.7	1.0			<0.01	<0.01	0.14	<0.01	0.105	0.02
A003	67.7	68.7	1.0			0.01	<0.01	0.18	0.01	0.104	0.01
A003	68.7	69.7	1.0			0.01	<0.01	0.20	<0.01	0.095	0.02
A003	69.7	70.7	1.0			0.01	<0.01	0.20	0.01	0.144	0.02
A003	70.7	71.7	1.0			0.01	<0.01	0.20	0.01	0.160	0.01
A003	71.7	73.0	1.3			0.01	<0.01	0.17	<0.01	0.132	0.01
A003	73.0	74.0	1.0			0.01	<0.01	0.16	0.01	0.060	0.02
A003	74.0	75.0	1.0			<0.01	<0.01	0.13	0.01	0.043	0.02
A003	75.0	76.0	1.0			<0.01	<0.01	0.05	<0.01	0.097	0.08
A003	76.0	77.0	1.0			<0.01	<0.01	0.10	0.01	0.085	0.08
A003	77.0	78.0	1.0			<0.01	<0.01	0.10	<0.01	0.174	0.01
A003	78.0	79.0	1.0			<0.01	<0.01	0.07	<0.01	0.100	<0.01
A003	79.0	80.0	1.0			<0.01	<0.01	0.11	<0.01	0.167	0.01
A003	80.0	81.0	1.0			<0.01	<0.01	0.17	<0.01	0.036	0.01
A003	81.0	82.0	1.0			<0.01	<0.01	0.16	<0.01	0.064	0.02
A003	82.0	83.0	1.0			<0.01	<0.01	0.14	0.01	0.074	0.03
A003	83.0	84.0	1.0			<0.01	<0.01	0.11	<0.01	0.073	0.02
A003	84.0	85.4	1.4			<0.01	<0.01	0.11	0.01	0.095	0.02
A003	85.4	86.4	1.0			0.01	<0.01	0.22	<0.01	0.303	0.03
A003	86.4	87.2	0.8			0.01	<0.01	0.13	<0.01	0.103	0.04
A003	87.2	88.2	1.0		<100	<0.01	<0.01	0.09	<0.01	0.033	0.02
A003	88.2	89.2	1.0		600	<0.01	<0.01	0.15	<0.01	0.065	0.02
A003	89.2	90.2	1.0		600	<0.01	<0.01	0.13	<0.01	0.072	0.02
A003	90.2	91.2	1.0		<100	<0.01	<0.01	0.08	<0.01	0.048	0.03
A003	91.2	92.2	1.0		1500	<0.01	<0.01	0.16	<0.01	0.080	0.05

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	92.2	93.2	1.0		<100	<0.01	<0.01	0.07	<0.01	0.127	0.03
A003	93.2	94.2	1.0		<100	<0.01	<0.01	0.09	<0.01	0.102	0.02
A003	94.2	95.2	1.0		<100	<0.01	<0.01	0.05	<0.01	0.106	0.02
A003	95.2	96.2	1.0		<100	<0.01	<0.01	0.08	<0.01	0.180	0.01
A003	96.2	97.2	1.0		700	<0.01	<0.01	0.16	<0.01	0.045	0.02
A003	97.2	98.2	1.0		<100	<0.01	<0.01	0.10	<0.01	0.025	0.03
A003	98.2	99.2	1.0		1200	<0.01	<0.01	0.15	<0.01	0.115	0.04
A003	99.2	100.1	0.9		<100	<0.01	<0.01	0.08	<0.01	0.050	0.03
A003	100.1	101.1	1.0		2300	<0.01	<0.01	0.19	<0.01	0.021	0.01
A003	101.1	102.1	1.0		1000	<0.01	<0.01	0.13	<0.01	0.023	0.01
A003	102.1	103.1	1.0		200	<0.01	<0.01	0.14	<0.01	0.050	0.02
A003	103.1	104.1	1.0		200	<0.01	<0.01	0.12	<0.01	0.070	0.01
A003	104.1	105.1	1.0		<100	<0.01	<0.01	0.13	<0.01	0.046	0.02
A003	105.1	106.6	1.5		500	<0.01	<0.01	0.14	<0.01	0.053	0.01
A003	106.6	107.6	1.0		1000	<0.01	<0.01	0.20	<0.01	0.111	<0.01
A003	107.6	108.6	1.0		100	<0.01	<0.01	0.14	<0.01	0.117	<0.01
A003	108.6	109.6	1.0		700	<0.01	<0.01	0.16	<0.01	0.146	<0.01
A003	109.6	110.6	1.0		800	0.01	<0.01	0.17	<0.01	0.094	<0.01
A003	110.6	111.6	1.0		600	<0.01	<0.01	0.16	<0.01	0.088	<0.01
A003	111.6	112.6	1.0		500	<0.01	<0.01	0.17	<0.01	0.086	<0.01
A003	112.6	113.6	1.0		400	<0.01	<0.01	0.19	<0.01	0.100	<0.01
A003	113.6	114.6	1.0		400	<0.01	<0.01	0.17	<0.01	0.084	<0.01
A003	114.6	115.6	1.0		300	<0.01	<0.01	0.17	<0.01	0.073	<0.01
A003	115.6	116.6	1.0		<100	<0.01	<0.01	0.18	<0.01	0.066	<0.01
A003	116.6	117.6	1.0		<100	<0.01	<0.01	0.19	<0.01	0.079	<0.01
A003	117.6	118.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.062	<0.01
A003	118.6	119.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.100	<0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	119.6	120.6	1.0		<100	<0.01	<0.01	0.17	<0.01	0.077	<0.01
A003	120.6	121.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.075	<0.01
A003	121.6	122.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.084	<0.01
A003	122.6	123.6	1.0		<100	<0.01	<0.01	0.13	<0.01	0.073	<0.01
A003	123.6	124.6	1.0		<100	<0.01	<0.01	0.14	<0.01	0.068	<0.01
A003	124.6	125.6	1.0		<100	<0.01	<0.01	0.18	<0.01	0.076	<0.01
A003	125.6	126.6	1.0		200	<0.01	<0.01	0.16	<0.01	0.073	<0.01
A003	126.6	127.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.063	<0.01
A003	127.6	128.6	1.0		<100	<0.01	<0.01	0.18	<0.01	0.076	<0.01
A003	128.6	129.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.078	<0.01
A003	129.6	130.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.066	<0.01
A003	130.6	131.6	1.0		<100	<0.01	<0.01	0.17	<0.01	0.065	<0.01
A003	131.6	132.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.088	<0.01
A003	132.6	133.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.065	<0.01
A003	133.6	134.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.063	<0.01
A003	134.6	135.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.059	<0.01
A003	135.6	136.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.080	<0.01
A003	136.6	137.6	1.0		<100	<0.01	<0.01	0.17	<0.01	0.083	<0.01
A003	137.6	138.6	1.0		<100	<0.01	<0.01	0.19	<0.01	0.095	<0.01
A003	138.6	139.6	1.0		<100	<0.01	<0.01	0.20	<0.01	0.141	<0.01
A003	139.6	140.6	1.0		<100	<0.01	<0.01	0.19	<0.01	0.079	<0.01
A003	140.6	141.6	1.0		<100	<0.01	<0.01	0.14	<0.01	0.068	<0.01
A003	141.6	142.6	1.0		<100	<0.01	<0.01	0.14	<0.01	0.085	<0.01
A003	142.6	143.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.084	<0.01
A003	143.6	144.6	1.0		<100	<0.01	<0.01	0.17	<0.01	0.049	<0.01
A003	144.6	145.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.052	<0.01
A003	145.6	146.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.053	<0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	146.6	147.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.046	<0.01
A003	147.6	148.6	1.0		<100	<0.01	<0.01	0.20	<0.01	0.075	<0.01
A003	148.6	149.6	1.0		<100	<0.01	<0.01	0.15	<0.01	0.066	<0.01
A003	149.6	150.6	1.0		<100	<0.01	<0.01	0.16	<0.01	0.074	<0.01
A003	150.6	152.0	1.4		<100	<0.01	<0.01	0.15	<0.01	0.079	<0.01
A003	152.0	153.0	1.0		100	0.01	<0.01	0.23	<0.01	0.822	<0.01
A003	153.0	154.0	1.0		100	0.01	<0.01	0.22	<0.01	0.075	<0.01
A003	154.0	155.0	1.0		<100	0.01	<0.01	0.20	<0.01	0.081	<0.01
A003	155.0	156.0	1.0		100	0.01	<0.01	0.20	<0.01	0.069	0.01
A003	156.0	157.0	1.0		100	0.01	<0.01	0.22	<0.01	0.066	<0.01
A003	157.0	158.0	1.0		<100	0.01	<0.01	0.24	<0.01	0.065	<0.01
A003	158.0	159.0	1.0		<100	0.01	<0.01	0.19	<0.01	0.072	<0.01
A003	159.0	160.0	1.0		<100	0.01	<0.01	0.24	<0.01	0.063	<0.01
A003	160.0	161.0	1.0		100	0.01	<0.01	0.21	<0.01	0.067	<0.01
A003	161.0	162.0	1.0		<100	0.01	<0.01	0.24	<0.01	0.080	0.01
A003	162.0	163.0	1.0		<100	0.01	<0.01	0.23	<0.01	0.074	<0.01
A003	163.0	164.0	1.0		<100	0.01	<0.01	0.20	<0.01	0.049	<0.01
A003	164.0	165.0	1.0		<100	0.01	<0.01	0.20	<0.01	0.050	0.01
A003	165.0	166.0	1.0		100	0.01	<0.01	0.22	<0.01	0.067	<0.01
A003	166.0	167.0	1.0		100	0.01	<0.01	0.30	<0.01	0.075	<0.01
A003	167.0	168.0	1.0		<100	0.01	<0.01	0.21	<0.01	0.071	<0.01
A003	168.0	169.0	1.0		<100	0.01	<0.01	0.22	<0.01	0.053	<0.01
A003	169.0	170.0	1.0		<100	0.01	<0.01	0.18	<0.01	0.036	<0.01
A003	170.0	171.0	1.0		100	0.01	<0.01	0.19	<0.01	0.040	<0.01
A003	171.0	172.0	1.0		100	0.01	<0.01	0.18	<0.01	0.033	<0.01
A003	172.0	173.0	1.0		100	0.01	<0.01	0.17	<0.01	0.065	<0.01
A003	173.0	174.0	1.0		100	0.01	<0.01	0.19	<0.01	0.041	0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	174.0	175.0	1.0		100	0.01	<0.01	0.19	<0.01	0.044	<0.01
A003	175.0	176.0	1.0		100	0.01	<0.01	0.21	<0.01	0.069	<0.01
A003	176.0	177.0	1.0		<100	0.01	<0.01	0.19	<0.01	0.050	<0.01
A003	177.0	178.0	1.0		100	0.01	<0.01	0.20	<0.01	0.044	<0.01
A003	178.0	179.0	1.0		100	0.01	<0.01	0.19	<0.01	0.041	<0.01
A003	179.0	180.0	1.0		100	0.01	<0.01	0.20	<0.01	0.048	<0.01
A003	180.0	181.0	1.0		100	0.01	<0.01	0.20	<0.01	0.043	<0.01
A003	181.0	182.0	1.0		<100	0.01	<0.01	0.20	<0.01	0.037	<0.01
A003	182.0	183.0	1.0		100	0.01	<0.01	0.19	<0.01	0.044	<0.01
A003	183.0	184.0	1.0		100	0.01	<0.01	0.20	<0.01	0.042	<0.01
A003	184.0	185.0	1.0		100	0.01	<0.01	0.18	<0.01	0.037	<0.01
A003	185.0	186.0	1.0		100	0.01	<0.01	0.20	<0.01	0.058	<0.01
A003	186.0	187.0	1.0		100	0.01	<0.01	0.22	<0.01	0.055	<0.01
A003	187.0	188.0	1.0		100	0.01	<0.01	0.22	<0.01	0.054	<0.01
A003	188.0	189.0	1.0		100	0.01	<0.01	0.21	<0.01	0.052	<0.01
A003	189.0	190.0	1.0		<100	0.01	<0.01	0.22	<0.01	0.049	<0.01
A003	190.0	191.0	1.0		100	0.01	<0.01	0.18	<0.01	0.035	<0.01
A003	191.0	192.0	1.0		100	0.01	<0.01	0.19	<0.01	0.034	<0.01
A003	192.0	193.0	1.0		100	0.01	<0.01	0.22	<0.01	0.081	<0.01
A003	193.0	194.0	1.0		100	0.01	<0.01	0.23	<0.01	0.086	<0.01
A003	194.0	195.0	1.0		100	0.01	<0.01	0.18	<0.01	0.065	<0.01
A003	195.0	196.0	1.0		100	0.01	<0.01	0.19	<0.01	0.054	<0.01
A003	196.0	197.0	1.0		100	0.01	<0.01	0.19	<0.01	0.069	0.01
A003	197.0	198.0	1.0		100	0.01	<0.01	0.25	<0.01	0.114	<0.01
A003	198.0	199.0	1.0		100	0.01	<0.01	0.49	<0.01	0.266	<0.01
A003	199.0	200.0	1.0		100	0.01	<0.01	0.40	<0.01	0.240	<0.01
A003	200.0	201.0	1.0		100	0.01	<0.01	0.38	<0.01	0.253	0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	201.0	202.0	1.0		100	0.01	<0.01	0.27	<0.01	0.136	0.01
A003	202.0	203.0	1.0		100	0.01	<0.01	0.37	<0.01	0.251	<0.01
A003	203.0	204.0	1.0		100	0.01	<0.01	0.33	<0.01	0.211	<0.01
A003	204.0	205.0	1.0		100	0.02	<0.01	0.58	<0.01	0.393	<0.01
A003	205.0	206.0	1.0		100	0.01	<0.01	0.37	<0.01	0.241	<0.01
A003	206.0	207.0	1.0		100	0.01	<0.01	0.30	<0.01	0.243	<0.01
A003	207.0	208.0	1.0		100	0.01	<0.01	0.23	<0.01	0.115	<0.01
A003	208.0	209.0	1.0		100	0.01	<0.01	0.21	<0.01	0.133	<0.01
A003	209.0	210.0	1.0		100	0.01	<0.01	0.21	<0.01	0.153	<0.01
A003	210.0	211.0	1.0		100	0.01	<0.01	0.19	<0.01	0.133	<0.01
A003	211.0	212.0	1.0		100	0.01	<0.01	0.18	<0.01	0.094	<0.01
A003	212.0	213.0	1.0		100	0.01	<0.01	0.16	<0.01	0.119	<0.01
A003	213.0	214.0	1.0		<100	0.01	<0.01	0.25	<0.01	0.188	<0.01
A003	214.0	215.0	1.0		100	0.01	<0.01	0.24	<0.01	0.177	<0.01
A003	215.0	216.0	1.0		100	0.01	<0.01	0.24	<0.01	0.212	<0.01
A003	216.0	217.4	1.4		100	0.01	<0.01	0.25	<0.01	0.161	<0.01
A003	217.4	218.7	1.3		100	0.01	<0.01	0.25	<0.01	0.338	<0.01
A003	218.7	219.7	1.0	<2	24	0.010	<0.0005	0.240	<0.001	0.180	0.0055
A003	219.7	220.7	1.0	<2	24	0.010	<0.0005	0.250	<0.001	0.170	0.003
A003	220.7	221.7	1.0	<2	26	0.010	<0.0005	0.270	<0.001	0.205	0.004
A003	221.7	222.7	1.0	<2	30	0.010	<0.0005	0.370	<0.001	0.285	0.0035
A003	222.7	223.7	1.0	<2	20	0.010	<0.0005	0.460	<0.001	0.415	0.0045
A003	223.7	224.7	1.0	<2	34	0.020	0.001	1.020	0.0015	0.955	0.0095
A003	224.7	225.7	1.0	<2	26	0.010	0.001	0.555	<0.001	0.550	0.014
A003	225.7	227.0	1.3	<2	34	0.020	0.001	1.040	<0.001	1.09	0.0085
A003	227.0	228.2	1.2	<2	30	0.010	0.0005	0.495	<0.001	0.495	0.0085
A003	228.2	229.2	1.0	<2	32	0.015	0.0015	0.815	0.001	0.840	0.0095

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	229.2	230.2	1.0	<2	22	0.010	0.001	0.620	<0.001	0.610	0.005
A003	230.2	231.2	1.0	<2	28	0.015	0.0005	0.715	<0.001	0.730	0.008
A003	231.2	232.2	1.0	<2	28	0.020	0.0015	1.120	0.0035	1.13	0.013
A003	232.2	233.2	1.0	<2	18	0.010	0.002	0.605	<0.001	0.665	0.0145
A003	233.2	234.2	1.0	<2	22	0.015	0.002	0.820	<0.001	0.860	0.006
A003	234.2	235.2	1.0	<2	24	0.010	0.0015	0.590	<0.001	0.665	0.0085
A003	235.2	236.2	1.0	<2	20	0.010	0.002	0.530	<0.001	0.610	0.0115
A003	236.2	237.2	1.0	<2	14	0.015	0.0035	0.930	<0.001	1.06	0.007
A003	237.2	238.2	1.0	<2	30	0.025	0.0095	1.640	<0.001	2.07	0.0105
A003	238.2	239.2	1.0	<2	22	0.015	0.0055	0.815	<0.001	1.02	0.008
A003	239.2	240.2	1.0	<2	36	0.030	0.011	1.800	<0.001	2.29	0.0085
A003	240.2	241.2	1.0	<2	28	0.015	0.007	0.985	<0.001	1.23	0.0075
A003	241.2	242.2	1.0	<2	20	0.015	0.005	0.865	<0.001	1.03	0.006
A003	242.2	243.2	1.0	<2	22	0.035	0.0105	1.840	<0.001	2.21	0.008
A003	243.2	244.2	1.0	<2	18	0.015	0.0035	0.720	<0.001	0.820	0.0105
A003	244.2	244.9	0.7	<2	20	0.025	0.007	1.220	<0.001	1.24	0.0085
A003	244.9	245.9	1.0	<2	22	0.050	0.0115	2.080	<0.001	2.34	0.007
A003	245.9	246.9	1.0	<2	24	0.035	0.0055	1.830	0.0015	2.30	0.0095
A003	246.9	247.9	1.0	<2	16	0.005	0.0025	0.355	0.008	0.750	0.009
A003	247.9	248.7	0.8	<2	40	<0.005	0.001	0.190	0.005	0.330	0.0095
A003	248.7	249.7	1.0	<2	22	<0.005	0.0015	0.175	0.0145	0.475	0.07
A003	249.7	250.7	1.0	<2	63	0.010	0.002	0.420	0.004	0.690	0.009
A003	250.7	251.7	1.0	<2	200	0.010	0.003	0.580	0.003	1.31	0.0065
A003	251.7	252.7	1.0	<2	190	<0.005	0.002	0.250	0.012	0.760	0.0085
A003	252.7	253.7	1.0	<2	22	0.005	0.0025	0.375	0.004	1.090	0.0135
A003	253.7	254.7	1.0	<2	42	0.005	<0.0005	0.320	<0.001	0.285	0.0035
A003	254.7	255.7	1.0	<2	110	0.005	0.003	0.395	<0.001	0.280	0.0065

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	255.7	256.7	1.0	<2	18	<0.005	0.0005	0.165	<0.001	0.145	0.01
A003	256.7	257.7	1.0	<2	26	<0.005	<0.0005	0.115	<0.001	0.065	0.0035
A003	257.7	258.7	1.0	<2	24	0.005	0.0005	0.240	<0.001	0.185	0.0035
A003	258.7	259.7	1.0	<2	26	<0.005	<0.0005	0.145	<0.001	0.085	0.004
A003	259.7	260.7	1.0	<2	48	<0.005	<0.0005	0.195	<0.001	0.135	0.004
A003	260.7	262.0	1.3	<2	30	0.005	<0.0005	0.195	<0.001	0.130	0.004
A003	262.0	263.3	1.3	<2	30	0.020	0.003	0.740	<0.001	0.670	0.0045
A003	263.3	264.3	1.0	<2	83	0.030	0.0045	1.470	<0.001	1.40	0.007
A003	264.3	265.3	1.0	<2	32	0.005	<0.0005	0.190	<0.001	0.135	0.003
A003	265.3	266.3	1.0	<2	26	0.010	<0.0005	0.420	<0.001	0.365	0.002
A003	266.3	267.3	1.0	<2	65	0.010	0.0005	0.610	<0.001	0.520	0.0035
A003	267.3	268.3	1.0	<2	85	0.015	0.0015	1.020	<0.001	0.925	0.003
A003	268.3	269.3	1.0	<2	61	0.010	0.0005	0.665	<0.001	0.605	0.0025
A003	269.3	270.1	0.8	<2	74	0.015	0.0005	0.920	<0.001	0.780	0.003
A003	270.1	271.1	1.0	<2	135	0.010	0.0035	0.885	0.001	0.755	0.007
A003	271.1	272.1	1.0	<2	210	0.035	0.007	2.980	0.0015	2.68	0.009
A003	272.1	273.1	1.0	<2	105	0.015	0.002	1.060	<0.001	0.940	0.0025
A003	273.1	274.1	1.0	<2	260	0.035	0.004	2.830	0.0015	2.35	0.008
A003	274.1	275.1	1.0	<2	46	0.005	0.001	0.340	<0.001	0.240	0.0035
A003	275.1	276.1	1.0	<2	20	0.010	<0.0005	0.255	<0.001	0.130	0.004
A003	276.1	277.1	1.0	<2	28	0.010	<0.0005	0.345	<0.001	0.235	0.0035
A003	277.1	278.1	1.0	<2	67	0.020	0.0005	0.895	<0.001	0.730	0.0045
A003	278.1	279.1	1.0	<2	500	0.025	0.004	1.310	<0.001	1.31	0.0185
A003	279.1	280.0	0.9		13600	0.0640	0.0092	1.63	<0.005	0.7650	0.0250
A003	280.0	281.0	1.0		<100	0.0066	0.0042	0.0770	<0.005	0.0650	0.0120
A003	281.0	282.0	1.0		<100	0.0060	<0.0025	0.0645	<0.005	0.0600	0.0140
A003	282.0	283.0	1.0		<100	0.0050	<0.0025	0.0420	<0.005	0.0550	0.0130

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A003	283.0	284.0	1.0		<100	0.0054	<0.0025	0.0345	<0.005	0.0900	0.0245

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AVEBURY PROSPECT
A004

Collar coordinates	354,625.3mE 5,357,371.9mN 146.0mRL	**Final hole depth**	**226.3m**
Collar bearing	353°		
Collar dip	-50°	**Hole details**	0.0m to 3.0m HW
Coordinate system	AMG		3.0m to 56.0m HQ
			56.0m to 226.3m NQ

Drilled to test western end of a magnetic anomaly on the Avebury grid

Commenced	5 February 1999	**Drilled by**	Diamond Drilling Tasmania
Completed	18 February 1999	**Logged by**	Mick McKeown (McKeown Mining)

SUMMARY OF RESULTS

from m	to m	description	length m	Ni %	S %	As ppM
54.3	55.3	serepentinite	1.0	0.55	0.42	200
130.1	179.9	serpentinite	49.8	0.70	1.09	1283
137.3	146.3	serpentinite	9.0	1.02	1.20	100
151.1	157.1	serpentinite	6.0	1.29	1.45	2833

Down hole camera surveys

bhid	at	brg	dip
A004	0	352.7	-50
A004	61	352.7	-50.0
A004	112	352.7	-50.0
A004	160	352.7	-50.5
A004	211	352.7	-50.5

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	16.0	**CLAY AND CLAYSTONE**	0.0	7.6	1.5	20				
			7.6	10.6	1.8	60				
		Orange and brown clay and claystone (after rock) with common limonite on fractures in the claystone.	10.6	13.6	0.8	27				
			13.6	16.0	0.8	33				
		BCA is obscure.								
		The interval is puggy to rubbly.								
		The contact with the next interval is gradational (weathering).								
16.0	27.6	**CLAYSTONE AND CHERT**	16.0	19.6	1.3	36				
			19.6	20.4	0.8	100				
		Brown and tan claystone (after rock) and minor grey chert with common limonite on fractures.	20.4	22.6	0.3	14				
			22.6	25.6	1.5	50				
			25.6	27.6	0.8	40				
		BCA is obscure.								
		The interval is puggy to rubbly.								
		The contact with the next interval is gradational (weathering).								
27.6	40.5	**HORNFELS AND CHERTY HORNFELS**	27.6	28.3	0.7	100				
			28.3	29.1	0.6	75				
		Grey and lesser purple grey hornfels and lesser light grey cherty hornfels with common limonite on joints and fractures, trace to sparse quartz as stringers and lace veining, sparse narrow clayey zones.	29.1	30.2	1.1	100				
			30.2	31.2	1.0	100				
			31.2	32.8	1.6	100				
			32.8	33.3	0.5	100				
		BCA is obscure.	33.3	34.0	0.7	100				
			34.0	34.6	0.6	100				
		The interval is extremely broken to crumbly.	34.6	35.1	0.5	100				

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
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from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
			35.1	35.4	0.3	100				
		The contact with the next interval is sharp but broken.	35.4	35.6	0.2	100				
			35.6	36.5	0.9	100				
			36.5	37.0	0.5	100				
			37.0	37.6	0.5	83				
			37.6	37.9	0.3	100				
			37.9	38.8	0.9	100				
			38.8	40.4	1.6	100				
40.5	43.7	**CHERT SKARN**	40.4	41.4	1.0	100	40.5	41.5	0.015	1.00
			41.4	42.7	1.3	100	41.5	42.5	0.015	<0.01
		Green, purple (axinitic) and green black chert and skarnised chert with common axinite, common chlorite, sparse schorl as small clots less than 2cm across, trace to sparse green serpentine on joints, and sparse puggy clay on joints.	42.7	43.6	0.9	100	42.5	43.7	0.025	<0.01
		BCA is obscure.								
		The interval is extremely broken to extremely broken.								
		The contact with the next interval is sharp but broken.								
43.7	44.7	**CHERT AND SCHORL**	43.6	44.2	0.6	100	43.7	44.7	0.105	<0.01
			44.2	44.7	0.5	100				
		Dark green to grey black chert with common schorl as clots and patches up to 5cm across, and trace crystalline pyrite.								
		BCA is obscure.								
		The interval is rubbly.								

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The contact with the next interval is sharp but broken.								
44.7	45.9	**SERPENTINITE** Light green serpentinite (siliceous?) and sparse included dark green serpentinite fragments up to 5cm across, trace quartz as stringers, trace brown sphalerite as blebs and in some quartz stringers, trace to sparse calcite as stringers, rare chloritic stylolites, and trace schorl? as flecks. BCA is obscure. The interval is unbroken. The contact with the next interval is sharp but irregular.	44.7	46.1	1.4	100	44.7	45.9	0.020	0.10
45.9	51.3	**SERPENTINITE** Mottled light to mid green serpentinite with sparse to minor magnetite as stringers and flecks, trace calcite as stringers, and trace pentlandite as rare disseminations. BCA is obscure. The interval is broken. The contact with the next interval is gradational (lithology).	46.1 49.2	49.2 52.4	3.1 3.2	100 100	45.9 46.9 47.9 48.9 50.1	46.9 47.9 48.9 50.1 51.3	0.045 0.055 0.065 0.095 0.150	<0.01 <0.01 <0.01 <0.01 0.02
51.3	61.2	**SERPENTINITE** Grey green serpentinite with minor to abundant magnetite as stringers, flecks and patches up to 10cm across, trace to sparse calcite as stringers, trace quartz as blebs,	52.4 55.5 56.0 58.6	55.5 56.0 58.6 61.1	3.1 0.5 2.6 2.5	100 100 100 100	51.3 52.3 53.3 54.3	52.3 53.3 54.3 55.3	0.285 0.270 0.270 0.545	0.18 0.21 0.47 0.42

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		trace pentlandite in calcite stringers and as disseminations associated with magnetite, and trace crystalline pyrite in calcite stringers and on joints.					55.3	56.3	0.240	0.14
							56.3	57.3	0.145	0.07
							57.3	58.3	0.170	0.08
		The interval is microfaulted in part.					58.3	59.3	0.170	0.10
							59.3	60.3	0.245	0.18
		BCA is obscure.					60.3	61.2	0.220	0.11
		The interval is broken, particularly along calcite stringers.								
		The contact with the next interval is sharp at 60 degrees to the core axis.								
61.2	86.3	**SERPENTINITE**	61.1	64.1	3.0	100	61.2	62.2	0.255	0.12
			64.1	67.3	3.2	100	62.2	63.2	0.230	0.12
		Very dark green to black massive serpentinite and patches of light green serpentinite,	67.3	70.5	3.2	100	63.2	64.2	0.240	0.12
		with minor to common magnetite as crystalline masses throughout, trace pentlandite	70.5	73.6	3.1	100	64.2	65.2	0.215	0.10
		as disseminations, sparse calcite as stringers, and trace to sparse chrysotilic green	73.6	76.6	3.0	100	65.2	66.2	0.215	0.14
		serpentine as stringers and on joints.	76.6	79.3	2.7	100	66.2	67.2	0.210	0.14
			79.3	82.2	2.9	100	67.2	68.2	0.200	0.16
		BCA is obscure.	82.2	85.4	3.2	100	68.2	69.2	0.170	0.18
							69.2	70.2	0.200	0.20
		The interval is broken in part near chrysotilic serpentine stringers.					70.2	71.2	0.190	0.17
							71.2	72.2	0.180	0.15
		The contact with the next interval is sharp at 40 degrees to the core axis.					72.2	73.2	0.180	0.14
							73.2	74.2	0.175	0.15
86.3	88.2	**SERPENTINISED GABBRO**	85.4	88.5	3.1	100	74.2	75.2	0.170	0.16
							75.2	76.2	0.180	0.17
		Light to dark green serpentinite after coarse grained crystalline gabbro, with abundant					76.2	77.2	0.195	0.18
		magnetite in more serpentinised (less crystalline) patches and sparse magnetite in					77.2	78.2	0.280	0.19
		gabbroic (more crystalline) parts, trace pentlandite as very rare disseminations,					78.2	79.2	0.195	0.13
		and sparse green serpentine as stringers and veinlets,					79.2	80.2	0.200	0.16
							80.2	81.2	0.185	0.13

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COMPANY Allegiance Mining NL
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HOLE NUMBER A004

from m	to m	DESCRIPTION
		The coarse grained texture is preserved throughout.
		The interval is generally unbroken.
		The contact with the next interval is sharp at 40 degrees to the core axis.
88.2	101.5	**MOTTLED SERPENTINITE**
		Mottled grey green and light green serpentinite with abundant magnetite as crystalline patches, blebs and stringers, trace pentlandite as rare disseminations becoming sparse towards 101.5m, trace calcite as stringers, and sparse green serpentine as stringers and veinlets.
		The mottled effect reflects the original coarse grained gabbroic texture.
		At 101.2m, very dark magnetite stringers cut gunmetal black magnetite patches.
		BCA is obscure.
		The interval is broken to very broken.
		The contact with the next interval is gradational (lithology).
101.5	124.1	**SERPENTINITE**
		Black serpentinite with common to locally abundant magnetite, sparse pentlandite as disseminations and blebs, and trace to sparse white chrysotilic serpentine as stringers.
		BCA is obscure.
		The interval is broken in part near chrysotilic stringers.

from m	to m	rec m	rec %
88.5	90.7	2.2	100
90.7	93.8	3.1	100
93.8	96.9	3.1	100
96.9	100.0	3.1	100
100.0	101.6	1.6	100
101.6	103.6	2.0	100
103.6	106.6	3.0	100
106.6	109.6	3.0	100
109.6	112.2	2.6	100
112.2	115.2	3.0	100
115.2	118.2	3.0	100
118.2	120.7	2.5	100
120.7	123.9	3.2	100

from m	to m	Ni %	S %
81.2	82.2	0.195	0.14
82.2	83.2	0.185	0.14
83.2	84.2	0.195	0.13
84.2	85.2	0.170	0.17
85.2	86.3	0.195	0.08
86.3	87.3	0.150	0.02
87.3	88.2	0.130	0.02
88.2	89.2	0.140	<0.01
89.2	90.2	0.130	0.01
90.2	91.2	0.155	0.01
91.2	92.2	0.170	0.04
92.2	93.2	0.170	0.04
93.2	94.2	0.175	0.04
94.2	95.2	0.145	0.08
95.2	96.2	0.180	<0.01
96.2	97.2	0.315	0.12
97.2	98.2	0.450	0.09
98.2	99.2	0.480	0.07
99.2	100.2	0.285	0.06
100.2	101.5	0.355	0.07
101.5	102.5	0.280	0.18
102.5	103.5	0.375	0.19
103.5	104.5	0.295	0.18
104.5	105.5	0.220	0.14
105.5	106.5	0.350	0.13
106.5	107.5	0.320	0.11
107.5	108.5	0.245	0.12
108.5	109.5	0.275	0.09

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COMPANY Allegiance Mining NL
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from m	to m	DESCRIPTION
		The contact with the next interval is sharp at 30 degrees to the core axis.
124.1	124.3	**SERPENTINITE BRECCIA**
		Black serpentinite clasts up to 2cm across in grey puggy matrix.
		VCA is 30 degrees to the core axis.
		The interval is extremely broken and puggy.
		The contact with the next interval is sharp at 30 degrees to the core axis.
124.3	133.9	**SERPENTINITE**
		As between 101.5m and 124.1m.
		BCA is obscure.
		The interval is broken in part.
		The contact with the next interval is sharp at 50 degrees to the core axis.
133.9	134.0	**SERPENTINITE AND MONTMORILLONITE**
		Black serpentinite with abundant montmorillonite as stringers at 50 degrees to the core axis.
		The contact with the next interval is sharp at 50 degrees to the core axis.

from m	to m	rec m	rec %
123.9	127.0	3.1	100
127.0	130.2	3.2	100
130.2	133.0	2.8	100
133.0	136.2	3.2	100

from m	to m	Ni %	S %
109.5	110.5	0.280	0.08
110.5	111.5	0.220	0.08
111.5	112.5	0.420	0.07
112.5	113.5	0.405	0.07
113.5	114.5	0.215	0.12
114.5	115.5	0.385	0.13
115.5	116.5	0.300	0.17
116.5	117.5	0.260	0.14
117.5	118.5	0.285	0.12
118.5	119.5	0.310	0.13
119.5	120.5	0.335	0.18
120.5	121.5	0.310	0.21
121.5	122.8	0.500	0.37
122.8	124.1	0.175	0.23
124.1	125.1	0.160	0.20
125.1	126.1	0.185	0.14
126.1	127.1	0.240	0.20
127.1	128.1	0.215	0.18
128.1	129.1	0.275	0.24
129.1	130.1	0.230	0.22
130.1	131.1	0.325	0.36
131.1	132.1	0.545	0.52
132.1	133.9	0.620	0.56

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from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
134.0	137.3	**SILICEOUS SERPENTINITE**					133.9	134.9	0.500	0.47
							134.9	136.1	0.515	0.51
		Light green and grey green siliceous serpentinite with common magnetite as first generation flecks and patches and second generation stringers, sparse pentlandite as blebs, flecks and small ragged patches up to 2cm across associated with the second generation magnetite, and trace green serpentine as stringers.					136.1	137.3	0.345	0.38
		BCA is obscure.								
		The interval is broken in part.								
		The contact with the next interval is sharp, broken and brecciated.								
137.3	139.1	**SILICEOUS SERPENTINITE**	136.2	138.0	1.8	100	137.3	138.3	1.190	1.44
			138.0	139.6	1.6	100	138.3	139.3	1.340	1.47
		Light green to grey siliceous serpentinite with common to abundant magnetite as patches, sparse to minor pentlandite as flecks and small patches, sparse green serpentine as stringers, and sparse calcite as stringers and veinlets.								
		Near both contacts, the interval is brecciated with pale green matrix.								
		BCA is obscure.								
		The interval is extremely broken.								
		The contact with the next interval is sharp, broken and brecciated.								
139.1	139.6	**SILICEOUS SERPENTINITE**					139.3	140.3	1.570	1.85
		Pale green to grey siliceous serpentinite with common pentlandite as flecks accumulating to small patches, minor magnetite as flecks and veinlets, and trace								

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PROJECT Zeehan Joint Venture
HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		chrysotile as stringers. BCA is obscure. The interval is broken. The contact with the next interval is gradational (lithology).								
139.6	149.3	**SILICEOUS SERPENTINITE** Pale green to grey serpentinite with common to abundant magnetite as patches (accumulating to massive magnetite in part, magnetite abundant near start grading to common at near end of interval), sparse to minor pentlandite as blebs and flecks, sparse green serpentine as stringers, and sparse calcite as vuggy veinlets. Very coarse gabbroic texture has been preserved in part. BCA is obscure. The interval is broken. The contact with the next interval is sharp but irregular.	139.6 142.6 145.2 148.2	142.6 145.2 148.2 149.8	3.0 2.6 3.0 1.6	100 100 100 100	140.3 141.3 142.3 143.3 144.3 145.3 146.3 147.3 148.3	141.3 142.3 143.3 144.3 145.3 146.3 147.3 148.3 149.3	1.040 0.360 1.440 0.710 0.385 1.110 0.275 0.430 0.280	1.17 0.42 1.68 0.81 0.49 1.46 0.37 0.57 0.42
149.3	151.1	**XENOLITH** Mottled brown to green and lesser black chert/hornfels xenolith with trace pentlandite as flecks, sparse schorl as flecks, and sparse green serpentine on joints. This is a very altered rock. BCA is obscure.	149.8	151.6	1.8	100	149.3 150.1	150.1 151.1	0.185 0.525	0.14 0.79

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from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is very broken. The contact with the next interval is sharp but irregular.								
151.1	163.9	**SERPENTINITE** Pale green to grey green serpentinite becoming darker in colour towards 163.5m, with common, locally abundant, magnetite, and sparse to minor pentlandite as flecks, blebs and small patches. The interval has an extremely coarse remnant gabbroic or, perhaps, a brecciated texture. BCA is obscure. The interval is generally unbroken. The contact with the next interval is gradational (lithology).	151.6 154.6 157.6 160.6	154.6 157.6 160.6 163.6	3.0 3.0 3.0 3.0	100 100 100 100	151.1 152.1 153.1 154.1 155.1 156.1 157.1 158.1 159.1 159.9 160.9 161.9 162.9	152.1 153.1 154.1 155.1 156.1 157.1 158.1 159.1 159.9 160.9 161.9 162.9 163.9	1.380 1.620 0.610 0.615 1.920 1.600 0.190 0.345 1.000 0.480 0.420 0.360 0.630	1.80 1.97 0.78 0.77 2.31 1.04 0.17 0.18 0.69 0.32 0.47 0.41 0.86
163.9	165.5	**SERPENTINITE** Pale green to grey green serpentinite with minor magnetite as small crystalline patches, and sparse to minor pentlandite as flecks, blebs and small patches. BCA is obscure. The interval is generally unbroken. The contact with the next interval is gradational (lithology).	163.6	166.6	3.0	100	163.9 164.9	164.9 165.9	1.880 0.550	2.71 0.61

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HOLE NUMBER A004

from m	to m	DESCRIPTION
165.5	173.1	**SERPENTINITE** As between 163.5m and 165.5m but with minor tremolite? or altered feldspar? as small crystalline patches. 166.70m to 166.75m: puggy zone: fault? The contact with the next interval is gradational (lithology).
173.1	174.6	**SERPENTINITE** Massive, mottled light to mid green serpentinite with minor magnetite as stringers, and sparse pentlandite as flecks and occasional small patches. BCA = 50 degrees (magnetite banding) The interval is generally unbroken. The contact with the next interval is gradational (lithology).
174.6	184.2	**SILICEOUS ROCK** Grey siliceous rock and minor quartz rock with sparse remnant feldspar? patches, minor pentlandite as flecks and patches throughout, and sparse calcite as veinlets. 179.9m to 180.2m: quartz vein with puggy clay and minor schorl 182.0m to 182.1m: chert xenolith 182.2m to 183.0m: chert xenolith BCA is obscure.

from m	to m	rec m	rec %
166.6	169.6	3.0	100
169.6	172.6	3.0	100
172.6	175.6	3.0	100
175.6	178.6	3.0	100
178.6	181.6	3.0	100
181.6	184.6	3.0	100

from m	to m	Ni %	S %
165.9	166.9	0.400	0.30
166.9	167.9	0.245	0.33
167.9	168.9	0.405	0.57
168.9	169.9	0.705	0.25
169.9	170.9	1.060	1.09
170.9	172.0	0.840	0.47
172.0	173.1	0.490	0.24
173.1	174.9	0.220	1.50
174.9	175.9	0.230	2.52
175.9	176.9	0.810	4.88
176.9	177.9	0.410	2.74
177.9	178.9	0.375	2.55
178.9	179.9	0.605	4.11
179.9	180.9	0.235	2.60
180.9	182.2	0.145	2.09
182.2	183.2	0.150	1.10
183.2	184.2	0.215	1.62

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HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is generally unbroken but extremely broken from 179.9m to 180.2m. The contact with the next interval is sharp but irregular.								
184.2	186.1	**CHERT AND SILTSTONE** Brown chert and green fine grained altered siltstone with sparse to minor schorl as stringers and veinlets, sparse leucoxene? spotting in chert, sparse light green serpentine as veinlets, and sparse crystalline quartz as veinlets. BCA is irregular. The interval is broken. The contact with the next interval is sharp at 30 degrees to the core axis: fault.	184.6	187.6	3.0	100	184.2	185.0	0.160	0.28
186.1	187.9	**SCHORL ROCK** Semi-massive schorl with pale green crystalline tremolite? as matrix in part, sparse red sphalerite as flecks, trace to sparse pyrite as flecks, and trace pink cassiterite? flecks. 186.1m to 186.2m: puggy serpentine: fault. BCA is obscure. The contact with the next interval is gradational (mineralogy).								
187.9	223.6	**CHERT AND HORNFELS** Grey, red, green and white chert and lesser green hornfels with sparse schorl as stringers and crystalline patches, trace to sparse crystalline quartz as stringers, sparse	187.6 190.6 193.6 196.6	190.6 193.6 196.6 198.9	3.0 3.0 3.0 2.3	100 100 100 100				

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HOLE NUMBER A004

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		axinite as patches, for example at 193.0m, sparse red sphalerite as rare flecks associated with axinite at 193.3m and 200.3m, and trace bright green diopside? as a veinlet at 193.0m.	198.9	201.9	3.0	100				
			201.9	205.0	3.1	100				
			205.0	208.1	3.1	100				
			208.1	210.6	2.5	100				
			210.6	211.6	1.0	100				
			211.6	214.6	3.0	100				
		197.4m to 199.5m: a very brecciated chert zone with minor quartz as stringers.	214.6	217.6	3.0	100				
			217.6	220.6	3.0	100				
		BCA is	220.6	223.6	3.0	100				
			223.6	226.3	2.7	100				
		The interval is generally unbroken.								
		END OF HOLE AT 226.3m.								

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bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	40.5	41.5	1.0	<2	<50	0.0060	<0.005	0.0150	0.005	<0.01	0.015
A004	41.5	42.5	1.0	<2	<50	0.0060	<0.005	0.0150	0.005	<0.01	0.02
A004	42.5	43.7	1.2	<2	<50	0.0040	<0.005	0.0250	<0.005	<0.01	0.03
A004	43.7	44.7	1.0	<2	50	0.0070	<0.005	0.1050	0.005	<0.01	0.025
A004	44.7	45.9	1.2	<2	<50	<0.0020	<0.005	0.0200	0.005	0.1	0.19
A004	45.9	46.9	1.0	<2	<50	<0.0020	<0.005	0.0450	<0.005	<0.01	0.025
A004	46.9	47.9	1.0	<2	<50	0.0020	<0.005	0.0550	<0.005	<0.01	0.055
A004	47.9	48.9	1.0	<2	<50	0.0020	<0.005	0.0650	<0.005	<0.01	0.055
A004	48.9	50.1	1.2	<2	150	<0.0020	<0.005	0.0950	0.01	<0.01	0.045
A004	50.1	51.3	1.2	<2	500	<0.0020	<0.005	0.1500	0.005	0.02	0.025
A004	51.3	52.3	1.0	<2	850	0.0020	<0.005	0.2850	<0.005	0.18	0.02
A004	52.3	53.3	1.0	<2	250	0.0020	<0.005	0.2700	0.04	0.21	0.115
A004	53.3	54.3	1.0	<2	300	<0.0020	<0.005	0.2700	0.02	0.47	0.055
A004	54.3	55.3	1.0	<2	200	0.0040	<0.005	0.5450	<0.005	0.42	0.02
A004	55.3	56.3	1.0	<2	100	<0.0020	<0.005	0.2400	<0.005	0.14	0.01
A004	56.3	57.3	1.0	<2	<50	<0.0020	<0.005	0.1450	<0.005	0.07	0.015
A004	57.3	58.3	1.0	<2	<50	<0.0020	<0.005	0.1700	<0.005	0.08	0.01
A004	58.3	59.3	1.0	<2	50	<0.0020	<0.005	0.1700	<0.005	0.1	0.005
A004	59.3	60.3	1.0	<2	250	0.0030	<0.005	0.2450	<0.005	0.18	0.01
A004	60.3	61.2	0.9	<2	850	0.0020	<0.005	0.2200	0.01	0.11	0.04
A004	61.2	62.2	1.0	<2	300	0.0070	<0.005	0.2550	<0.005	0.12	0.01
A004	62.2	63.2	1.0	<2	50	0.0070	<0.005	0.2300	<0.005	0.12	0.015
A004	63.2	64.2	1.0	<2	150	0.0080	<0.005	0.2400	<0.005	0.12	0.015
A004	64.2	65.2	1.0	<2	300	0.0060	<0.005	0.2150	<0.005	0.1	0.015
A004	65.2	66.2	1.0	<2	100	0.0060	<0.005	0.2150	<0.005	0.14	0.02
A004	66.2	67.2	1.0	<2	250	0.0070	<0.005	0.2100	<0.005	0.14	0.025
A004	67.2	68.2	1.0	<2	350	0.0060	<0.005	0.2000	<0.005	0.16	0.02

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	68.2	69.2	1.0	<2	150	0.0050	<0.005	0.1700	0.005	0.18	0.03
A004	69.2	70.2	1.0	<2	350	0.0060	<0.005	0.2000	0.005	0.2	0.025
A004	70.2	71.2	1.0	<2	200	0.0060	<0.005	0.1900	0.01	0.17	0.02
A004	71.2	72.2	1.0	<2	150	0.0060	<0.005	0.1800	<0.005	0.15	0.02
A004	72.2	73.2	1.0	<2	100	0.0070	<0.005	0.1800	0.005	0.14	0.02
A004	73.2	74.2	1.0	<2	100	0.0070	<0.005	0.1750	0.005	0.15	0.02
A004	74.2	75.2	1.0	<2	100	0.0060	<0.005	0.1700	0.01	0.16	0.025
A004	75.2	76.2	1.0	<2	150	0.0060	<0.005	0.1800	0.015	0.17	0.03
A004	76.2	77.2	1.0	<2	250	0.0060	<0.005	0.1950	0.01	0.18	0.025
A004	77.2	78.2	1.0	<2	1000	0.0100	<0.005	0.2800	0.005	0.19	0.025
A004	78.2	79.2	1.0	<2	200	0.0070	<0.005	0.1950	0.01	0.13	0.015
A004	79.2	80.2	1.0	<2	100	0.0070	<0.005	0.2000	0.01	0.16	0.015
A004	80.2	81.2	1.0	<2	50	0.0070	<0.005	0.1850	<0.005	0.13	0.01
A004	81.2	82.2	1.0	<2	50	0.0070	<0.005	0.1950	<0.005	0.14	0.01
A004	82.2	83.2	1.0	<2	50	0.0070	<0.005	0.1850	<0.005	0.14	0.01
A004	83.2	84.2	1.0	<2	100	0.0060	<0.005	0.1950	<0.005	0.13	0.01
A004	84.2	85.2	1.0	<2	100	0.0050	<0.005	0.1700	<0.005	0.17	0.01
A004	85.2	86.3	1.1	<2	100	0.0050	<0.005	0.1950	<0.005	0.08	0.01
A004	86.3	87.3	1.0	<2	50	0.0030	<0.005	0.1500	<0.005	0.02	0.01
A004	87.3	88.2	0.9	<2	50	0.0020	<0.005	0.1300	<0.005	0.02	0.01
A004	88.2	89.2	1.0	<2	200	0.0020	<0.005	0.1400	<0.005	<0.01	0.01
A004	89.2	90.2	1.0	<2	<50	0.0020	<0.005	0.1300	<0.005	0.01	0.01
A004	90.2	91.2	1.0	<2	<50	0.0030	<0.005	0.1550	<0.005	0.01	0.01
A004	91.2	92.2	1.0	2	<50	0.0050	<0.005	0.1700	<0.005	0.04	0.01
A004	92.2	93.2	1.0	<2	<50	0.0050	<0.005	0.1700	<0.005	0.04	0.01
A004	93.2	94.2	1.0	<2	<50	0.0050	<0.005	0.1750	<0.005	0.04	0.01
A004	94.2	95.2	1.0	<2	<50	0.0040	<0.005	0.1450	<0.005	0.08	0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	95.2	96.2	1.0	<2	200	0.0030	<0.005	0.1800	<0.005	<0.01	0.01
A004	96.2	97.2	1.0	<2	600	0.0050	<0.005	0.3150	0.005	0.12	0.01
A004	97.2	98.2	1.0	<2	1000	0.0060	<0.005	0.4500	0.01	0.09	0.01
A004	98.2	99.2	1.0	<2	1750	0.0050	<0.005	0.4800	0.01	0.07	0.02
A004	99.2	100.2	1.0	<2	200	0.0050	<0.005	0.2850	<0.005	0.06	0.01
A004	100.2	101.5	1.3	<2	1500	0.0050	<0.005	0.3550	<0.005	0.07	0.01
A004	101.5	102.5	1.0	<2	750	0.0050	<0.005	0.2800	<0.005	0.18	0.01
A004	102.5	103.5	1.0	<2	1400	0.0070	<0.005	0.3750	<0.005	0.19	0.005
A004	103.5	104.5	1.0	<2	500	0.0050	<0.005	0.2950	<0.005	0.18	0.01
A004	104.5	105.5	1.0	<2	150	0.0050	<0.005	0.2200	<0.005	0.14	0.01
A004	105.5	106.5	1.0	<2	1400	0.0070	<0.005	0.3500	<0.005	0.13	0.01
A004	106.5	107.5	1.0	<2	1300	0.0070	<0.005	0.3200	<0.005	0.11	0.01
A004	107.5	108.5	1.0	<2	600	0.0060	<0.005	0.2450	<0.005	0.12	0.01
A004	108.5	109.5	1.0	<2	1000	0.0070	<0.005	0.2750	<0.005	0.09	0.01
A004	109.5	110.5	1.0	<2	950	0.0070	<0.005	0.2800	<0.005	0.08	0.01
A004	110.5	111.5	1.0	<2	350	0.0060	<0.005	0.2200	<0.005	0.08	0.01
A004	111.5	112.5	1.0	<2	2500	0.0100	<0.005	0.4200	<0.005	0.07	0.01
A004	112.5	113.5	1.0	2	2300	0.0120	<0.005	0.4050	<0.005	0.07	0.01
A004	113.5	114.5	1.0	<2	450	0.0060	<0.005	0.2150	<0.005	0.12	0.01
A004	114.5	115.5	1.0	3	1900	0.0070	<0.005	0.3850	<0.005	0.13	0.01
A004	115.5	116.5	1.0	<2	1100	0.0060	<0.005	0.3000	<0.005	0.17	0.01
A004	116.5	117.5	1.0	<2	850	0.0050	<0.005	0.2600	<0.005	0.14	0.01
A004	117.5	118.5	1.0	<2	1050	0.0060	<0.005	0.2850	<0.005	0.12	0.01
A004	118.5	119.5	1.0	<2	1150	0.0060	<0.005	0.3100	<0.005	0.13	0.005
A004	119.5	120.5	1.0	<2	700	0.0060	<0.005	0.3350	<0.005	0.18	0.015
A004	120.5	121.5	1.0	<2	150	0.0060	<0.005	0.3100	<0.005	0.21	0.005
A004	121.5	122.8	1.3	2	50	0.0080	<0.005	0.5000	<0.005	0.37	0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	122.8	124.1	1.3	<2	<50	0.0040	<0.005	0.1750	<0.005	0.23	0.01
A004	124.1	125.1	1.0	2	<50	0.0050	<0.005	0.1600	<0.005	0.2	0.01
A004	125.1	126.1	1.0	3	<50	0.0050	<0.005	0.1850	<0.005	0.14	0.01
A004	126.1	127.1	1.0	2	<50	0.0070	<0.005	0.2400	<0.005	0.2	0.01
A004	127.1	128.1	1.0	<2	<50	0.0070	<0.005	0.2150	<0.005	0.18	0.005
A004	128.1	129.1	1.0	<2	<50	0.0080	<0.005	0.2750	<0.005	0.24	0.01
A004	129.1	130.1	1.0	<2	<50	0.0080	<0.005	0.2300	<0.005	0.22	0.01
A004	130.1	131.1	1.0	<2	<50	0.0080	<0.005	0.3250	<0.005	0.36	0.015
A004	131.1	132.1	1.0	<2	50	0.0120	<0.005	0.5450	<0.005	0.52	0.015
A004	132.1	133.9	1.8	<2	200	0.0120	<0.005	0.6200	<0.005	0.56	0.01
A004	133.9	134.9	1.0	<2	50	0.0110	<0.005	0.5000	<0.005	0.47	0.01
A004	134.9	136.1	1.2	2	<50	0.0110	<0.005	0.5150	<0.005	0.51	0.005
A004	136.1	137.3	1.2	3	<50	0.0080	<0.005	0.3450	<0.005	0.38	0.005
A004	137.3	138.3	1.0	2	100	0.0280	0.005	1.1900	<0.005	1.44	0.005
A004	138.3	139.3	1.0	<2	100	0.0270	0.005	1.3400	0.01	1.47	0.02
A004	139.3	140.3	1.0	<2	100	0.0330	0.01	1.5700	0.015	1.85	0.045
A004	140.3	141.3	1.0	<2	100	0.0240	<0.005	1.0400	<0.005	1.17	0.015
A004	141.3	142.3	1.0	<2	50	0.0100	<0.005	0.3600	<0.005	0.42	0.01
A004	142.3	143.3	1.0	<2	350	0.0340	0.01	1.4400	<0.005	1.68	0.01
A004	143.3	144.3	1.0	<2	50	0.0150	<0.005	0.7100	<0.005	0.81	0.01
A004	144.3	145.3	1.0	<2	<50	0.0090	<0.005	0.3850	<0.005	0.49	0.005
A004	145.3	146.3	1.0	<2	50	0.0260	0.01	1.1100	<0.005	1.46	0.01
A004	146.3	147.3	1.0	<2	<50	0.0070	<0.005	0.2750	<0.005	0.37	0.005
A004	147.3	148.3	1.0	<2	50	0.0110	<0.005	0.4300	<0.005	0.57	0.01
A004	148.3	149.3	1.0	<2	<50	0.0070	<0.005	0.2800	<0.005	0.42	0.01
A004	149.3	150.1	0.8	<2	100	0.0070	<0.005	0.1850	<0.005	0.14	0.15
A004	150.1	151.1	1.0	<2	100	0.0120	<0.005	0.5250	<0.005	0.79	0.02

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	151.1	152.1	1.0	2	350	0.0320	0.01	1.3800	<0.005	1.8	0.015
A004	152.1	153.1	1.0	<2	1150	0.0370	0.01	1.6200	<0.005	1.97	0.01
A004	153.1	154.1	1.0	<2	600	0.0150	<0.005	0.6100	<0.005	0.78	0.01
A004	154.1	155.1	1.0	<2	750	0.0150	<0.005	0.6150	<0.005	0.77	0.01
A004	155.1	156.1	1.0	<2	2750	0.0400	0.01	1.9200	<0.005	2.31	0.01
A004	156.1	157.1	1.0	<2	11400	0.0750	<0.005	1.6000	<0.005	1.04	0.01
A004	157.1	158.1	1.0	<2	900	0.0090	<0.005	0.1900	<0.005	0.17	0.005
A004	158.1	159.1	1.0	<2	2950	0.0230	<0.005	0.3450	<0.005	0.18	0.01
A004	159.1	159.9	0.8	<2	7300	0.0500	<0.005	1.0000	<0.005	0.69	0.015
A004	159.9	160.9	1.0	<2	2950	0.0280	<0.005	0.4800	<0.005	0.32	0.005
A004	160.9	161.9	1.0	<2	500	0.0120	<0.005	0.4200	<0.005	0.47	0.01
A004	161.9	162.9	1.0	<2	50	0.0090	<0.005	0.3600	<0.005	0.41	0.01
A004	162.9	163.9	1.0	3	150	0.0150	0.005	0.6300	<0.005	0.86	0.01
A004	163.9	164.9	1.0	3	250	0.0400	0.015	1.8800	<0.005	2.71	0.01
A004	164.9	165.9	1.0	2	2000	0.0300	<0.005	0.5500	<0.005	0.61	0.005
A004	165.9	166.9	1.0	<2	2250	0.0330	<0.005	0.4000	<0.005	0.3	0.01
A004	166.9	167.9	1.0	<2	100	0.0100	<0.005	0.2450	<0.005	0.33	0.01
A004	167.9	168.9	1.0	<2	600	0.0110	0.005	0.4050	<0.005	0.57	0.01
A004	168.9	169.9	1.0	<2	6750	0.0330	<0.005	0.7050	<0.005	0.25	0.01
A004	169.9	170.9	1.0	<2	5750	0.0240	0.005	1.0600	<0.005	1.09	0.01
A004	170.9	172.0	1.1	<2	7300	0.0300	<0.005	0.8400	<0.005	0.47	0.01
A004	172.0	173.1	1.1	<2	5050	0.0290	<0.005	0.4900	<0.005	0.24	0.015
A004	173.1	174.9	1.8	<2	100	0.0080	0.015	0.2200	<0.005	1.5	0.005
A004	174.9	175.9	1.0	<2	<50	0.0110	0.03	0.2300	<0.005	2.52	0.005
A004	175.9	176.9	1.0	<2	<50	0.0320	0.07	0.8100	<0.005	4.88	<0.005
A004	176.9	177.9	1.0	<2	<50	0.0190	0.04	0.4100	<0.005	2.74	<0.005
A004	177.9	178.9	1.0	<2	300	0.0220	0.055	0.3750	<0.005	2.55	0.005
A004	178.9	179.9	1.0	<2	200	0.0360	0.08	0.6050	<0.005	4.11	0.01

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A004	179.9	180.9	1.0	<2	50	0.0150	0.035	0.2350	<0.005	2.6	0.025
A004	180.9	182.2	1.3	<2	<50	0.0190	0.135	0.1450	<0.005	2.09	0.01
A004	182.2	183.2	1.0	<2	50	0.0170	0.115	0.1500	<0.005	1.1	0.02
A004	183.2	184.2	1.0	<2	500	0.0220	0.07	0.2150	<0.005	1.62	0.01
A004	184.2	185.0	0.8	5	450	0.0120	0.01	0.1600	<0.005	0.28	0.02

ALLEGIANCE MINING NL ZEEHAN JOINT VENTURE
AVEBURY PROSPECT
A005

Collar coordinates	354,520.9mE 5,357,467.4mN 171.3mRL	**Final hole depth**	**202.5m**
Collar bearing	353°		
Collar dip	-50°	**Hole details**	0.0m to 3.0m HW
Coordinate system	AMG		3.0m to 75.8m HQ
			75.8m to 202.5m NQ

Drilled to test western end of a magnetic anomaly on the Avebury grid

Commenced	22 February 1999	**Drilled by**	Diamond Drilling Tasmania
Completed	5 March 1999	**Logged by**	Mick McKeown (McKeown Mining)

SUMMARY OF RESULTS

from	to	description	length	Ni	S	As
m	m		m	%	%	ppM

no serpentinite intersected

Down hole camera surveys

bhid	at	brg	dip
A005	0	353.8	-50.0
A005	52	7	-49.0
A005	100	7	-48.5
A005	151	12	-47.5
A005	202	7	-47.5

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	9.0	**CLAY**	0.0	7.5	1.3	17				
		Mottled brown, faun and orange clay and minor claystone (after rock) fragments with common limonite and goethite staining on fractures.								
		BCA is obscure.								
		The interval is extremely broken.								
		The contact with the next interval is gradational (weathering).								
9.0	19.0	**WEATHERED HORNFELS AND CLAYSTONE**	7.5	13.2	3.0	53				
			13.2	15.1	1.8	95				
		Grey, very weathered hornfels and grey, white and orange claystone (after rock) with common limonite and goethite on joints and fractures.	15.1	15.7	0.4	67				
			15.7	19.0	0.8	24				
		BCA is obscure.								
		The interval is extremely broken.								
		The contact with the next interval is gradational (weathering).								
19.0	42.4	**HORNFELS**	19.0	20.8	0.9	50				
			20.8	21.3	0.5	100				
		Dark crimson grey hornfels with sparse green actinolite? as stringers, veinlets and patches with narrow bleached alteration haloes, trace quartz as rare stringers, sparse to minor schorl associated with actinolite?	21.3	21.7	0.4	100				
			21.7	22.1	0.2	50				
			22.1	22.6	0.5	100				
			22.6	22.8	0.2	100				
		41.7m to 41.9m: actinolite/schorl vein	22.8	23.5	0.7	100				
			23.5	23.7	0.2	100				
		BCA at 23.0m = 50 degrees (bedding).	23.7	24.2	0.5	100				

615141

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION
		The interval is extremely broken.
		The contact with the next interval is sharp but irregular.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
24.2	24.4	0.2	100				
24.4	25.3	0.9	100				
25.3	26.0	0.7	100				
26.0	26.4	0.4	100				
26.4	26.7	0.3	100				
26.7	27.5	0.8	100				
27.5	28.5	0.3	30				
28.5	29.2	0.7	100				
29.2	29.6	0.4	100				
29.6	29.9	0.1	33				
29.9	30.1	0.2	100				
30.1	30.4	0.3	100				
30.4	30.8	0.4	100				
30.8	31.5	0.7	100				
31.5	31.9	0.4	100				
31.9	32.2	0.3	100				
32.2	32.4	0.2	100				
32.4	32.7	0.3	100				
32.7	33.1	0.4	100				
33.1	33.9	0.8	100				
33.9	34.5	0.6	100				
34.5	34.9	0.3	75				
34.9	36.0	1.1	100				
36.0	36.6	0.6	100				
36.6	37.4	0.8	100				
37.4	37.7	0.3	100				
37.7	38.5	0.8	100				
38.5	40.1	1.6	100				
40.1	42.2	1.9	90				

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION
42.4	64.0	**CHERT** Mottled grey to white and slightly pink chert with sparse green chlorite as rare flecks, stringers and veinlets, sparse schorl as flecks and stringers, trace to sparse quartz as stringers, and trace crystalline pyrite on some joints and associated with quartz stringers. Some parts of the chert are altered tuffs, consisting of fine angular fragments in a fine grained groundmass. The interval has a brecciated fabric throughout. BCA at 43.2m = 0 degrees (bedding). The interval is broken. The contact with the next interval is gradational (lithology).
64.0	111.0	**HORNFELS AND LESSER CHERT** Crimson grey hornfels and cherty hornfels and lesser red brown to cream brown chert with sparse slightly vuggy pyrite blebs along bedding and as stringers, sparse quartz as stringers and veinlets, and sparse chlorite as rare flecks, stringers and veinlets. The interval has a brecciated fabric throughout. BCA at 28.4m = 40 to 50 degrees (bedding).

from m	to m	rec m	rec %	from m	to m	Ni %	S %
42.2	42.6	0.4	100				
42.6	43.5	0.9	100				
43.5	44.7	1.2	100				
44.7	45.7	1.0	100				
45.7	46.5	0.8	100				
46.5	48.0	1.5	100				
48.0	48.7	0.7	100				
48.7	49.3	0.6	100				
49.3	50.6	1.3	100				
50.6	51.3	0.7	100				
51.3	53.3	1.6	80				
53.3	53.7	0.4	100				
53.7	54.3	0.6	100				
54.3	55.5	1.2	100				
55.5	56.7	1.2	100				
56.7	57.9	1.2	100				
57.9	58.5	0.6	100				
58.5	59.8	1.3	100				
59.8	61.5	0.7	41				
61.5	62.5	1.0	100				
62.5	63.7	1.2	100				
63.7	64.5	0.8	100				
64.5	65.8	1.3	100				
65.8	67.3	1.5	100				
67.3	69.0	1.7	100				
69.0	69.8	0.8	100				
69.8	70.5	0.7	100				
70.5	72.1	1.6	100				
72.1	73.3	1.2	100				
73.3	74.3	1.0	100				

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
			74.3	76.3	2.0	100				
		The interval is broken to extremely broken.	76.3	77.8	1.5	100				
			77.8	79.4	1.6	100				
		The contact with the next interval is gradational (lithology).	79.4	81.7	2.3	100				
			81.7	82.5	0.8	100				
			82.5	85.5	3.0	100				
			85.5	88.5	3.0	100				
			88.5	90.2	1.7	100				
			90.2	91.5	1.3	100				
			91.5	94.2	2.7	100				
			94.2	96.6	2.4	100				
			96.6	97.5	0.9	100				
			97.5	100.5	3.0	100				
			100.5	102.3	1.8	100				
			102.3	103.5	1.2	100				
			103.5	106.0	2.5	100				
			106.0	106.5	0.5	100				
			106.5	107.8	1.3	100				
			107.8	109.5	1.7	100				
			109.5	111.2	1.7	100				
			111.2	111.9	0.7	100				
111.0	158.5	**HORNFELS**	111.9	112.5	0.6	100				
			112.5	113.6	1.1	100				
		Grey to crimson grey , fine grained hornfels with trace to sparse actinolite as diffuse stringers, veinlets and lace veining, trace pyrite as stringers, and trace pyrite associated with actinolite.	113.6	113.9	0.3	100				
			113.9	114.4	0.4	80				
			114.4	115.0	0.5	83				
			115.0	115.4	0.4	100				
		This interval is a hydrothermally altered sandstone or tuff.	115.4	115.8	0.2	50				
			115.8	118.5	2.7	100				
		BCA at 132.8m = 45 degrees (irregular bedding).	118.5	120.2	1.7	100				

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION
		BCA at 134.0m = 45 degrees (planar bedding).
		BCA at 157.0m = 45 degrees (planar bedding).
		The interval is broken.
		The contact with the next interval is gradational (lithology).
158.5	173.0	**HORNFELS**
		As from 111.0m and 158.5m but with sparse pyrrhotite as stringers, flecks, fracture fill and along bedding, trace pyrite in quartz stringers and veinlets and on joints, sparse quartz as stringers, and trace chalcopyrite associated with pyrrhotite stringers.
		BCA is irregular.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
120.2	121.2	1.0	100				
121.2	122.5	1.3	100				
122.5	123.8	1.3	100				
123.8	124.5	0.7	100				
124.5	126.5	2.0	100				
126.5	127.5	1.0	100				
127.5	130.0	2.5	100				
130.0	131.9	1.9	100				
131.9	133.5	1.6	100				
133.5	136.0	2.5	100				
136.0	137.6	1.6	100				
137.6	139.1	1.5	100				
139.1	140.7	1.6	100				
140.7	142.5	1.8	100				
142.5	143.6	1.1	100				
143.6	145.0	1.4	100				
145.0	146.6	1.6	100				
146.6	148.5	1.9	100				
148.5	149.4	0.9	100				
149.4	151.5	2.1	100				
151.5	153.1	1.6	100				
153.1	154.5	1.4	100				
154.5	157.5	3.0	100				
157.5	160.5	3.0	100				
160.5	163.5	3.0	100				
163.5	166.5	3.0	100				
166.5	169.5	3.0	100				
169.5	172.5	3.0	100				

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COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is broken.								
		The contact with the next interval is sharp at a low angle to the core axis.								
173.0	181.1	**HORNFELS AND CHERT**	172.5	174.9	2.4	100				
			174.9	177.5	2.6	100				
		Mottled brown cherty hornfels and grey, red brown and white chert with trace chlorite as stringers, sparse schorl in chert as small patches up to 10cm across, trace quartz as stringers, and sparse green actinolite associated with schorl.	177.5	178.5	1.0	100				
			178.5	181.5	3.0	100				
		The chert has a brecciated fabric.								
		BCAs are about 0 degrees and this interval may represent a band of narrow true thickness.								
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
			181.5	184.5	3.0	100				
181.3	191.3	**HORNFELS**	184.5	187.3	2.8	100				
			187.3	188.7	1.4	100				
		As from 158.5m to 173.0m.	188.7	190.5	1.8	100				
			190.5	192.6	2.1	100				
		BCA is irregular.								
		The interval is broken to very broken.								
		The contact with the next interval is gradational (lithology).								

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A005

from m	to m	DESCRIPTION
191.3	202.5	**HORNFELS**
		As from 111.0m and 158.5m.
		BCA is irregular.
		The interval is broken to very broken.
		END OF HOLE AT 202.5m.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
192.6	193.5	0.9	100				
193.5	195.0	1.5	100				
195.0	196.5	1.5	100				
196.5	198.0	1.5	100				
198.0	199.2	1.2	100				
199.2	200.7	1.5	100				
200.7	202.5	1.8	100				

615150

ALLEGIANCE MINING NL ZEEHAN JOINT VENTURE
AVEBURY PROSPECT
A006

Collar coordinates	354,735.8mE 5,357,189.7mN 150.0mRL	**Final hole depth**	**481.5m**
Collar bearing	000°		
Collar dip	-45°	**Hole details**	0.0m to 3.0m HW
Coordinate system	AMG		3.0m to 30.0m HQ
			30.0m to 481.5m NQ

Drilled to test western end of a magnetic anomaly on the Avebury grid

Commenced	26 March 1999	**Drilled by**	Diamond Drilling Tasmania
Completed	30 April 1999	**Logged by**	Mick McKeown (McKeown Mining)

SUMMARY OF RESULTS

from m	to m	description	length m	Ni %	S %	As ppM
318.0	445.5	serpentinite	127.5	0.35	0.50	<25
348.3	388.0	serpentinite	39.7	0.46	0.63	<25

Down hole camera surveys

bhid	at	brg	dip
A006	0	0.5	-45
A006	100	0.5	-44.5
A006	150	0.5	-45
A006	200	0.5	-46
A006	253	0.5	-46
A006	300	0.5	-46.5
A006	349	0.5	-44.5
A006	370	0.5	-48
A006	420	0.5	-48.5

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
0.0	7.3	**CLAY**	0.0	7.3	0.1	1				
		Red-brown clay.								
		The contact with the next interval is gradational (weathering).								
7.3	13.0	**CLAYSTONE**	7.3	10.5	1.1	34				
			10.5	13.0	0.6	24				
		Mottled brown and black claystone (after rock), the black colour is perhaps due to the presence of limonite and manganese.								
		BCA is obscure.								
		The interval is extremely broken to rubbly.								
		The contact with the next interval is sharp but broken.								
13.0	32.0	**CHERT AND LESSER HORNFELS**	13.0	14.7	1.7	100				
			14.7	16.5	1.2	67				
		Mottled white, grey and green-grey chert and very minor dark grey hornfels with sparse limonite on joints and fractures.	16.5	18.4	1.9	100				
			18.4	19.5	1.1	100				
			19.5	22.5	3.0	100				
		The mottling may be due to hydrothermal alteration; the chert has a brecciated fabric.	22.5	25.3	2.8	100				
			25.3	28.2	2.9	100				
		BCA is very irregular.	28.2	30.0	1.8	100				
			30.0	30.6	0.5	83				
		The interval is broken to extremely broken in part.	30.6	31.5	0.9	100				
		The contact with the next interval is gradational (lithology).								

615153

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION
32.0	81.0	**CHERT AND HORNFELS**
		Mottled grey-green, white and dark grey chert and green-grey to crimson-grey hornfels with trace quartz as stringers, trace schorl in chert, trace to sparse green serpentine on some joints and as alteration in some bands, and trace crystalline pyrite on some joints.
		The interval has a microfaulted fabric; the chert has a brecciated fabric, some narrow bands are completely disrupted.
		These are hydrothermally altered rocks.
		BCA is irregular but generally ranges from 40 to 50 degrees.
		The interval is broken to very broken.
		The contact with the next interval is gradational (lithology).
81.0	98.9	**CHERT AND HORNFELS**
		Grey to green-cream-grey chert and black to grey hornfels with sparse to minor serpentine as stringers and small patches and pervasive in some bands, and sparse to minor magnetite concentrated in some bands.
		The interval is banded and the chert bands are disrupted.
		BCA averages 70 to 80 degrees to the core axis.
		The interval is broken.
		The contact with the next interval is sharp but broken.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
31.5	33.6	2.1	100				
33.6	34.5	0.9	100				
34.5	37.5	3.0	100				
37.5	39.6	2.1	100				
39.6	40.5	0.9	100				
40.5	42.4	1.9	100				
42.4	43.5	1.1	100				
43.5	46.5	3.0	100				
46.5	49.5	3.0	100				
49.5	52.5	3.0	100				
52.5	55.2	2.7	100				
55.2	58.2	3.0	100				
58.2	61.2	3.0	100				
61.2	62.2	1.0	100				
62.2	64.5	2.3	100				
64.5	66.3	1.8	100				
66.3	67.5	1.2	100				
67.5	70.5	3.0	100				
70.5	73.5	3.0	100				
73.5	73.9	0.4	100				
73.9	76.3	2.4	100				
76.3	77.6	1.3	100				
77.6	79.5	2.9	153				
79.5	82.5	3.0	100				
82.5	85.5	3.0	100				
85.5	88.5	3.0	100				
88.5	90.6	2.1	100				
90.6	93.6	3.0	100				
93.6	96.7	3.1	100				
96.7	99.7	3.0	100				

615154

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
							97.9	98.9	0.085	0.110
98.9	103.1	**QUARTZ**	99.7	102.8	3.1	100	98.9	99.9	0.168	0.160
							99.9	100.9	0.166	0.145
		Massive white, green-white and grey quartz with minor disseminated magnetite, minor locally abundant vivid green diopside, trace disseminated molybdenite or bismuth, trace black and brown sphalerite as flecks, trace disseminated pyrrhotite, trace black chlorite as stylolites in part.					100.9	101.9	0.188	0.145
							101.9	103.1	0.101	0.140
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is gradational.								
103.1	109.0	**MASSIVE TO SEMI-MASSIVE MAGNETITE**	102.8	105.9	3.1	100	103.1	104.0	0.205	0.135
			105.9	108.3	2.4	100	104.0	105.0	0.232	0.480
		Massive to semi-massive magnetite with minor to abundant black and green serpentine as matrix, sparse to minor quartz as stringers, veinlets and veins, sparse to minor calcite as stringers, veinlets, veins and as matrix to magnetite patches in part, sparse brown sphalerite as flecks and small patches, and trace crystalline pyrite on joints.					105.0	106.0	0.130	0.090
							106.0	107.0	0.264	0.165
							107.0	108.0	0.137	0.105
							108.0	109.0	0.215	0.170
		Some remnant olivine? crystals occur near the start of the interval.								
		BCA is obscure.								
		The interval is broken to very broken.								
		The contact with the next interval is sharp but broken.								

615153

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
109.0	110.8	**SERPENTINITE AND SILICEOUS SERPENTINITE**	108.3	111.4	3.1	100	109.0	110.0	0.188	0.110
		Massive dirty green-cream siliceous serpentinite as rounded fragments up to 20cm across in green-black to black serpentinite matrix with sparse to minor magnetite as flecks and small patches, sparse calcite as stringers, and trace disseminated pentlandite. BCA is obscure. The interval is broken. The contact with the next interval is sharp but irregular.								
110.8	114.5	**SERPENTINITE**	111.4	114.4	3.0	100				
		Intermixed dirty green and black serpentinite with interstitial, locally massive, calcite, and minor magnetite as more or less interconnected small patches. BCA is obscure. The interval is broken. The contact with the next interval is sharp but irregular.								
114.5	120.7	**SLIGHTLY SILICEOUS SERPENTINITE**	114.4	117.5	3.1	100				
			117.5	120.6	3.1	100				
		Massive slightly mottled dirty green and green-white slightly siliceous serpentinite with common to abundant magnetite as flecks, stringers and veinlets accumulating to massive magnetite in part. BCA is obscure.								

615159

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The interval is broken.								
		The contact with the next interval is gradational (lithology).								
120.7	123.0	**QUARTZ-MAGNETITE-SERPENTINE**	120.6	123.7	3.1	100				
		Magnetite flecks, stringers and veinlets and serpentine flecks in massive quartz groundmass.								
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is gradational (lithology).								
123.0	133.3	**QUARTZ-MAGNETITE-SERPENTINE AND MAGNETITE-SERPENTINE**	123.7	126.8	3.1	100				
			126.8	129.9	3.1	100				
		Intermixed quartz-magnetite-serpentine (as from 120.7m to 123.0m) and massive magnetite-serpentine consisting of green-black serpentine and pervasive magnetite and rare massive green serpentine bands up to 5cm true thickness.	129.9	132.9	3.0	100				
		BCA is obscure.								
		The interval is broken.								
		The contact with the next interval is sharp but irregular.								
133.3	138.3	**QUARTZ-CALCITE**	132.9	134.8	1.9	100				
			134.8	136.5	1.7	100				
		Massive finegrained intemixed quartz and calcite with sparse green serpentine as flecks	136.5	139.5	3.0	100				

615151

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		(remnant crystals) and stringers, and massive vivid green serpentine from 133.3m to 134.4m. BCA is obscure. The interval is broken. The contact with the next interval is sharp but broken.								
138.3	143.3	**FAULT ZONE?** Dirty olive green siliceous serpentinite, black and green-black brecciated serpentinite with quartz lace veining, and mottled green, black and brown (altered) serpentinite with sparse pervasive magnetite as flecks. VCA at 142.3m = 45 degrees (quartz/breccia banding in serpentinite). The interval is broken to extremely broken. The contact with the next interval is sharp but broken.	139.5 141.4	141.4 144.3	0.9 2.9	47 100				
143.3	173.1	**SERPENTINITE** Slightly mottled black and green-black massive serpentinite with minor magnetite as flecks, stringers and small patches, trace very fine grained disseminated pentlandite, trace calcite and quartz as stringers, sparse chrysotilic serpentine as stringers and and veinlets from 156.0m to 172.1m. BCA is obscure The interval is generally unbroken except where chrysotilic serpentine veinlets occur.	144.3 147.3 149.9 153.0 156.0 158.9 162.0 165.1 168.1 171.2	147.3 149.9 153.0 156.0 158.9 162.0 165.1 168.1 171.2 174.2	3.0 2.6 3.1 3.0 2.9 3.1 3.1 3.0 3.1 3.0	100 100 100 100 100 100 100 100 100 100				

615156

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		The contact with the next interval is gradational (lithology).								
173.1	192.7	**SERPENTINITE**	174.2	176.3	2.1	100				
			176.3	178.5	2.2	100				
		Similar to previous interval (from 143.3m to 173.1m) but with green-white serpentine clots	178.5	181.5	3.0	100				
		and flecks which give this interval a distinctive appearance, the clots contain fine	181.5	184.5	3.0	100				
		grained acicular crystals (actinolite?); with minor pervasive magnetite, trace	184.5	187.5	3.0	100				
		disseminated pentlandite, but no chrysotilic serpentine veining.	187.5	190.5	3.0	100				
			190.5	193.5	3.0	100				
		BCA at 187.8m = 60 degrees (banding).								
		The interval is unbroken.								
		The contact with the next interval is gradational (lithology).								
192.7	204.7	**SERPENTINITE**	193.5	196.5	3.0	100				
			196.5	199.5	3.0	100				
		As from 143.3m to 173.1m with common to abundant magnetite as flecks, stringers	199.5	202.2	2.7	100				
		and patches, trace pentlandite as disseminations associated with magnetite, and sparse	202.2	205.2	3.0	100				
		chrysotilic veinlets as stringers and veinlets.								
		BCA is obscure.								
		The interval is generally unbroken but extremely broken where chrysotilic serpentine occurs.								
		The contact with the next interval is gradational (lithology).								

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
204.7	223.4	**SERPENTINITE**	205.2	208.3	3.1	100				
			208.3	211.4	3.1	100				
		As from 173.1m to 192.7m.	211.4	214.5	3.1	100				
			214.5	217.2	2.7	100				
		BCA is obscure.	217.2	220.3	3.1	100				
			220.3	223.4	3.1	100				
		The interval is generally unbroken.								
		The contact with the next interval is gradational (lithology).								
223.4	314.0	**SERPENTINITE**	223.4	226.5	3.1	100				
			226.5	229.5	3.0	100				
		Massive black and slightly mottled green-black serpentinite with common to abundant magnetite as flecks, stringers and patches, trace to sparse pentlandite as disseminations, flecks and rare small patches associated with magnetite, trace to sparse chrysotilic serpentine as stringers and veinlets, and rare green-white serpentine clots (crystal remnants?).	229.5	232.0	2.5	100				
			232.0	235.1	3.1	100				
			235.1	238.3	3.2	100				
			238.3	241.5	3.2	100				
			241.5	244.5	3.0	100				
			244.5	247.5	3.0	100				
		274.5m to 274.6m: fault: chrysotilic breccia/pug zone; the surrounding serpentinite is brecciated for about half a metre to a metre either side of this fault.	247.5	250.5	3.0	100				
			250.5	253.5	3.0	100				
			253.5	256.5	3.0	100				
		BCA at 236.3m = 40 degrees (alignment of small magnetite patches).	256.5	259.5	3.0	100				
		BCA at 300.5m = 45 degrees (alignment of small magnetite patches).	259.5	262.5	3.0	100				
			262.5	265.5	3.0	100				
		The interval is generally unbroken but extremely broken where chrysotilic serpentine occurs.	265.5	267.6	2.1	100				
			267.6	270.7	3.1	100				
			270.7	273.9	3.2	100				
		The contact with the next interval is gradational.	273.9	275.6	1.7	100				
			275.6	277.5	1.9	100				
			277.5	280.5	3.0	100				
			280.5	283.5	3.0	100				

615160

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION
314.0	348.6	**SERPENTINITE** Massive dirty olive green to black serpentinite with minor to common magnetite as irregular patches, sparse pentlandite as flecks, stringers and small patches aligned at 80 degrees to the core axis from about 325m to 335m, and trace white serpentine as stringers. 347.8m to 347.9m: patch of siliceous serpentinite. BCA from 325m to 335m = 80 degrees (sulphide alignment). The interval is generally unbroken. The contact with the next interval is sharp but broken.

from m	to m	rec m	rec %	from m	to m	Ni %	S %
283.5	285.3	1.8	100				
285.3	288.0	2.7	100				
288.0	291.1	3.1	100				
291.1	294.3	3.2	100				
294.3	297.3	3.0	100				
297.3	300.4	3.1	100				
300.4	303.5	3.1	100				
303.5	306.0	2.5	100				
306.0	309.0	3.0	100				
309.0	312.0	3.0	100				
312.0	314.8	2.8	100				
314.8	317.9	3.1	100	314.1	315.0	0.298	0.390
317.9	320.5	2.6	100	315.0	316.0	0.279	0.360
320.5	322.5	3.0	150	316.0	317.0	0.258	0.300
322.5	328.5	3.0	50	317.0	318.0	0.283	0.345
328.5	330.3	1.8	100	318.0	319.0	0.591	0.670
330.3	333.5	3.2	100	319.0	320.0	0.388	0.435
333.5	336.6	3.1	100	320.0	321.0	0.310	0.335
336.6	339.6	3.0	100	321.0	322.0	0.366	0.405
339.6	342.7	3.1	100	322.0	323.0	0.471	0.525
342.7	345.8	3.1	100	323.0	324.0	0.258	0.290
345.8	348.9	3.1	100	324.0	325.0	0.229	0.260
				325.0	326.0	0.322	0.360
				326.0	327.0	0.360	0.420
				327.0	328.0	0.202	0.225
				328.0	329.0	0.236	0.285
				329.0	330.4	0.214	0.265
				330.4	331.4	0.197	0.265
				331.4	332.4	0.214	0.305
				332.4	333.4	0.343	0.635
				333.4	334.4	0.422	0.655

615161

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
							334.4	335.4	0.424	0.700
							335.4	336.4	0.286	0.420
							336.4	337.4	0.309	0.410
							337.4	338.4	0.271	0.445
							338.4	339.4	0.238	0.370
							339.4	340.4	0.257	0.435
							340.4	341.4	0.417	0.745
							341.4	342.4	0.171	0.350
							342.4	343.4	0.217	0.575
							343.4	344.4	0.186	0.690
							344.4	345.4	0.156	0.825
							345.4	346.4	0.276	1.150
							346.4	347.3	0.271	0.955
							347.3	348.3	0.350	0.905
348.6	360.2	**SERPENTINITE AND SEMI-MASSIVE MAGNETITE**	348.9	350.8	1.9	100	348.3	349.3	0.674	1.430
			350.8	353.1	2.3	100	349.3	350.3	0.822	1.980
		Massive black serpentinite and semi-massive magnetite as patches and networks with	353.1	355.5	2.4	100	350.3	351.3	0.277	0.590
		sparse disseminated pentlandite as flecks, and sparse black serpentine on joints.	355.5	356.6	1.1	100	351.3	352.3	0.309	0.755
			356.6	357.8	1.2	100	352.3	353.7	0.449	1.050
		BCA is obscure.	357.8	360.0	2.2	100	353.7	354.7	0.572	0.995
							354.7	355.7	0.545	0.980
		The interval is extremely broken to rubbly and there is some core loss:					355.7	356.7	0.315	0.485
		322.5m to 328.5m: 3.0m recovered, 50% core loss.					356.7	358.2	0.241	0.430
							358.2	359.2	0.436	1.320
		The contact with the next interval is gradational.					359.2	360.2	0.447	0.830
360.2	374.0	**SERPENTINITE AND SEMI-MASSIVE MAGNETITE**	360.0	361.5	1.5	100	360.2	361.0	0.533	0.785
			361.5	364.5	3.0	100	361.0	362.0	0.483	0.735
		Massive black serpentinite and semi-massive magnetite as patches and networks with	364.5	367.5	3.0	100	362.0	363.0	0.649	0.780
		sparse to minor pentlandite as flecks and small patches, and trace to sparse white	367.5	370.5	3.0	100	363.0	364.0	0.193	0.165

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
		serpentine as stringers. There are rare patches of siliceous serpentinite, which may be remnant gabbro patches, for example, from 360.8m to 360.9m.	370.5	373.5	3.0	100	364.0	365.0	0.301	0.235
							365.0	366.0	1.020	0.855
							366.0	367.0	0.527	0.445
		BCA is obscure.					367.0	368.0	0.292	0.215
							368.0	369.0	0.547	0.500
		The interval is generally unbroken.					369.0	370.0	0.480	0.470
							370.0	371.0	0.415	0.400
		The contact with the next interval is gradational.					371.0	372.0	0.356	0.340
							372.0	373.0	0.374	0.360
							373.0	374.0	0.325	0.275
374.0	427.0	**SEMI-MASSIVE MAGNETITE AND SERPENTINITE**	373.5	376.5	3.0	100	374.0	375.0	0.185	0.120
			376.5	379.5	3.0	100	375.0	376.0	0.206	0.150
		Semi-massive magnetite as patches and networks and interstitial black serpentinite	379.5	382.5	3.0	100	376.0	377.0	0.277	0.255
		and occasional mottled light green to grey-green siliceous serpentinite zones up to 2m	382.5	385.5	3.0	100	377.0	378.0	0.505	0.505
		long and rare white-green altered ragged remnant gabbro fragments up to 5cm across,	385.5	388.5	3.0	100	378.0	379.0	0.648	0.780
		with trace to sparse pentlandite as flecks, stringers and small patches up to 5mm across;	388.5	391.5	3.0	100	379.0	380.0	0.656	0.775
		magnetite is less common in the siliceous serpentinite zones.	391.5	393.6	2.1	100	380.0	381.0	0.278	0.295
			393.6	396.7	3.1	100	381.0	382.0	0.666	0.900
		BCA is obscure.	396.7	399.8	3.1	100	382.0	383.0	0.577	0.650
			399.8	402.9	3.1	100	383.0	384.0	0.439	0.445
		The interval is generally unbroken.	402.9	406.0	3.1	100	384.0	385.0	0.211	0.140
			406.0	408.3	2.3	100	385.0	386.0	0.664	0.755
		The contact with the next interval is gradational.	408.3	411.4	3.1	100	386.0	387.0	0.289	0.300
			411.4	414.5	3.1	100	387.0	388.0	0.735	0.870
			414.5	417.6	3.1	100	388.0	389.0	0.421	0.440
			417.6	420.7	3.1	100	389.0	390.0	0.237	0.355
			420.7	423.3	2.6	100	390.0	391.0	0.205	0.390
			423.3	425.8	2.5	100	391.0	392.0	0.447	0.470
			425.8	429.0	3.2	100	392.0	393.0	0.393	0.355
			429.0	432.1	3.1	100	393.0	394.0	0.229	0.245
			432.1	435.2	3.1	100	394.0	395.0	0.172	0.220

615163

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION

from m	to m	rec m	rec %	from m	to m	Ni %	S %
435.2	438.1	2.9	100	395.0	396.0	0.339	0.410
438.1	438.2	0.1	100	396.0	397.0	0.538	1.440
438.2	439.2	1.0	100	397.0	398.0	0.290	0.380
439.2	441.6	2.4	100	398.0	399.0	0.232	0.415
441.6	442.5	0.9	100	399.0	400.0	0.320	0.280
442.5	445.5	3.0	100	400.0	401.0	0.297	0.270
445.5	448.5	3.0	100	401.0	402.0	0.194	0.110
448.5	451.5	3.0	100	402.0	403.0	0.260	0.215
451.5	454.5	3.0	100	403.0	404.0	0.264	0.260
454.5	457.5	3.0	100	404.0	405.0	0.398	0.295
457.5	460.5	3.0	100	405.0	406.0	0.395	0.300
460.5	463.5	3.0	100	406.0	407.0	0.826	0.920
463.5	466.5	3.0	100	407.0	408.0	0.821	0.940
466.5	469.5	3.0	100	408.0	409.0	0.204	0.255
469.5	472.5	3.0	100	409.0	410.0	0.257	0.275
472.5	475.5	3.0	100	410.0	411.0	0.186	0.189
475.5	478.5	3.0	100	411.0	412.0	0.339	0.276
478.5	481.5	3.0	100	412.0	413.0	0.439	0.404
				413.0	414.0	0.250	0.274
				414.0	415.0	0.237	0.264
				415.0	416.0	0.203	1.550
				416.0	417.0	0.526	0.774
				417.0	418.0	0.189	0.157
				418.0	419.0	0.264	0.208
				419.0	420.0	0.372	0.310
				420.0	421.0	0.394	0.358
				421.0	422.0	0.259	0.220
				422.0	423.0	0.137	0.075
				423.0	424.0	0.187	0.168
				424.0	425.0	0.157	0.202
				425.0	426.0	0.292	0.513

615164

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION	from m	to m	rec m	rec %	from m	to m	Ni %	S %
							426.0	427.0	0.262	0.611
427.0	437.5	**SEMI-MASSIVE MAGNETITE AND SERPENTINITE**					427.0	428.0	0.433	1.330
							428.0	429.0	0.364	0.941
		Semi-massive magnetite as patches and networks with interstitial black serpentinite and rare white-green altered ragged remnant gabbro fragments, with trace pentlandite as flecks, and trace to sparse quartz as stringers.					429.0	430.0	0.115	0.166
							430.0	431.0	0.146	0.265
							431.0	432.0	0.194	0.525
							432.0	433.0	0.307	0.792
		BCA at 430.0m = 20 to 25 degrees (magnetite banding in serpentinite).					433.0	434.0	0.461	0.693
							434.0	435.0	0.286	0.315
		The interval is generally unbroken.					435.0	436.0	0.373	0.378
							436.0	437.5	0.470	0.871
		The contact with the next interval is sharp, but slightly irregular, at 45 degrees to the core axis.								
437.5	481.5	**HORNSTONE**					437.5	438.5	0.089	0.060
							438.5	439.5	0.147	0.076
		Mottled vivid green (diopside), white (diopside and quartz), cream and brown (chert), and dark green (actinolite) brecciated chert, with common to abundant diopside and quartz, trace disseminated magnetite as fine flecks, becoming less common after the first metre or so, trace to sparse black and lesser brown schorl as fine flecks, and trace disseminated pyrrhotite as flecks.					439.5	440.5	0.112	0.051
							440.5	441.5	0.085	0.112
							441.5	442.5	0.084	0.138
							442.5	443.5	0.080	0.171
							443.5	444.5	0.087	0.192
							444.5	445.5	0.755	0.136
		Note that the diopside fluoreeces under ultraviolet light and that some of the quartz has a purple tinge.					445.5	446.5	0.109	0.191
							446.5	447.5	0.079	0.158
							447.5	448.5	0.109	0.111
		Some parts of the interval up to 2m long are more uniformly green and massive.					448.5	449.5	0.085	0.074
							449.5	450.5	0.102	0.123
		BCA is obscure.					450.5	451.5	0.079	0.106
							451.5	452.5	0.076	0.093
		This unit is relatively hard; bit burnt in at441.6m.					452.5	453.5	0.075	0.059

COMPANY Allegiance Mining NL
PROJECT Zeehan Joint Venture
HOLE NUMBER A006

from m	to m	DESCRIPTION
		END OF HOLE AT 481.5m

from m	to m	rec m	rec %	from m	to m	Ni %	S %
				453.5	454.6	0.051	0.040
				454.6	454.8	0.145	8.900
				454.8	455.5	0.040	0.065
				455.5	456.5	0.053	0.054
				456.5	457.5	0.074	0.042
				457.5	458.5	0.077	0.063
				458.5	459.5	0.049	0.029

615169

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	97.9	98.9	1.0		<100	0.0032	<0.0025	0.0845	0.0450	0.1100	0.0365
A006	98.9	99.9	1.0		<100	0.0032	0.0042	0.1680	0.0385	0.1600	0.0225
A006	99.9	100.9	1.0		<100	0.004	<0.0025	0.1660	0.0165	0.1450	0.0265
A006	100.9	101.9	1.0		<100	0.0052	<0.0025	0.1880	0.0545	0.1450	0.0230
A006	101.9	103.1	1.2		<100	0.0052	<0.0025	0.1010	0.0150	0.1400	0.0735
A006	103.1	104.0	0.9		<100	0.0225	0.0030	0.2050	0.0385	0.1350	0.0450
A006	104.0	105.0	1.0		160	0.0180	0.0074	0.2320	0.0605	0.4800	0.8590
A006	105.0	106.0	1.0		<100	0.0072	<0.0025	0.1300	0.0265	0.0900	0.0315
A006	106.0	107.0	1.0		160	0.0140	<0.0025	0.2640	<0.0050	0.1650	0.0325
A006	107.0	108.0	1.0		160	0.0076	<0.0025	0.1370	<0.0050	0.1050	0.0270
A006	108.0	109.0	1.0		170	0.0096	<0.0025	0.2150	<0.0050	0.1700	0.0220
A006	109.0	110.0	1.0		<100	0.0076	<0.0025	0.1880	<0.0050	0.1100	0.0185
A006	314.1	315.0	0.9		<100	0.0098	<0.0025	0.2980	<0.0050	0.390	0.0135
A006	315.0	316.0	1.0		<100	0.0090	<0.0025	0.2790	<0.0050	0.360	0.0076
A006	316.0	317.0	1.0		<100	0.0086	<0.0025	0.2580	<0.0050	0.300	0.0052
A006	317.0	318.0	1.0		<100	0.0082	<0.0025	0.2830	<0.0050	0.345	0.0068
A006	318.0	319.0	1.0		<100	0.0140	<0.0025	0.5910	0.0170	0.670	0.0385
A006	319.0	320.0	1.0		<100	0.0105	<0.0025	0.3880	<0.0050	0.435	0.0058
A006	320.0	321.0	1.0		<100	0.0090	<0.0025	0.3100	<0.0050	0.335	0.0046
A006	321.0	322.0	1.0		<100	0.0105	<0.0025	0.3660	<0.0050	0.405	0.0056
A006	322.0	323.0	1.0		<100	0.0120	<0.0025	0.4710	<0.0050	0.525	0.0230
A006	323.0	324.0	1.0		<100	0.0080	<0.0025	0.2580	<0.0050	0.290	0.0038
A006	324.0	325.0	1.0		<100	0.0078	<0.0025	0.2290	<0.0050	0.260	<0.0025
A006	325.0	326.0	1.0		<100	0.0086	<0.0025	0.3220	<0.0050	0.360	0.0060
A006	326.0	327.0	1.0		<100	0.0094	<0.0025	0.3600	<0.0050	0.420	0.0076
A006	327.0	328.0	1.0		<100	0.0070	<0.0025	0.2020	<0.0050	0.225	<0.0025
A006	328.0	329.0	1.0		<100	0.0080	<0.0025	0.2360	<0.0050	0.285	0.0028

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	329.0	330.4	1.4		<100	0.0076	<0.0025	0.2140	<0.0050	0.265	<0.0025
A006	330.4	331.4	1.0		<100	0.0072	<0.0025	0.1970	<0.0050	0.265	<0.0025
A006	331.4	332.4	1.0		<100	0.0072	<0.0025	0.2140	<0.0050	0.305	0.0076
A006	332.4	333.4	1.0		<100	0.0110	<0.0025	0.3430	<0.0050	0.635	0.0068
A006	333.4	334.4	1.0		<100	0.0125	<0.0025	0.4220	<0.0050	0.655	0.0050
A006	334.4	335.4	1.0		<100	0.0130	<0.0025	0.4240	<0.0050	0.700	0.0050
A006	335.4	336.4	1.0		<100	0.0098	<0.0025	0.2860	<0.0050	0.420	<0.0025
A006	336.4	337.4	1.0		<100	0.0100	<0.0025	0.3090	<0.0050	0.410	0.0030
A006	337.4	338.4	1.0		<100	0.0100	<0.0025	0.2710	<0.0050	0.445	0.0082
A006	338.4	339.4	1.0		<100	0.0088	<0.0025	0.2380	<0.0050	0.370	<0.0025
A006	339.4	340.4	1.0		<100	0.0086	<0.0025	0.2570	<0.0050	0.435	<0.0025
A006	340.4	341.4	1.0		<100	0.0125	<0.0025	0.4170	<0.0050	0.745	0.0026
A006	341.4	342.4	1.0		<100	0.0076	<0.0025	0.1710	<0.0050	0.350	0.0080
A006	342.4	343.4	1.0		<100	0.0080	<0.0025	0.2170	<0.0050	0.575	0.0064
A006	343.4	344.4	1.0		<100	0.0080	<0.0025	0.1860	<0.0050	0.690	0.0038
A006	344.4	345.4	1.0		<100	0.0082	0.0042	0.1560	<0.0050	0.825	0.0056
A006	345.4	346.4	1.0		<100	0.0092	0.0062	0.2760	<0.0050	1.15	<0.0025
A006	346.4	347.3	0.9		<100	0.0094	0.0042	0.2710	<0.0050	0.955	0.0048
A006	347.3	348.3	1.0		<100	0.0125	0.0046	0.3500	<0.0050	0.905	0.0056
A006	348.3	349.3	1.0		<100	0.0185	0.0078	0.6740	<0.0050	1.43	0.0026
A006	349.3	350.3	1.0		<100	0.0245	0.0105	0.8220	<0.0050	1.98	0.0070
A006	350.3	351.3	1.0		<100	0.0090	0.0038	0.2770	<0.0050	0.590	0.0030
A006	351.3	352.3	1.0		<100	0.0098	0.0040	0.3090	<0.0050	0.755	<0.0025
A006	352.3	353.7	1.4		<100	0.0125	0.0038	0.4490	<0.0050	1.05	0.0044
A006	353.7	354.7	1.0		<100	0.0135	<0.0025	0.5720	<0.0050	0.995	0.0056
A006	354.7	355.7	1.0		<100	0.0135	<0.0025	0.5450	<0.0050	0.980	0.0094
A006	355.7	356.7	1.0		<100	0.0090	<0.0025	0.3150	<0.0050	0.485	0.0036

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	356.7	358.2	1.5		<100	0.0082	<0.0025	0.2410	<0.0050	0.430	0.0220
A006	358.2	359.2	1.0		<100	0.0120	0.0056	0.4360	<0.0050	1.32	0.0036
A006	359.2	360.2	1.0		<100	0.0110	0.0048	0.4470	<0.0050	0.8300	0.0054
A006	360.2	361.0	0.8		<100	0.0115	0.0046	0.5330	<0.0050	0.7850	0.0070
A006	361.0	362.0	1.0		<100	0.0110	0.0042	0.4830	<0.0050	0.7350	0.0100
A006	362.0	363.0	1.0		<100	0.0130	0.0060	0.6490	<0.0050	0.7800	0.0096
A006	363.0	364.0	1.0		<100	0.0060	<0.0025	0.1930	<0.0050	0.1650	<0.0025
A006	364.0	365.0	1.0		<100	0.0074	<0.0025	0.3010	<0.0050	0.2350	<0.0025
A006	365.0	366.0	1.0		<100	0.0185	<0.0025	1.02	<0.0050	0.8550	<0.0025
A006	366.0	367.0	1.0		<100	0.0015	<0.0025	0.5270	<0.0050	0.4450	<0.0025
A006	367.0	368.0	1.0		<100	0.0096	<0.0025	0.2920	<0.0050	0.2150	<0.0025
A006	368.0	369.0	1.0		<100	0.0140	<0.0025	0.5470	<0.0050	0.5000	<0.0025
A006	369.0	370.0	1.0		<100	0.0110	<0.0025	0.4800	<0.0050	0.4700	<0.0025
A006	370.0	371.0	1.0		<100	0.0115	<0.0025	0.4150	<0.0050	0.4000	<0.0025
A006	371.0	372.0	1.0		<100	0.0094	<0.0025	0.3560	<0.0050	0.3400	<0.0025
A006	372.0	373.0	1.0		<100	0.0105	<0.0025	0.3740	<0.0050	0.3600	<0.0025
A006	373.0	374.0	1.0		<100	0.0098	<0.0025	0.3250	<0.0050	0.2750	<0.0025
A006	374.0	375.0	1.0		<100	0.0066	<0.0025	0.1850	<0.0050	0.1200	<0.0025
A006	375.0	376.0	1.0		<100	0.0066	<0.0025	0.2060	<0.0050	0.1500	<0.0025
A006	376.0	377.0	1.0		<100	0.0076	0.0520	0.2770	<0.0050	0.2550	0.0060
A006	377.0	378.0	1.0		<100	0.0125	<0.0025	0.5050	<0.0050	0.5050	0.0315
A006	378.0	379.0	1.0		<100	0.0145	0.0042	0.6480	<0.0050	0.7800	0.0590
A006	379.0	380.0	1.0		<100	0.0150	0.0032	0.6560	<0.0050	0.7750	0.0285
A006	380.0	381.0	1.0		<100	0.0070	<0.0025	0.2780	<0.0050	0.2950	<0.0025
A006	381.0	382.0	1.0		<100	0.0155	<0.0025	0.6660	<0.0050	0.9000	0.0036
A006	382.0	383.0	1.0		<100	0.0135	<0.0025	0.5770	<0.0050	0.6500	0.0054
A006	383.0	384.0	1.0		<100	0.0105	<0.0025	0.4390	<0.0050	0.4450	0.0130

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	384.0	385.0	1.0		<100	0.0074	<0.0025	0.2110	0.0055	0.1400	<0.0025
A006	385.0	386.0	1.0		<100	0.0165	<0.0025	0.6640	<0.0050	0.7550	0.0074
A006	386.0	387.0	1.0		<100	0.0082	<0.0025	0.2890	<0.0050	0.3000	0.0028
A006	387.0	388.0	1.0		<100	0.0170	<0.0025	0.7350	<0.0050	0.8700	0.0190
A006	388.0	389.0	1.0		<100	0.0120	<0.0025	0.4210	<0.0050	0.4400	0.0125
A006	389.0	390.0	1.0		<100	0.0080	<0.0025	0.2370	<0.0050	0.3550	0.0030
A006	390.0	391.0	1.0		<100	0.0066	<0.0025	0.2050	<0.0050	0.3900	0.0190
A006	391.0	392.0	1.0		<100	0.0110	<0.0025	0.4470	<0.0050	0.4700	0.0038
A006	392.0	393.0	1.0		<100	0.0105	<0.0025	0.3930	<0.0050	0.3550	<0.0025
A006	393.0	394.0	1.0		<100	0.0066	<0.0025	0.2290	<0.0050	0.2450	0.0092
A006	394.0	395.0	1.0		<100	0.0072	<0.0025	0.1720	<0.0050	0.2200	0.0165
A006	395.0	396.0	1.0		<100	0.0110	<0.0025	0.3390	<0.0050	0.4100	0.0070
A006	396.0	397.0	1.0		<100	0.0140	0.0060	0.5380	<0.0050	1.44	0.0460
A006	397.0	398.0	1.0		<100	0.0090	<0.0025	0.2900	<0.0050	0.3800	<0.0025
A006	398.0	399.0	1.0		<100	0.0058	<0.0025	0.2320	<0.0050	0.4150	0.0036
A006	399.0	400.0	1.0		<100	0.0105	<0.0025	0.3200	<0.0050	0.2800	0.0030
A006	400.0	401.0	1.0		<100	0.0115	<0.0025	0.2970	<0.0050	0.2700	0.0066
A006	401.0	402.0	1.0		<100	0.0084	<0.0025	0.1940	<0.0050	0.1100	<0.0025
A006	402.0	403.0	1.0		<100	0.0096	<0.0025	0.2600	<0.0050	0.2150	<0.0025
A006	403.0	404.0	1.0		<100	0.0100	0.0040	0.2640	0.0050	0.2600	<0.0025
A006	404.0	405.0	1.0		<100	0.0100	<0.0025	0.3980	<0.0050	0.2950	<0.0025
A006	405.0	406.0	1.0		<100	0.0105	<0.0025	0.3950	<0.0050	0.3000	<0.0025
A006	406.0	407.0	1.0		<100	0.0175	0.0026	0.8260	<0.0050	0.9200	<0.0025
A006	407.0	408.0	1.0		<100	0.0170	<0.0025	0.8210	<0.0050	0.9400	0.0068
A006	408.0	409.0	1.0		<100	0.0078	<0.0025	0.2040	<0.0050	0.2550	<0.0025
A006	409.0	410.0	1.0		<100	0.0080	<0.0025	0.2570	<0.0050	0.2750	0.0048
A006	410.0	411.0	1.0		<25	0.0088	<0.0015	0.1860	<0.0125	0.1890	0.0036

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	411.0	412.0	1.0		<25	0.0115	<0.0015	0.3390	<0.0125	0.2760	<0.0015
A006	412.0	413.0	1.0		<25	0.0145	<0.0015	0.4390	<0.0125	0.4040	0.0026
A006	413.0	414.0	1.0		<25	0.0105	0.0018	0.2500	<0.0125	0,2740	0.0056
A006	414.0	415.0	1.0		<25	0.0082	<0.0015	0.2370	<0.0125	0.2640	0.0018
A006	415.0	416.0	1.0		<25	0.0082	0.0054	0.2030	<0.0125	1.55	0.0260
A006	416.0	417.0	1.0		<25	0.0170	0.0054	0.5260	<0.0125	0.7740	0.0078
A006	417.0	418.0	1.0		<25	0.0082	0.0016	0.1890	<0.0125	0.1570	0.0054
A006	418.0	419.0	1.0		<25	0.0098	0.0030	0.2640	<0.0125	0.2080	0.0036
A006	419.0	420.0	1.0		<25	0.0105	0.0016	0.3720	<0.0125	0.3100	0.0020
A006	420.0	421.0	1.0		<25	0.0135	0.0020	0.3940	<0.0125	0.3580	0.0040
A006	421.0	422.0	1.0		<25	0.0090	0.0028	0.2590	<0.0125	0.2200	0.0028
A006	422.0	423.0	1.0		<25	0.0070	0.0018	0.1370	<0.0125	0.0750	0.0052
A006	423.0	424.0	1.0		<25	0.0072	0.0036	0.1870	<0.0125	0.1680	0.0038
A006	424.0	425.0	1.0		<25	0.0084	0.0080	0.1570	<0.0125	0.2020	<0.0015
A006	425.0	426.0	1.0		<25	0.0135	0.0042	0.2920	<0.0125	0.5130	0.0072
A006	426.0	427.0	1.0		<25	0.0135	0.0084	0.2620	<0.0125	0.6110	0.0080
A006	427.0	428.0	1.0		<25	0.0215	0.0195	0.4330	<0.0125	1.33	0.0078
A006	428.0	429.0	1.0		<25	0.0180	0.0160	0.3640	<0.0125	0.9410	0.0076
A006	429.0	430.0	1.0		<25	0.0074	0.0060	0.1150	<0.0125	0.1660	<0.0015
A006	430.0	431.0	1.0		<25	0.0092	0.0066	0.1460	<0.0125	0.2650	<0.0015
A006	431.0	432.0	1.0		<25	0.0135	0.0096	0.1940	<0.0125	0.5250	0.0030
A006	432.0	433.0	1.0		<25	0.0155	0.0170	0.3070	<0.0125	0.7920	0.0086
A006	433.0	434.0	1.0		<25	0.0170	0.0054	0.4610	<0.0125	0.6930	<0.0015
A006	434.0	435.0	1.0		<25	0.0115	0.0066	0.2860	<0.0125	0.3150	0.0042
A006	435.0	436.0	1.0		<25	0.0130	0.0058	0.3730	<0.0125	0.3780	0.0032
A006	436.0	437.5	1.5		<25	0.0170	0.0145	0.4700	<0.0125	0.8710	0.0130
A006	437.5	438.5	1.0		<25	0.0020	0.0125	0.0890	<0.0125	0.0595	0.0120

bhid	from m	to m	length m	Ag ppM	As ppM	Co %	Cu %	Ni %	Pb %	S %	Zn %
A006	438.5	439.5	1.0		<25	0.0030	0.0080	0.1470	<0.0125	0.0760	0.0105
A006	439.5	440.5	1.0		<25	0.0026	0.0078	0.1120	<0.0125	0.0505	0.0110
A006	440.5	441.5	1.0		<25	0.0022	0.0070	0.0845	<0.0125	0.1120	0.0180
A006	441.5	442.5	1.0		<25	0.0040	0.0058	0.0840	<0.0125	0.1380	0.0185
A006	442.5	443.5	1.0		<25	0.0026	0.0058	0.0800	<0.0125	0.1710	0.0140
A006	443.5	444.5	1.0		<25	0.0026	0.0060	0.0870	<0.0125	0.1920	0.0120
A006	444.5	445.5	1.0		<25	0.0024	0.0042	0.7550	<0.0125	0.1360	0.0140
A006	445.5	446.5	1.0		<25	0.0024	0.0076	0.1090	<0.0125	0.1910	0.0125
A006	446.5	447.5	1.0		<25	0.0024	0.0066	0.0785	<0.0125	0.1580	0.0120
A006	447.5	448.5	1.0		<25	0.0048	0.0060	0.1090	<0.0125	0.1110	0.0140
A006	448.5	449.5	1.0		<25	0.0056	0.0062	0.0850	<0.0125	0.0740	0.0165
A006	449.5	450.5	1.0		<25	0.0072	0.0078	0.1020	<0.0125	0.1230	0.0265
A006	450.5	451.5	1.0		<25	0.0046	0.0058	0.0785	<0.0125	0.1060	0.0145
A006	451.5	452.5	1.0		<25	0.0040	0.0060	0.0760	<0.0125	0.0930	0.0130
A006	452.5	453.5	1.0		<25	0.0040	0.0036	0.0745	<0.0125	0.0585	0.0130
A006	453.50	454.62	1.1		<25	0.0034	0.0040	0.0510	<0.0125	0.0395	0.0105
A006	454.62	454.80	0.2		<25	0.0092	0.0190	0.1450	<0.0125	8.90	0.0600
A006	454.8	455.5	0.7		<25	0.0034	0.0042	0.0400	<0.0125	0.0650	0.0165
A006	455.5	456.5	1.0		<25	0.0024	0.0042	0.0530	<0.0125	0.0540	0.0135
A006	456.5	457.5	1.0		<25	0.0030	0.0036	0.0740	<0.0125	0.0420	0.0130
A006	457.5	458.5	1.0		<25	0.0028	0.0048	0.0770	<0.0125	0.0625	0.0120
A006	458.5	459.5	1.0		<25	0.0024	0.0034	0.0490	<0.0125	0.0285	0.0110

Appendix 2

Petrological descriptions

615174

Central Mineralogical Services

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16 March 1998

Mr L.A. Newnham
Newnham Mining & Exploration Services
PO Box 132
RIVERSIDE Tas 7250

REPORT CMS 98/3/3

YOUR REFERENCE:	Letter M. McKeown
DATE RECEIVED:	10 March 1998
SAMPLE NO'S:	A001 (17 cores)
SUBMITTED BY:	M. McKeown
WORK REQUESTED:	Petrology, Mineragraphy

H.W. Fander, M.Sc.

c.c. McKeown Mining Pty Ltd
PO Box 50
RIDGLEY Tas 7321

615175

REPORT CMS 98/3/3

DDH A001 INTERSECTIONS

Seventeen drill core intersections were received for petrographic and mineragraphic study; thin and polished sections were prepared as appropriate and descriptions are appended.

The only serpentinites recognisable as such without doubt were the last three intersections; at ***289.9m***, some of the original dunite is preserved, and there is no evidence of gabbroic rocks.

Most of the other rocks are extensively or completely contact-metasomatised, so that the nature of the original rocks are not known or are speculative; normally skarns of this type would be formed from pre-existing carbonate rocks but derivation from strongly magnesian types such as serpentinites could be feasible. Chromium assays could assist in determining the origin of these metasomatised rocks.

The Ni mineralisation is apparently due solely to pentlandite, and the absence of significant amounts of other sulphides is metallurgically attractive. The mineralisation postdates serpentinisation and predates a later episode of minor shearing.

CENTRAL MINERALOGICAL SERVICES
REPORT CMS 98/3/3 - 16 MARCH 1998
NEWNHAM MINING & EXPLORATION SERVICES
(Mr L A Newnham)

SAMPLE NO: A001/36.2m (T.S. 67633) Page 1

CLASSIFICATION: Tremolitised Limestone.

COMPOSITION: Mainly fine-grained calcite pigmented with ultrafine goethite. Extensive development of small, subrandom, replacive tremolite needles throughout. Carbonaceous partings.

FABRIC: Finely-crystalline; faint preferred orientation (bedding) augmented by some subparallel tremolite needles.

MINOR MINERALS: Semi-concordant sulphide veinlets, and crosscutting coarse (white) calcite veins with sulphides. Also small sulphide grains throughout.

INTERPRETATION/COMMENTS: This rock has been thoroughly metasomatised but, unusually, is not recrystallised, ie cannot be termed a marble in the metamorphic sense. The sulphides are not pyrite or pyrrhotite. Ni assay recommended.

SAMPLE NO: A001/48.8m (T.S. 67634)

CLASSIFICATION: Phlogopitised Subgreywacke.

COMPOSITION: Framework of matrix-supported sub-angular to subrounded grains of quartz, argillised feldspar, felsite, rhyolite, in a fine siliceous matrix with many small patches of fine replacive phlogopite.

FABRIC: Poorly to moderately sorted sand-sized grains, crudely bedded, with occasional silty-shaly intercalations. Indurated.

MINOR MINERALS: Quartz-sulphide veinlets; also fine sulphides throughout. Fine black pigmentation may be carbonaceous matter.

INTERPRETATION/COMMENTS: Volcanic components may be more plentiful but not recognisable because of alteration (?vitric material). Sulphides were mostly introduced with the replacive phlogopite, with later veining.

SAMPLE NO: A001/60.4m (T.S. 67635)

CLASSIFICATION: Diopside Hornfels.

COMPOSITION: Dominantly composed of random prismatic crystals of diopside, with interstitial patches of unusual green/brown chlorite in which sulphides preferentially occur.

FABRIC: Variable crystallinity, with some diopside crystals up to 12mm long. No relict textures to indicate nature of original rock.

MINOR MINERALS: Conspicuous sulphides (pyrrhotite and a trace of dark sphalerite). Trace of carbonate.

INTERPRETATION/COMMENTS: Nature of original rock not known, presumably represented by chlorite patches. Possibly ultramafic but this is speculative and other interpretations are possible.

SAMPLE NO: A001/73.8m (T.S. 67637)

CLASSIFICATION: Actinolite Hornfels.

COMPOSITION: Consists very largely of matted pale-green actinolite needles which have completely replaced the pre-existing rock. Patches of dark tourmaline (schorl) formed after the actinolite.

FABRIC: Relict textures indicate a fine-grained, bedded sediment. Some faulting/shearing occurred after actinolite formation and preceded tourmalinisation.

MINOR MINERALS: Ultrafine leucoxene/rutile occurs throughout, possibly inherited from the primary rock.

INTERPRETATION/COMMENTS: Thought to have been a semi-calcareous fine-grained sediment, thoroughly metasomatised, then sheared, followed by tourmalinisation.

SAMPLE NO: A001/88.6m (T.S. 67638)

CLASSIFICATION: Metachert.

COMPOSITION: Bands of microcrystalline quartz, with bands and lenses containing abundant fine apatite and ultrafine white leucoxene. Streaks and lenses of carbonate, partly replaced by actinolite.

FABRIC: Strong relict bedding, banding, and parallel lenses. No clastic textures recognisable.

MINOR MINERALS: Crosscutting veinlets of untwinned alkali feldspar and of quartz. Occasional grains of sphene.

INTERPRETATION/COMMENTS: Originally a silica-rich chemical sediment, mainly chert, with phosphatic lenses and bands.

SAMPLE NO: A001/121.0m (T.S. 67639)

CLASSIFICATION: Metasomatised Sediment.

COMPOSITION: Chiefly composed of alternating bands of fine-grained orange/amber phlogopite and bands and lenses of pale green, random actinolite needles, with relict cherty lenses and streaks.

FABRIC: General banding, due to replacement of beds of different composition by specific minerals. Minerals are fine-grained within bands.

MINOR MINERALS: Conspicuous sulphides associated with the actinolite rather than phlogopite. A few relatively large apatite crystals in phlogopite.

INTERPRETATION/COMMENTS: Originally a chemical sediment, perhaps correlatable with and broadly similar to **88.6m** though less cherty, more argillic. Needs a Ni assay.

SAMPLE NO: A001/150.9m (T.S. 67640)

CLASSIFICATION: Metasomatised Clastic Sediment (?Tuff).

COMPOSITION: Bands of clastic grains suspected to have been glassy, feldspathic and felsic volcanics, but now completely altered to quartz-sericite and variably replaced by fine actinolite. Parallel veins of K-feldspar/actinolite/epidote/quartz.

FABRIC: Original bedding and clastic (framework grain) textures have survived; very few clastic quartz grains.

MINOR MINERALS: Conspicuous semi-opaque finely granular leucoxene-sphene occurs throughout. Crosscutting chlorite-carbonate veins.

INTERPRETATION/COMMENTS: The inferred composition of the original rock suggests that it was a lithic-feldspathic tuff of felsic to intermediate derivation.

SAMPLE NO: A001/164.6m (T.S. 67641)

CLASSIFICATION: Axinite Rock.

COMPOSITION: Dominantly composed of large random bladed axinite crystals with characteristic habit, and minor ragged diopside patches, with patches of very dark Fe-rich sphalerite (marmatite).

FABRIC: Random, coarsely-crystalline, with some radiating-prismatic crystal groups. Sphalerite 50μ - 10mm+.

MINOR MINERALS: A few interstitial carbonate patches. Ultrafine leucoxene-sphene in places, probably inherited from original rock.

INTERPRETATION/COMMENTS: Origin of rock unknown but was presumably a carbonate which was metasomatised/pneumatolysed.

SAMPLE NO: A001/178.4m (T.S. 67642)

CLASSIFICATION: Axinite Skarn.

COMPOSITION: Mainly large prismatic axinite crystals, with minor interstitial quartz, actinolite, diopside. Poikiloblastic crystals of dark green tourmaline partly enclosing the other minerals.

FABRIC: Coarsely-crystalline with random fabric. No relict textures. Typical skarn fabric. Tourmaline was the last mineral to form.

MINOR MINERALS: A few calcite patches and chlorite aggregates. Conspicuous ultrafine leucoxene in parallel lines throughout the other minerals.

INTERPRETATION/COMMENTS: Similar to **164.6m** but with more diver composition.

SAMPLE NO: A001/227.5m (T.S. 67643)

CLASSIFICATION: Sheared, Altered Diopside Skarn.

COMPOSITION: Relict parallel bands of pale, prismatic diopside crystals with intercalated masses of fine replacive phlogopite (green) as dense matted flakes.

FABRIC: Banded structure probably due to parallel shears along which phlogopite alteration proceeded.

MINOR MINERALS: Occasional sphene crystals and small sulphide grains.

INTERPRETATION/COMMENTS: Appears to have been a virtually monomineralic diopside rock, sheared and retrograded. Originally a carbonate rock (?dolomite).

SAMPLE NO: A001/239.4m (T.S. 67644)

CLASSIFICATION: Phlogopitised Skarn.

COMPOSITION: Remnant irregular patches of small prismatic diopside crystals intergrown with flakes of pale phlogopite, set in a mass of ultrafine, pale phlogopite.

FABRIC: Mostly very fine-grained, dense phlogopite; diopside and adjacent phlogopite coarser, up to 0.5mm. No relict textures.

MINOR MINERALS: Black oxide opaques, with sphene rims. Occasional small patches of sericite, chlorite.

INTERPRETATION/COMMENTS: Similar to **227.5m**; probably originally a diopside skarn, extensively retrograded.

SAMPLE NO: A001/245.7m (T.S.67646)

CLASSIFICATION: Diopside Skarn.

COMPOSITION: Almost monomineralic, consisting of fresh granular to prismatic crystals of diopside, with aggregates of small magnetite crystals.

FABRIC: Finely-crystalline, with patches of larger crystals up to 3mm. No relict features.

MINOR MINERALS: A few small patches of pale chlorite. Isolated pyrrhotite patches.

INTERPRETATION/COMMENTS: No evidence of serpentinitic origin, no chromite seen.

SAMPLE NO: A001/250.4m (T.S. 67467)

CLASSIFICATION: Steatitised Serpentinite.

COMPOSITION: Dark areas are serpentinite, consisting of antigorite/chrysotile with characteristic mesh textures, pigmented with ultrafine magnetite. There are large areas of replacive talc, with granular magnetite.

FABRIC: The mesh fabric is medium-grained and is typical of a dunite. The talc is clearly replacive.

MINOR MINERALS: Patches of pentlandite, associated with the granular magnetite. ***See separate description.***

INTERPRETATION/COMMENTS: The mineralisation appears to be associated with the magnetite and with the replacive talc. The serpentinite is of ultramafic origin (ie not gabbroic).

SAMPLE NO: A001/271.3m (T.S. 67648)

CLASSIFICATION: Serpentinite (Sheared).

COMPOSITION: Classical network fabric of antigorite units pigmented with ultrafine magnetite, and fine chrysotile veinlets and networks of magnetite veinlets.

FABRIC: Network textures are coarser - grained than at **250m**, indicating original grainsizes of 1-2mm for individual olivine crystals. Thin parallel shears postdating the sulphides.

MINOR MINERALS: Concordant and crosscutting pentlandite and magnetite veins. Chlorite in shears. Sulphides postdate the serpentinisation ***(see separate description).***

INTERPRETATION/COMMENTS: Originally a dunite or peridotite, correlatable with **250.4m** but coarser and not steatitised. Sulphides were introduced after serpentinisation and before shearing. There are two generations of magnetite, (a) ultrafine, from breakdown of olivine; (b) introduced, much coarser.

SAMPLE NO: A001/289.9m (T.S. 67649)

CLASSIFICATION: Tremolitised Serpentinite.

COMPOSITION: Dominantly composed of relatively large, stout prismatic crystals of tremolite, with irregular interstitial patches of pale chlorite and antigorite. ***See below for a further description.***

FABRIC: Antigorite patches have shadowy serpentine network textures, and tremolite is clearly replacive.

MINOR MINERALS: Chromite grains with magnetite rims. Fine magnetite as small inclusions in tremolite. Scattered small pyrrhotite and pentlandite patches.

INTERPRETATION/COMMENTS: The distribution of the dark serpentinite patches in the core indicate very variable replacement by tremolite.
See below.

SAMPLE NO: A001/289.9m (T.S. 67649)A

CLASSIFICATION: Partly Altered Serpentinite.

COMPOSITION: Another section was prepared and consisted of only incipiently to partly serpentinised dunite (forsterite olivine) with olivine crystals up to 3mm. It has been partly replaced by coarse tremolite, and this in turn is partly replaced by pale green talc. In some places talc directly replaces serpentinite. Sulphides are associated mainly with tremolite. The occurrence of forsterite (the Mg end-member) is unusual, as olivine generally contains some Fe.

This rock shows a complex alteration history.

MINERAGRAPHY OF SELECTED SAMPLES

A001/61.7m (PS 67636)
The dominant sulphide is pyrrhotite as branching veinlike masses in a host of dense, dark chlorite. Some pyrrhotite is altered to pyrite, and there are thin, fine inclusions ("flames") of pentlandite sporadically distributed through the pyrrhotite. There are also small chalcopyrite inclusions.

A001/244.2m (PS 67645)
This consists almost entirely of massive, coarsely-crystalline fresh **pentlandite**, cut by occasional pyrite veinlets and containing a few thin lamellae of chalcopyrite and pyrrhotite.
Photo 1; magnification = 135x

A001/250.4m (PS 67647)
The only sulphide detected was **pentlandite**, as coarsely-crystalline masses with good cleavage, cut by magnetite veinlets. There are associated masses of granular magnetite and fine magnetite along cleavage-planes.
Photo 2; magnification = 135x

A001/271.3m (PS 67648)
Again, the only sulphide was **pentlandite**, as well-cleaved coarsely-crystalline masses; coarser granular magnetite is associated. There are traces of chalcopyrite in the magnetite.
Photo 3; magnification = 135x

In all these samples, the Co is contained in the pentlandite; there is a constant relationship between Co and Ni.

Metallurgically, the occurrence of only one sulphide is a very significant advantage, enabling high-grade Ni concentrates to be produced with the minimum of processing.

REPORT CMS 99/2/9

PHOTOMICROGRAPHS

The photomicrographs were prepared to illustrate the various pentlandite occurrences in the mineralised intersections, and the relationships between the pentlandite (yellow) and magnetite (gangue is dark grey to black). All magnifications are the same - 135x.

1 and 2 A003/231m
Microfractured pentlandite (well-developed cubic cleavage) extensively veined by late magnetite.

3 A003/259.9m
Pentlandite patches and veins in massive primary (?) magnetite.

4 and 5 A003/272m
Massive coarse fresh pentlandite with minor magnetite (grey) and gangue (black).

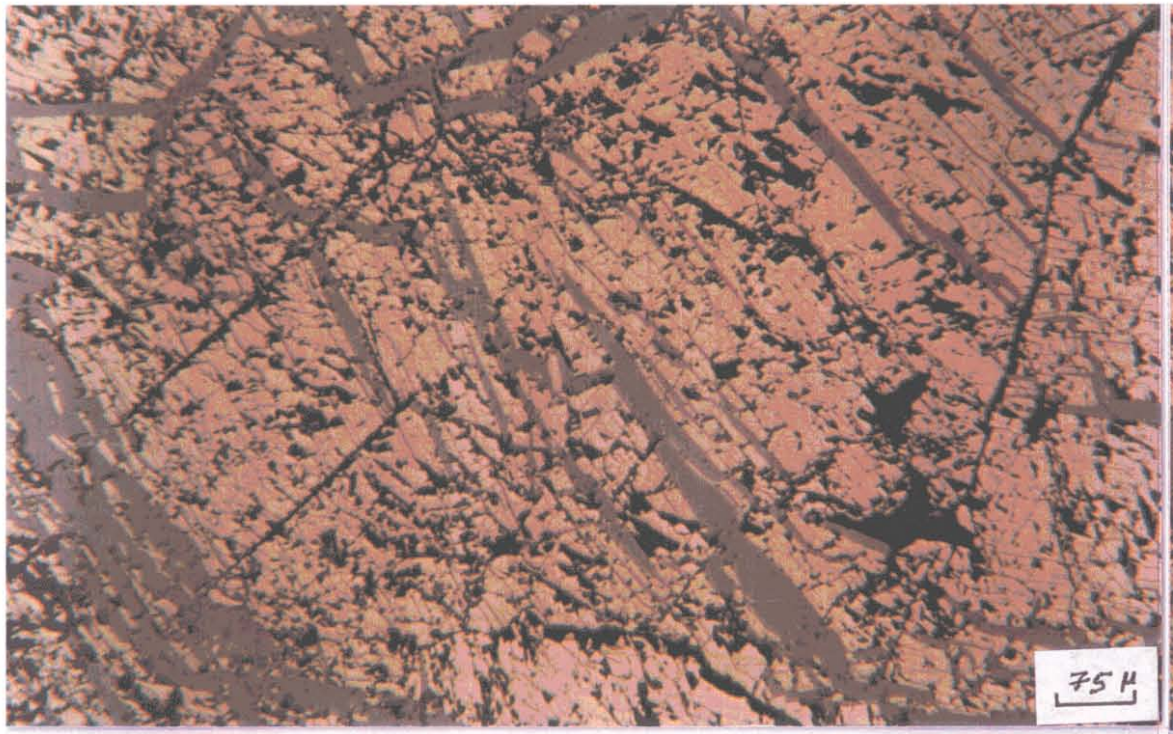
6 A003/278.3m
Massive pentlandite with magnetite veinlets along cleavage-planes.

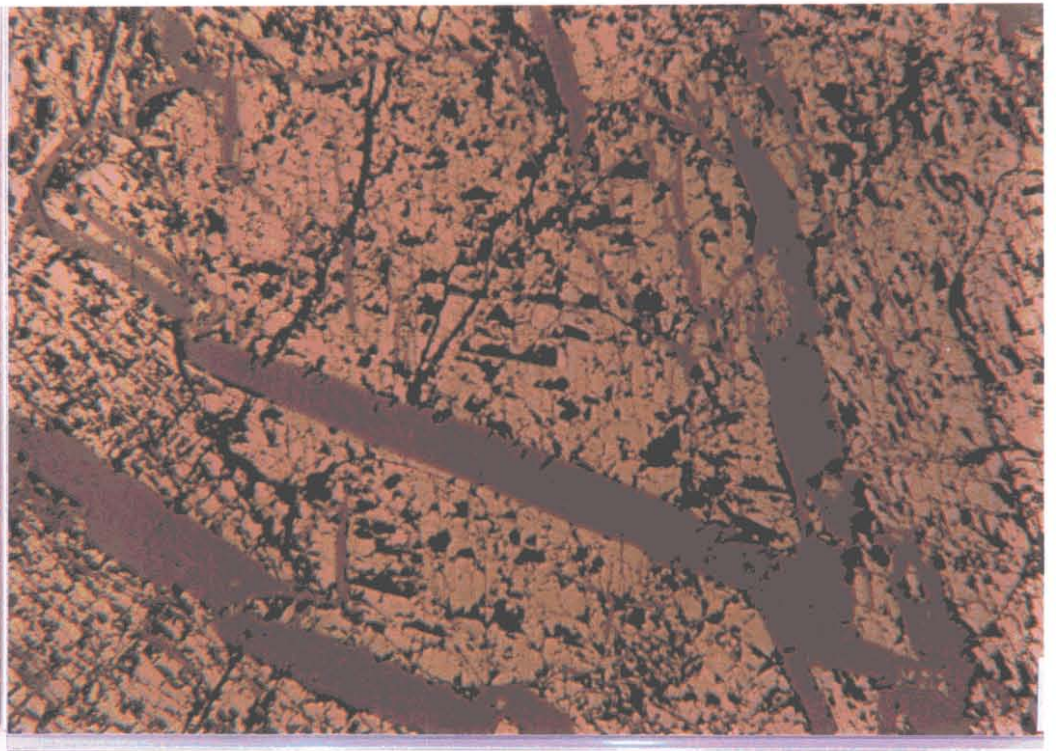
7 A003/278.3m
Pentlandite with magnetite veins, and primary magnetite enclosing chromite.

1

3

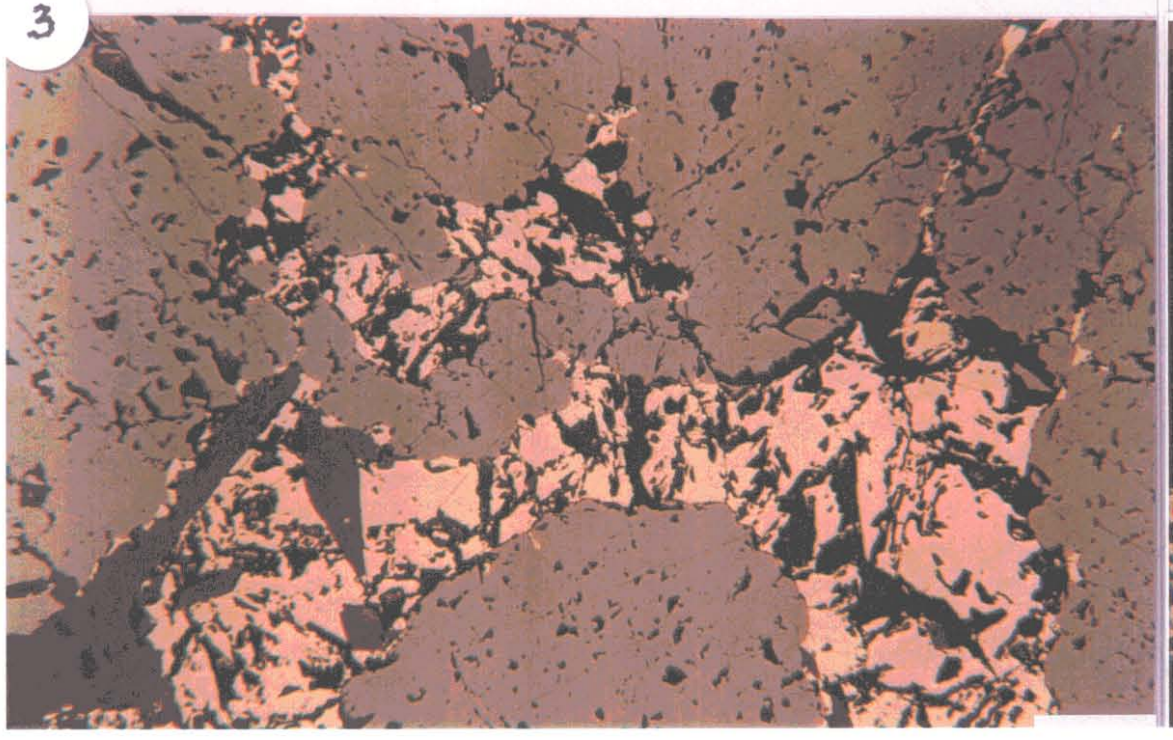
615186

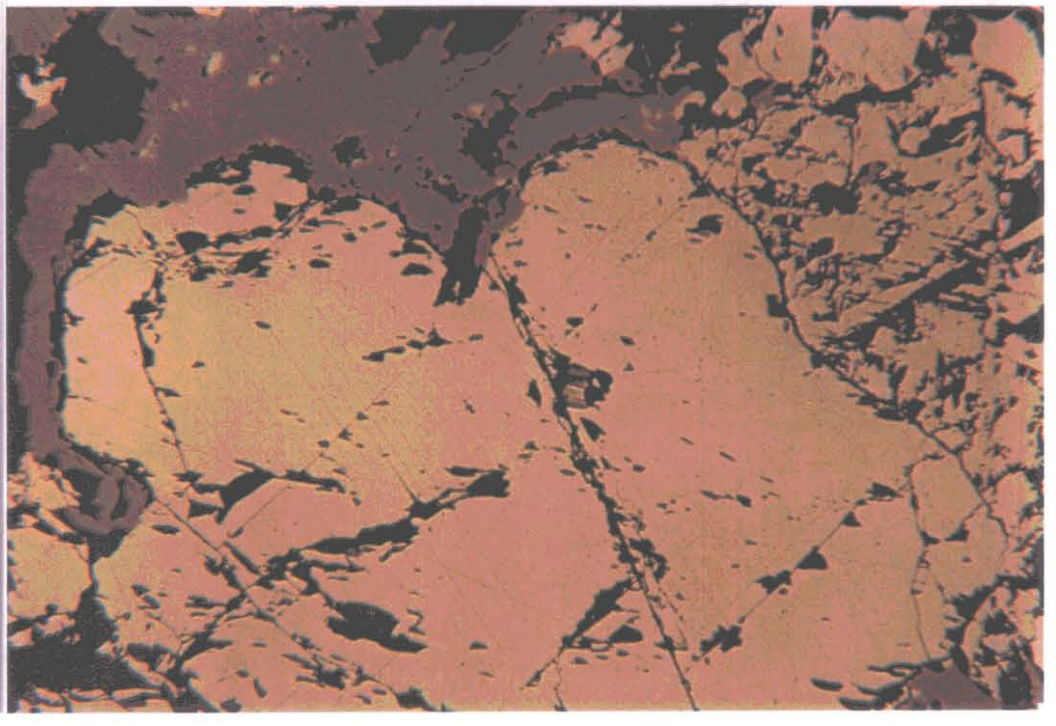




615187

3





3

615188

615189

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18 February 1999

Mr M. McKeown
McKeown Mining Pty Ltd
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RIDGLEY Tas. 7321

REPORT CMS 99/2/9

YOUR REFERENCE:	Letter 15 February 1999
DATE RECEIVED:	17 February 1999
SAMPLE NO'S:	A003
SUBMITTED BY:	M. McKeown
WORK REQUESTED:	Mineragraphy

H.W. Fander

H.W. Fander, M.Sc.

615190

Central Mineralogical Services

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19 April 1999

Mr M. McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY Tas. 7321

REPORT CMS 99/3/12

YOUR REFERENCE:	Fax 30 March 1999
DATE RECEIVED:	31 March 1999
SAMPLE NO'S:	A004
SUBMITTED BY:	M. McKeown
WORK REQUESTED:	Mineralogy

H.W. Fander, M.Sc.

REPORT CMS 99/3/12

DDH A004 INTERSECTIONS

Four drill core slabs were received for mineragraphic examination; polished sections were prepared, selecting the most sulphide-rich areas of the samples.

The mineralogy is more complex than in previous samples; several Ni-As phases were identified, and pyrrhotite is present in addition to pentlandite.

Pentlandite was the earliest sulphide mineral to form, and it is invariably extensively veined by magnetite. The Ni-As phases have partly replaced the pentlandite in places; in others, they occur independently (having perhaps completely replaced the pentlandite). In ***156.3m*** and ***170.2m*** there are unresolved difficulties in trying to reconcile As and Ni assays; the only As-bearing phases present are Ni compounds, and if the As assays are recalculated to the chief Ni-As phase (maucherite, with about 46% As), there is very little Ni left over for pentlandite. This suggests a sampling problem and indicates that the chief Ni-bearing phases in these two intersections are Ni-As minerals, (unless, elsewhere in these 1m lengths there are non-nickel As minerals such as arsenopyrite).

A004/121.4m

The only Ni sulphide present here is pentlandite, as scattered irregular to spheroidal patches up to 2 x 4mm in size and as sparse grains down to 10μ. The larger patches are laced with a network of very fine magnetite veins down to <5μ; there are also poorly-defined, minute dendritic patches of an unidentified phase, possibly mackinawite (FeS) or a related species. There would be some difficulty in eliminating either of these phases from the pentlandite but this is probably not essential in any case.

An earlier generation of magnetite occurs, often with chromite cores. Ultrafine graphite surrounds some of the pentlandite patches.

A004/139.2m

The two sulphides are pentlandite and pyrrhotite, as granular intergrowths generally on a <100μ scale, sometimes coarser; in these intergrowths the pentlandite is the major component. These composite patches are up to several millimetres across and are generally studded with 20μ - 200μ magnetite crystals, and some patches are thickly rimmed with magnetite. There are also granular magnetite clusters with small (5μ - 100μ) pentlandite inclusions. Shreds of pentlandite 5μ - 200μ are intergrown with silicate in an irregular fashion.

A004/156.3m

The main sulphide phases are pentlandite and pyrrhotite, with maucherite (Ni_3As_2), a trace of gersdorffite; rare, isolated small grains of native bismuth occur.

Pentlandite and pyrrhotite form coarsely-granular intergrowths on a 200µ - 600µ scale; the pentlandite is invariably full of magnetite veinlets along cleavage - planes.

Maucherite occurs as eutectoid intergrowths with pyrrhotite (on a 5µ - 30µ scale) in patches up to 1mm across; in places these eutectoids are seen to progressively replace pentlandite. Occasional patches of gersdorffite up to 200µ have invaded and partly replaced pentlandite and are finely intergrown with maucherite. Rare <30µ grains of native Bi are embedded in pyrrhotite.

A004/170.2m

The sulphides are pentlandite, pyrrhotite, maucherite and a trace of niccolite; no gersdorffite was seen. The pentlandite is full of magnetite veinlets and is coarsely intergrown with pyrrhotite. Maucherite and pyrrhotite occur as granular (50µ - 200µ) and eutectoid (10µ - 50µ) intergrowths replacing pentlandite - in some places the pentlandite has all but disappeared. Niccolite occurs as <50µ blebs in silicates and in pentlandite.

The pentlandite/pyrrhotite intergrowths occur as random patches and as veins up to 1mm wide.

615193

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4 May 1999

Mr M McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

REPORT CMS 99/4/9

YOUR REFERENCE:	Fax 02/5/99
DATE RECEIVED:	30 April 1999
SAMPLE NO'S:	A006
SUBMITTED BY:	M. McKeown
WORK REQUESTED:	Mineragraphy, Petrology

H.W. Fander, M.Sc.

REPORT CMS 99/4/9

DRILLHOLE A006 INTERSECTIONS

Five slabs were received for examination, from 425.7m, 427.9m, 440.0 and 441.2m. The first three samples were examined in polished section, the last two in thin section.

A006/425.7m

The chief opaque mineral is magnetite, occurring as networks of granular crystals, containing patches of microbrecciated chromite.

There are traces of pyrrhotite, pyrite and ?pentlandite, as grains <1μ to 50μ in size, randomly scattered through the serpentinite.

The very dark colour of the rock is due to a pigmentation of ultrafine graphite; much of this is <2μ, as individual randomly orientated flakes within the serpentine minerals. Some graphite occurs as larger aggregates, up to 50μ, and occasionally as semi-continuous fine, veinlike bodies; rarely there are aggregates up to 120μ.

A006/427.9m

The mineralogy is similar to that of the previous intersection; there are more sulphides but less graphite. However, the graphite has a greater tendency to occur as subparallel wisps or semi-continuous veinlike bodies generally only a few microns wide.

The sulphides occur as small grains and occasional larger lenses (up to 2mm long) of intergrown pyrrhotite, pentlandite and ?valleriite (indistinguishable in polished section from mackinawite); the pentlandite/?valleriite intergrowths are generally on an ultrafine scale (2-20μ).

A006/436.9m

In this intersection, much of the magnetite occurs as small, evenly-distributed grains with some clusters and very occasional embedded chromite.

Sulphides are common throughout and are generally composite patches, up to 1.5mm across, of finely intergrown pentlandite, ?valleriite, and pyrrhotite; the scale of these intergrowths is <50μ and is mostly in the 5-20μ range. In addition, ultrafine magnetite often occurs in the cleavage-planes of the pentlandite. Thus, this material is metallurgically problematical, especially as the valleriite (if confirmed as such) would be responsible for high levels of Mg in a nickel concentrate (the formula for valleriite is $[CuFeS_2]$ $[(Mg, Al, Fe)(OH)_2]$; for mackinauwite $(Fe, Ni)_9S_8$). A high Cu assay would indicate valleriite, since other Cu minerals are absent.

Traces of ultrafine graphite occur sporadically in the host-rock and especially along the margins of the sulphide patches.

A006/440m, 441.2m
These are similar rocks and may broadly be termed **silicified calc-silicate breccias.**

At 440m the rock consists of angular, small and large fragments of actinolite-quartz hornfelses and metaquartzite (?metachert) with minor actinolite patches, in a mass of crustiform, fine-to coarsely-crystalline quartz. There are small patches of crushed **chromite** crystals and occasional wisps of fine sulphides. Small aggregates of coarse diopside crystals occur.

At 441.2m the rock is made up of angular fragments of pale green coarsely-crystalline diopside, and fragments of fine-grained metaquartzite (?metachert), set in a mass of finely-to coarsely-crystalline and crustiform quartz. There are traces of fine sulphides; no chromite was definitely identified. No scheelite was detected in either sample.

Comments
Both rocks are thought to represent brecciated banded calc-silicates, perhaps originally chemical sediments (carbonate/chert units) contact-metamorphosed/metasomatised. The presence of chromite is intriguing; the Gordon Limestone contains detrital chromite (presumably at the base). However, they may have a different, ultimately ultramafic source.

615196

H.W. Fander, M.Sc.

A006/440m, 441.2m
These are similar rocks and may broadly be termed **silicified calc-silicate breccias.**

At 440m the rock consists of angular, small and large fragments of actinolite-quartz hornfelses and metaquartzite (?metachert) with minor actinolite patches, in a mass of crustiform, fine-to coarsely-crystalline quartz. There are small patches of crushed **chromite** crystals and occasional wisps of fine sulphides. Small aggregates of coarse diopside crystals occur.

At 441.2m the rock is made up of angular fragments of pale green coarsely-crystalline diopside, and fragments of fine-grained metaquartzite (?metachert), set in a mass of finely-to coarsely-crystalline and crustiform quartz. There are traces of fine sulphides; no chromite was definitely identified. No scheelite was detected in either sample.

Comments
Both rocks are thought to represent brecciated banded calc-silicates, perhaps originally chemical sediments (carbonate/chert units) contact-metamorphosed/metasomatised. The presence of chromite is intriguing; the Gordon Limestone contains detrital chromite (presumably at the base). However, they may have a different, ultimately ultramafic source.

615198

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18 May 1999

Mr M. McKeown
McKeown Mining Pty Ltd
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REPORT CMS 99/5/7

YOUR REFERENCE: Verbal Request

DATE RECEIVED: 13 May 1999

SAMPLE NO'S: A006

SUBMITTED BY: M. McKeown

WORK REQUESTED: Petrology

H.W. Fander, M.Sc.

615199

REPORT CMS 99/5/7

DDH A006 INTERSECTIONS

Four intersections from A006, at 445.4m, 449.6m, 451.1m and 456.0m, were received for petrological study; thin sections were prepared and offcuts were examined under short- and long-wave U.V.

The rocks are essentially similar and may be described as a group.

The intersections are **calc-silicate breccias**. The original rocks consisted largely or wholly of fairly coarsely-crystalline pale diopside ranging into green hedenbergite, with sporadic patches of fibrous tremolite; the pale diopside fluoresces white/cream in short-wave UV, the tremolite is dull-pink/peach in long-wave UV (scheelite shows much more intense fluorescence). The darker hedenbergite does not fluoresce because of the quenching effect of the Fe.

The diopside-hedenbergite fragments are cemented by vein quartz. At 445.4m there are pinkish fragments of chert or metachert pigmented with ultrafine hematite (not unlike garnet in appearance in hand-specimen). In two of the intersections, prehnite has partly replaced the diopside, and at 449.6m and 451.1m there are traces of fragmented chromite. At 456.0m, traces of sulphides occur.

615200

Appendix 3

Assays and re-assays of A003

615201

A N A L A B S

Our reference : BU015779
Your reference : **Batch 2/2/99**
Project code : Core
Report date : 10/02/99
Report status : Final
Page : 1 of 1

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Cu	Pb	Zn	Co	Ni	S
A003 248.7-249.7	<0.01	0.01	0.05	<0.01	0.10	0.395
A003 249.7-250.7	<0.01	0.01	0.01	<0.01	0.30	0.605
A003 250.7-251.7	<0.01	0.01	0.01	<0.01	0.44	1.173
A003 251.7-252.7	<0.01	0.01	<0.01	<0.01	0.18	0.716
A003 252.7-253.7	<0.01	0.01	0.01	<0.01	0.36	1.187
A003 270.1-271.1	<0.01	<0.01	0.02	0.01	0.83	0.731
A003 271.1-272.1	<0.01	<0.01	0.02	0.04	2.74	2.898
A003 272.1-273.1	<0.01	<0.01	<0.01	0.02	0.95	0.921
A003 273.1-274.1	<0.01	<0.01	0.06	0.04	2.50	2.685
A003 274.1-275.1	<0.01	<0.01	<0.01	0.01	0.31	0.203
Method	A103	A103	A103	A103	A103	V821
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.005

Notes: N.A. = not analysed, - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615202

A N A L A B S

Our reference : BU015795
Your reference : Batch 4 4/2/99
Project code : Core
Report date : 12/02/99
Report status : Preliminary
Page : 1 of 1

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 218.7-219.7	0.14	--	--	--	--	--
A003 219.7-220.7	0.15	--	--	--	--	--
A003 220.7-221.7	0.16	--	--	--	--	--
A003 221.7-222.7	0.23	--	--	--	--	--
A003 222.7-223.7	0.28	--	--	--	--	--
A003 223.7-224.7	0.65	--	--	--	--	--
A003 224.7-225.7	0.39	--	--	--	--	--
A003 225.7-227.0	0.71	--	--	--	--	--
A003 227.0-228.2	0.32	--	--	--	--	--
A003 228.2-229.2	0.53	--	--	--	--	--
A003 229.2-230.2	<0.01	--	--	--	--	--
A003 230.2-231.2	0.40	--	--	--	--	--
A003 231.2-232.2	0.53	--	--	--	--	--
A003 232.2-233.2	0.67	--	--	--	--	--
A003 233.2-234.2	0.48	--	--	--	--	--
A003 234.2-235.2	0.39	--	--	--	--	--
A003 235.2-236.2	0.30	--	--	--	--	--
A003 236.2-237.2	0.51	--	--	--	--	--
A003 237.2-238.2	1.02	--	--	--	--	--
A003 238.2-239.2	0.48	--	--	--	--	--
A003 239.2-240.2	1.18	--	--	--	--	--
A003 240.2-241.2	0.60	--	--	--	--	--
A003 241.2-242.2	0.52	--	--	--	--	--
A003 242.2-243.2	1.18	--	--	--	--	--
A003 243.2-244.2	0.39	--	--	--	--	--
A003 244.2-244.9	0.68	--	--	--	--	--
A003 244.9-245.9	1.37	--	--	--	--	--
A003 245.9-246.9	1.30	--	--	--	--	--
A003 246.9-247.9	0.27	--	--	--	--	--
A003 247.9-248.7	0.12	--	--	--	--	--
A003 253.7-254.7	0.23	--	--	--	--	--
A003 254.7-255.7	0.26	--	--	--	--	--
A003 255.7-256.7	0.11	--	--	--	--	--
A003 256.7-257.7	0.07	--	--	--	--	--
A003 257.7-258.7	0.09	--	--	--	--	--
A003 258.7-259.7	0.12	--	--	--	--	--
A003 259.7-260.7	0.13	--	--	--	--	--
A003 260.7-262.0	0.49	--	--	--	--	--
A003 262.0-263.3	1.03	--	--	--	--	--
A003 263.3-26.3	0.10	--	--	--	--	--
A003 264.3-265.3	0.29	--	--	--	--	--
A003 265.3-266.3	0.54	--	--	--	--	--
A003 266.3-267.3	0.40	--	--	--	--	--
A003 267.3-268.3	0.61	--	--	--	--	--
A003 268.3-269.3	0.39	--	--	--	--	--
A003 269.3-270.1	0.56	--	--	--	--	--
A003 275.1-276.	0.15	--	--	--	--	--
A003 276.1-277.1	0.21	--	--	--	--	--
A003 277.1-278.1	0.52	--	--	--	--	--
A003 278.1 279.1	<0.01	--	--	--	--	--
Method	A103	A103	A103	A103	A103	A103
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.01

Notes: - = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615203

ANALABS

Our reference : BU015795
Your reference : Batch 4 4/2/99
Project code : Core
Report date : 17/02/99
Report status : Preliminary
Page : 1 of 1

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 218.7-219.7	0.18	<0.01	<0.01	<0.01	<0.01	0.01
A003 219.7-220.7	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 220.7-221.7	0.23	<0.01	<0.01	<0.01	<0.01	<0.01
A003 221.7-222.7	0.29	<0.01	<0.01	<0.01	<0.01	<0.01
A003 222.7-223.7	0.36	<0.01	<0.01	<0.01	<0.01	<0.01
A003 223.7-224.7	0.82	<0.01	<0.01	<0.01	<0.01	0.01
A003 224.7-225.7	0.46	<0.01	<0.01	<0.01	<0.01	0.02
A003 225.7-227.0	0.87	<0.01	0.01	<0.01	<0.01	0.01
A003 227.0-228.2	0.40	<0.01	<0.01	<0.01	<0.01	<0.01
A003 228.2-229.2	0.63	<0.01	0.01	<0.01	<0.01	<0.01
A003 229.2-230.2	0.45	<0.01	<0.01	<0.01	<0.01	<0.01
A003 230.2-231.2	0.57	<0.01	<0.01	<0.01	<0.01	<0.01
A003 231.2-232.2	0.90	<0.01	0.01	<0.01	<0.01	<0.01
A003 232.2-233.2	0.50	<0.01	<0.01	<0.01	<0.01	<0.01
A003 233.2-234.2	0.62	<0.01	0.01	<0.01	<0.01	<0.01
A003 234.2-235.2	0.49	<0.01	<0.01	<0.01	<0.01	<0.01
A003 235.2-236.2	0.43	<0.01	<0.01	<0.01	<0.01	<0.01
A003 236.2-237.2	0.69	<0.01	0.01	<0.01	<0.01	<0.01
A003 237.2-238.2	1.35	0.01	0.02	<0.01	<0.01	<0.01
A003 238.2-239.2	0.62	0.01	0.01	<0.01	<0.01	<0.01
A003 239.2-240.2	1.40	0.01	0.02	<0.01	<0.01	<0.01
A003 240.2-241.2	0.77	0.01	0.01	<0.01	<0.01	<0.01
A003 241.2-242.2	0.72	0.01	0.01	<0.01	<0.01	<0.01
A003 242.2-243.2	1.53	0.01	0.02	<0.01	<0.01	<0.01
A003 243.2-244.2	0.54	<0.01	0.01	<0.01	<0.01	<0.01
A003 244.2-244.9	0.95	0.01	0.01	<0.01	<0.01	<0.01
A003 244.9-245.9	1.82	0.01	0.03	<0.01	<0.01	<0.01
A003 245.9-246.9	1.54	0.01	0.03	<0.01	<0.01	<0.01
A003 246.9-247.9	0.25	<0.01	<0.01	0.01	<0.01	<0.01
A003 247.9-248.7	0.10	<0.01	<0.01	0.01	<0.01	<0.01
A003 253.7-254.7	0.25	<0.01	<0.01	<0.01	<0.01	<0.01
A003 254.7-255.7	0.30	<0.01	<0.01	<0.01	<0.01	<0.01
A003 255.7-256.7	0.10	<0.01	<0.01	<0.01	<0.01	<0.01
A003 256.7-257.7	0.08	<0.01	<0.01	<0.01	<0.01	<0.01
A003 257.7-258.7	0.18	<0.01	<0.01	<0.01	<0.01	<0.01
A003 258.7-259.7	0.11	<0.01	<0.01	<0.01	<0.01	<0.01
A003 259.7-260.7	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 260.7-262.0	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 262.0-263.3	0.58	<0.01	0.01	<0.01	<0.01	<0.01
A003 263.3-264.3	1.14	<0.01	0.02	<0.01	<0.01	<0.01
A003 264.3-265.3	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 265.3-266.3	0.36	<0.01	<0.01	<0.01	<0.01	<0.01
A003 266.3-267.3	0.51	<0.01	<0.01	<0.01	<0.01	<0.01
A003 267.3-268.3	0.87	<0.01	0.01	<0.01	<0.01	<0.01
A003 268.3-269.3	0.55	<0.01	0.01	<0.01	<0.01	<0.01
A003 269.3-270.1	0.75	<0.01	0.01	<0.01	<0.01	<0.01
A003 275.1-276.1	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 276.1-277.1	0.26	<0.01	<0.01	<0.01	<0.01	<0.01
A003 277.1-278.1	0.09	<0.01	0.01	<0.01	<0.01	<0.01
A003 278.1-279.1	1.07	<0.01	0.01	<0.01	<0.01	0.04
Method	A103	A103	A103	A103	A103	A103
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.01

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615204

A N A L A B S

Our reference : BU015848
Your reference : **Reassay 99/2 & 99/4**
Project code : Pulps
Report date : 17/02/99
Report status : Final
Page : 1 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni
A003 218.7-219.7	0.19
A003 219.7-220.7	0.20
A003 220.7-221.7	0.21
A003 221.7-222.7	0.28
A003 222.7-223.7	0.38
A003 223.7-224.7	0.78
A003 224.7-225.7	0.46
A003 225.7-227.0	0.89
A003 227.0-228.2	0.41
A003 228.2-229.2	0.68
A003 229.2-230.2	0.50
A003 230.2-231.2	0.58
A003 231.2-232.2	0.92
A003 232.2-233.2	0.51
A003 233.2-234.2	0.64
A003 234.2-235.2	0.47
A003 235.2-236.2	0.41
A003 236.2-237.2	0.69
A003 237.2-238.2	1.33
A003 238.2-239.2	0.62
A003 239.2-240.2	1.43
A003 240.2-241.2	0.78
A003 241.2-242.2	0.62
A003 242.2-243.2	1.51
A003 243.2-244.2	0.55
A003 244.2-244.9	0.93
A003 244.9-245.9	1.83
A003 245.9-246.9	1.62
A003 246.9-247.9	0.26
A003 247.9-248.7	0.11
A003 248.7-249.7	0.07
A003 249.7-250.7	0.27
A003 250.7-251.7	0.41
A003 251.7-252.7	0.15
A003 252.7-253.7	0.35
A003 253.7-254.7	0.25
A003 254.7-255.7	0.29
A003 255.7-256.7	0.09
A003 256.7-257.7	0.06
A003 257.7-258.7	0.18
A003 258.7-259.7	0.11
A003 259.7-260.7	0.14
A003 260.7-262.0	0.13
A003 262.0-263.3	0.57
A003 263.3-264.3	1.18
A003 264.3-265.3	0.14
A003 265.3-266.3	0.35
A003 266.3-267.3	0.52
A003 267.3-268.3	0.88
A003 268.3-269.3	0.57
Method	A103
Units	%
Detection Limit	0.01

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615205

A N A L A B S

Our reference : BU015848
Your reference : **Reassay 99/2 & 99/4**
Project code : Pulps
Report date : 17/02/99
Report status : Final
Page : 2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni					
A003 269.3-270.1	0.76					
A003 270.1-271.1	0.73					
A003 271.1-272.1	2.52					
A003 272.1-273.1	0.88					
A003 273.1-274.1	2.33					
A003 274.1-275.1	0.28					
A003 275.1-276.1	0.20					
A003 276.1-277.1	0.28					
A003 277.1-278.1	0.67					
A003 278.1-279.1	1.10					
Method	A103					
Units	%					
Detection Limit	0.01					

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615206

ANALABS

Our reference : BU015795
Your reference : **Batch 4** **4/2/99**
Project code : Core
Report date : 19/02/99
Report status : Final
Page : 1 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 218.7-219.7	0.18	<0.01	<0.01	<0.01	<0.01	0.01
A003 219.7-220.7	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 220.7-221.7	0.23	<0.01	<0.01	<0.01	<0.01	<0.01
A003 221.7-222.7	0.29	<0.01	<0.01	<0.01	<0.01	<0.01
A003 222.7-223.7	0.36	<0.01	<0.01	<0.01	<0.01	<0.01
A003 223.7-224.7	0.82	<0.01	<0.01	<0.01	<0.01	0.01
A003 224.7-225.7	0.46	<0.01	<0.01	<0.01	<0.01	0.02
A003 225.7-227.0	0.87	<0.01	0.01	<0.01	<0.01	0.01
A003 227.0-228.2	0.40	<0.01	<0.01	<0.01	<0.01	<0.01
A003 228.2-229.2	0.63	<0.01	0.01	<0.01	<0.01	<0.01
A003 229.2-230.2	0.45	<0.01	<0.01	<0.01	<0.01	<0.01
A003 230.2-231.2	0.57	<0.01	<0.01	<0.01	<0.01	<0.01
A003 231.2-232.2	0.90	<0.01	0.01	<0.01	<0.01	<0.01
A003 232.2-233.2	0.50	<0.01	<0.01	<0.01	<0.01	<0.01
A003 233.2-234.2	0.62	<0.01	0.01	<0.01	<0.01	<0.01
A003 234.2-235.2	0.49	<0.01	<0.01	<0.01	<0.01	<0.01
A003 235.2-236.2	0.43	<0.01	<0.01	<0.01	<0.01	<0.01
A003 236.2-237.2	0.69	<0.01	0.01	<0.01	<0.01	<0.01
A003 237.2-238.2	1.35	0.01	0.02	<0.01	<0.01	<0.01
A003 238.2-239.2	0.62	0.01	0.01	<0.01	<0.01	<0.01
A003 239.2-240.2	1.40	0.01	0.02	<0.01	<0.01	<0.01
A003 240.2-241.2	0.77	0.01	0.01	<0.01	<0.01	<0.01
A003 241.2-242.2	0.72	0.01	0.01	<0.01	<0.01	<0.01
A003 242.2-243.2	1.53	0.01	0.02	<0.01	<0.01	<0.01
A003 243.2-244.2	0.54	<0.01	0.01	<0.01	<0.01	<0.01
A003 244.2-244.9	0.95	0.01	0.01	<0.01	<0.01	<0.01
A003 244.9-245.9	1.82	0.01	0.03	<0.01	<0.01	<0.01
A003 245.9-246.9	1.54	0.01	0.03	<0.01	<0.01	<0.01
A003 246.9-247.9	0.25	<0.01	<0.01	0.01	<0.01	<0.01
A003 247.9-248.7	0.10	<0.01	<0.01	0.01	<0.01	<0.01
A003 253.7-254.7	0.25	<0.01	<0.01	<0.01	<0.01	<0.01
A003 254.7-255.7	0.30	<0.01	<0.01	<0.01	<0.01	<0.01
A003 255.7-256.7	0.10	<0.01	<0.01	<0.01	<0.01	<0.01
A003 256.7-257.7	0.08	<0.01	<0.01	<0.01	<0.01	<0.01
A003 257.7-258.7	0.18	<0.01	<0.01	<0.01	<0.01	<0.01
A003 258.7-259.7	0.11	<0.01	<0.01	<0.01	<0.01	<0.01
A003 259.7-260.7	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 260.7-262.0	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 262.0-263.3	0.58	<0.01	0.01	<0.01	<0.01	<0.01
A003 263.3-264.3	1.14	<0.01	0.02	<0.01	<0.01	<0.01
A003 264.3-265.3	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 265.3-266.3	0.36	<0.01	<0.01	<0.01	<0.01	<0.01
A003 266.3-267.3	0.51	<0.01	<0.01	<0.01	<0.01	<0.01
A003 267.3-268.3	0.87	<0.01	0.01	<0.01	<0.01	<0.01
A003 268.3-269.3	0.55	<0.01	0.01	<0.01	<0.01	<0.01
A003 269.3-270.1	0.75	<0.01	0.01	<0.01	<0.01	<0.01
A003 275.1-276.1	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 276.1-277.1	0.26	<0.01	<0.01	<0.01	<0.01	<0.01
A003 277.1-278.1	0.09	<0.01	0.01	<0.01	<0.01	<0.01
A003 278.1-279.1	1.07	<0.01	0.01	<0.01	<0.01	0.04
Method	A103	A103	A103	A103	A103	A103
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.01

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615207

A N A L A B S

Our reference	:	BU015795
Your reference	:	Batch 4 4/2/99
Project code	:	Core
Report date	:	19/02/99
Report status	:	Final
Page	:	2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S					
A003 218.7-219.7	0.166					
A003 219.7-220.7	0.168					
A003 220.7-221.7	0.226					
A003 221.7-222.7	0.292					
A003 222.7-223.7	0.406					
A003 223.7-224.7	0.956					
A003 224.7-225.7	0.558					
A003 225.7-227.0	1.126					
A003 227.0-228.2	0.462					
A003 228.2-229.2	0.822					
A003 229.2-230.2	0.576					
A003 230.2-231.2	0.691					
A003 231.2-232.2	1.145					
A003 232.2-233.2	0.628					
A003 233.2-234.2	0.882					
A003 234.2-235.2	0.653					
A003 235.2-236.2	0.603					
A003 236.2-237.2	1.019					
A003 237.2-238.2	2.145					
A003 238.2-239.2	0.935					
A003 239.2-240.2	2.238					
A003 240.2-241.2	1.208					
A003 241.2-242.2	1.053					
A003 242.2-243.2	2.325					
A003 243.2-244.2	0.800					
A003 244.2-244.9	1.358					
A003 244.9-245.9	2.582					
A003 245.9-246.9	2.624					
A003 246.9-247.9	0.704					
A003 247.9-248.7	0.285					
A003 253.7-254.7	0.282					
A003 254.7-255.7	0.278					
A003 255.7-256.7	0.146					
A003 256.7-257.7	0.063					
A003 257.7-258.7	0.196					
A003 258.7-259.7	0.078					
A003 259.7-260.7	0.130					
A003 260.7-262.0	0.135					
A003 262.0-263.3	0.698					
A003 263.3-264.3	1.407					
A003 264.3-265.3	0.109					
A003 265.3-266.3	0.349					
A003 266.3-267.3	0.539					
A003 267.3-268.3	0.903					
A003 268.3-269.3	0.557					
A003 269.3-270.1	0.750					
A003 275.1-276.1	0.113					
A003 276.1-277.1	0.206					
A003 277.1-278.1	0.725					
A003 278.1-279.1	1.252					
Method	V821					
Units	%					
Detection Limit	0.005					

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615208

ANALABS

Our reference : BU015933
Your reference : 2nd March 99
Project code : pulps
Report date : 09/03/99
Report status : Preliminary
Page : 1 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	S	Ni	Ni		
A003 218.7-219.7	2040	<2500	2000	-		
A003 219.7-220.7	2190	<2500	2200	-		
A003 220.7-221.7	2550	<2500	2400	-		
A003 221.7-222.7	3340	0.27%	3400	-		
A003 222.7-223.7	4580	0.41%	4300	-		
A003 223.7-224.7	9680	0.94%	>5000	0.94		
A003 224.7-225.7	6020	0.57%	>5000	0.55		
A003 225.7-227.0	11100	1.10%	>5000	1.07		
A003 227.0-228.2	4930	0.49%	4600	-		
A003 228.2-229.2	8270	0.87%	>5000	0.80		
A003 229.2-230.2	5930	0.59%	>5000	0.57		
A003 230.2-231.2	7230	0.75%	>5000	0.70		
A003 231.2-232.2	11500	1.15%	>5000	1.10		
A003 232.2-233.2	6540	0.70%	>5000	0.58		
A003 233.2-234.2	8430	0.93%	>5000	0.81		
A003 234.2-235.2	5860	0.71%	>5000	0.56		
A003 235.2-236.2	5420	0.63%	4700	-		
A003 236.2-237.2	9240	1.10%	>5000	0.86		
A003 237.2-238.2	16500	2.00%	>5000	1.61		
A003 238.2-239.2	7740	1.00%	>5000	0.73		
A003 239.2-240.2	17400	2.35%	>5000	1.71		
A003 240.2-241.2	10400	1.31%	>5000	0.95		
A003 241.2-242.2	8830	1.09%	>5000	0.84		
A003 242.2-243.2	18900	2.25%	>5000	1.83		
A003 243.2-244.2	6580	0.78%	>5000	0.68		
A003 244.2-244.9	11600	1.35%	>5000	1.07		
A003 244.9-245.9	21000	2.55%	>5000	2.10		
A003 245.9-246.9	18600	2.40%	>5000	1.85		
A003 246.9-247.9	2930	0.68%	2500	-		
A003 247.9-248.7	1600	0.29%	1100	-		
A003 248.7-249.7	1350	0.39%	900	-		
A003 249.7-250.7	3790	0.63%	2700	-		
A003 250.7-251.7	5170	1.11%	3800	-		
A003 251.7-252.7	2260	0.71%	1700	-		
A003 252.7-253.7	3830	1.14%	3900	-		
A003 253.7-254.7	3110	0.27%	2600	-		
A003 254.7-255.7	3730	0.30%	3200	-		
A003 255.7-256.7	1520	<2500	1100	-		
A003 256.7-257.7	1280	<2500	800	-		
A003 257.7-258.7	2300	<2500	2000	-		
A003 258.7-259.7	1440	<2500	1200	-		
A003 259.7-260.7	1950	<2500	1700	-		
A003 260.7-262.0	1960	<2500	1600	-		
A003 262.0-263.3	7020	0.70%	>5000	0.66		
A003 263.3-264.3	13500	1.33%	>5000	1.35		
A003 264.3-265.3	1750	<2500	1700	-		
A003 265.3-266.3	4090	0.31%	4000	-		
A003 266.3-267.3	6400	0.54%	>5000	0.57		
A003 267.3-268.3	10200	0.87%	>5000	0.99		
A003 268.3-269.3	6900	0.56%	>5000	0.70		
Method	1105	1105	A102	A103		
Units	ppm	ppm	ppm	%		
Detection Limit	2	2500	3	0.01		
Upper Method			AI[illegible]			

Notes: - = not analysed, – = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615209

ANALABS

Our reference : BU015933
Your reference : 2nd March 99
Project code : pulps
Report date : 09/03/99
Report status : Preliminary
Page : 2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	S	Ni	Ni		
A003 269.3-270.1	9160	0.75%	>5000	0.89		
A003 270.1-271.1	9030	0.71%	>5000	0.87		
A003 271.1-272.1	30500	2.50%	>5000	2.86		
A003 272.1-273.1	10800	0.93%	>5000	1.09		
A003 273.1-274.1	27500	2.40%	>5000	2.82		
A003 274.1-275.1	DTF	DTF	3300	-		
A003 275 -6.1	2510	<2500	2400	-		
A003 276 .1	3320	<2500	3100	-		
A003 277.1-278.1	8360	0.68%	>5000	0.87		
A003 278.1-279.1	13100	1.17%	>5000	1.43		
Method	I105	I105	A102	A103		
Units	ppm	ppm	ppm	%		
Detection Limit	25	2500	3	0.01		
Upper Method			A103			

Notes: - = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

amdel

615210

MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 9AD0374

Sample rec'd : 19/02/99

Results reported : 02/03/99

No. of samples : 60

Report comprises a cover sheet and pages 1 to 4

Approved Signature:

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

amdel

615211

Job: 9AD0374
O/N:

Final

ANALYTICAL REPORT

SAMPLE	As	S
A003 218.7-219.7	24	1800
A003 219.7-220.7	24	1700
A003 220.7-221.7	26	2050
A003 221.7-222.7	30	2850
A003 222.7-223.7	20	4150
A003 223.7-224.7	34	9550
A003 224.7-225.7	26	5500
A003 225.7-227.0	34	1.09%
A003 227.0-228.2	30	4950
A003 228.2-229.2	32	8400
A003 229.2-230.2	22	6100
A003 230.2-231.2	28	7300
A003 231.2-232.2	28	1.13%
A003 232.2-233.2	18	6650
A003 233.2-234.2	22	8600
A003 234.2-235.2	24	6650
A003 235.2-236.2	20	6100
A003 236.2-237.2	14	1.06%
A003 237.2-238.2	30	2.07%
A003 238.2-239.2	22	1.02%
A003 239.2-240.2	36	2.29%
A003 240.2-241.2	28	1.23%
A003 241.2-242.2	20	1.03%
A003 242.2-243.2	22	2.21%
A003 243.2-244.2	18	8200
A003 244.2-244.9	20	1.24%
A003 244.9-245.9	22	2.34%
A003 245.9-246.9	24	2.30%
A003 246.9-247.9	16	7500
A003 247.9-248.7	40	3300
A003 248.7-249.7	22	4750
A003 249.7-250.7	63	6900
A003 250.7-251.7	200	1.31%
A003 251.7-252.7	190	7600
A003 252.7-253.7	22	1.09%
A003 253.7-254.7	42	2850
A003 254.7-255.7	110	2800
A003 255.7-256.7	18	1450
A003 256.7-257.7	26	650
A003 257.7-258.7	24	1850
A003 258.7-259.7	26	850
A003 259.7-260.7	48	1350
A003 260.7-262.0	30	1300
A003 262.0-263.3	30	6700
A003 263.3-264.3	83	1.40%
A003 264.3-265.3	32	1350
A003 265.3-266.3	26	3650
A003 266.3-267.3	65	5200
A003 267.3-268.3	85	9250
A003 268.3-269.3	61	6050
UNITS	ppm	ppm
DET.LIM	3	50
SCHEME	IC3E	IC3E

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615212

Job: 9AD0374
O/N:

Final

ANALYTICAL REPORT

SAMPLE	As	S
A003 269.3-270.1	74	7800
A003 270.1-271.1	135	7550
A003 271.1-272.1	210	2.68%
A003 272.1-273.1	105	9400
A003 273.1-274.1	260	2.35%
A003 274.1-275.1	46	2400
A003 275.1-276.1	20	1300
A003 276.1-277.1	28	2350
A003 277.1-278.1	67	7300
A003 278.1-279.1	500	1.31%
UNITS	ppm	ppm
DET.LIM	3	50
SCHEME	IC3E	IC3E

amdel

615213

Job: 9AD0374
O/N:

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ANALYTICAL REPORT

SAMPLE	Ag	Co	Cu	Ni	Pb	Zn
A003 218.7-219.7	<2	0.010	<5	0.240	<10	55
A003 219.7-220.7	<2	0.010	<5	0.250	<10	30
A003 220.7-221.7	<2	0.010	<5	0.270	<10	40
A003 221.7-222.7	<2	0.010	<5	0.370	<10	35
A003 222.7-223.7	<2	0.010	<5	0.460	<10	45
A003 223.7-224.7	<2	0.020	10	1.02	15	95
A003 224.7-225.7	<2	0.010	10	0.555	<10	140
A003 225.7-227.0	<2	0.020	10	1.04	<10	85
A003 227.0-228.2	<2	0.010	5	0.495	<10	85
A003 228.2-229.2	<2	0.015	15	0.815	10	95
A003 229.2-230.2	<2	0.010	10	0.620	<10	50
A003 230.2-231.2	<2	0.015	5	0.715	<10	80
A003 231.2-232.2	<2	0.020	15	1.12	35	130
A003 232.2-233.2	<2	0.010	20	0.605	<10	145
A003 233.2-234.2	<2	0.015	20	0.820	<10	60
A003 234.2-235.2	<2	0.010	15	0.590	<10	85
A003 235.2-236.2	<2	0.010	20	0.530	<10	115
A003 236.2-237.2	<2	0.015	35	0.930	<10	70
A003 237.2-238.2	<2	0.025	95	1.64	<10	105
A003 238.2-239.2	<2	0.015	55	0.815	<10	80
A003 239.2-240.2	<2	0.030	110	1.80	<10	85
A003 240.2-241.2	<2	0.015	70	0.985	<10	75
A003 241.2-242.2	<2	0.015	50	0.865	<10	60
A003 242.2-243.2	<2	0.035	105	1.84	<10	80
A003 243.2-244.2	<2	0.015	35	0.720	<10	105
A003 244.2-244.9	<2	0.025	70	1.22	<10	85
A003 244.9-245.9	<2	0.050	115	2.08	<10	70
A003 245.9-246.9	<2	0.035	55	1.83	15	95
A003 246.9-247.9	<2	0.005	25	0.355	80	90
A003 247.9-248.7	<2	<0.005	10	0.190	50	95
A003 248.7-249.7	<2	<0.005	15	0.175	145	700
A003 249.7-250.7	<2	0.010	20	0.420	40	90
A003 250.7-251.7	<2	0.010	30	0.580	30	65
A003 251.7-252.7	<2	<0.005	20	0.250	120	85
A003 252.7-253.7	<2	0.005	25	0.375	40	135
A003 253.7-254.7	<2	0.005	<5	0.320	<10	35
A003 254.7-255.7	<2	0.005	30	0.395	<10	65
A003 255.7-256.7	<2	<0.005	5	0.165	<10	100
A003 256.7-257.7	<2	<0.005	<5	0.115	<10	35
A003 257.7-258.7	<2	0.005	5	0.240	<10	35
A003 258.7-259.7	<2	<0.005	<5	0.145	<10	40
A003 259.7-260.7	<2	<0.005	<5	0.195	<10	40
A003 260.7-262.0	<2	0.005	<5	0.195	<10	40
A003 262.0-263.3	<2	0.020	30	0.740	<10	45
A003 263.3-264.3	<2	0.030	45	1.47	<10	70
A003 264.3-265.3	<2	0.005	<5	0.190	<10	30
A003 265.3-266.3	<2	0.010	<5	0.420	<10	20
A003 266.3-267.3	<2	0.010	5	0.610	<10	35
A003 267.3-268.3	<2	0.015	15	1.02	<10	30
A003 268.3-269.3	<2	0.010	5	0.665	<10	25
UNITS	ppm	%	ppm	%	ppm	ppm
DET.LIM	2	0.005	5	0.005	10	5
SCHEME	IC3B	IC3B	IC3B	IC3B	IC3B	IC3B

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615214

Job: 9AD0374
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ANALYTICAL REPORT

SAMPLE	Ag	Co	Cu	Ni	Pb	Zn
A003 269.3-270.1	<2	0.015	5	0.920	<10	30
A003 270.1-271.1	<2	0.010	35	0.885	10	70
A003 271.1-272.1	<2	0.035	70	2.98	15	90
A003 272.1-273.1	<2	0.015	20	1.06	<10	25
A003 273.1-274.1	<2	0.035	40	2.83	15	80
A003 274.1-275.1	<2	0.005	10	0.340	<10	35
A003 275.1-276.1	<2	0.010	<5	0.255	<10	40
A003 276.1-277.1	<2	0.010	<5	0.345	<10	35
A003 277.1-278.1	<2	0.020	5	0.895	<10	45
A003 278.1-279.1	<2	0.025	40	1.31	<10	185
UNITS	ppm	%	ppm	%	ppm	ppm
DET.LIM	2	0.005	5	0.005	10	5
SCHEME	IC3B	IC3B	IC3B	IC3B	IC3B	IC3B

Appendix 4

Assays and re-assays of A001

MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

615216

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 8AD0292

Sample rec'd : 09/02/98

Results reported : 26/02/98

No. of samples : 119

Report comprises a cover sheet and pages 1 to 6

This final analysis report replaces the preliminary reports sent on 20/02/98.

Approved Signature:

Chris Altmann

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

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615217

Job: 8AD0292
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A001 242.9-243.9	<1	42	46	2	1250	<5	600
A001 243.9-244.3	1	64	3400	1150	15.0%	<5	20.4%
A001 244.3-245.3	<1	6	72	29	3250	10	6650
A001 245.3-246.3	<1	4	50	17	2200	<5	3200
A001 246.3-247.6	<1	8	74	15	3150	<5	5300
A001 247.6-248.6	<1	14	115	17	4100	10	5900
A001 248.6-249.6	<1	10	68	12	2300	15	3000
A001 249.6-250.6	<1	24	270	55	1.23%	155	1.80%
A001 250.6-251.6	<1	22	240	57	1.11%	50	1.56%
A001 251.6-252.6	<1	26	185	35	8550	25	1.17%
A001 252.6-253.6	<1	32	190	65	8350	95	1.11%
A001 253.6-254.6	<1	32	145	14	6550	20	8450
A001 254.6-255.6	<1	26	76	2	2400	5	2750
A001 255.6-256.6	<1	14	74	2	2300	10	2700
A001 256.6-257.6	<1	18	115	3	4650	15	5550
A001 257.6-258.6	<1	16	85	3	2900	15	3350
A001 258.6-259.6	<1	14	86	6	2900	10	3400
A001 259.6-260.6	<1	12	61	2	1550	5	1600
A001 260.6-261.6	<1	12	64	<2	1500	<5	1450
A001 261.6-262.6	<1	14	70	<2	1700	<5	1800
A001 262.6-263.6	<1	16	64	<2	1850	10	1800
A001 263.6-264.6	<1	18	60	<2	1550	<5	1700
A001 264.6-265.6	<1	16	64	3	1700	<5	2100
A001 265.6-266.6	<1	16	94	21	3450	<5	5350
A001 266.6-267.6	<1	26	240	28	1.17%	10	1.76%
A001 267.6-268.6	<1	20	79	6	2600	5	3550
A001 268.6-269.6	<1	14	65	4	1800	5	2450
A001 269.6-270.6	<1	20	96	16	3350	5	5300
A001 270.6-271.6	<1	16	210	26	9050	5	1.38%
A001 271.6-272.6	<1	10	65	8	2700	<5	3750
A001 272.6-273.6	<1	10	190	24	7950	10	1.22%
A001 273.6-274.6	<1	14	60	7	1450	<5	2950
A001 274.6-275.6	<1	18	70	15	2150	5	6350
A001 275.6-277.3	<1	10	58	7	1150	5	2150
A001 277.3-278.3	<1	12	61	3	1150	5	1750
A001 278.3-279.3	<1	10	67	<2	1200	<5	1750
A001 279.3-280.3	<1	8	72	2	1750	10	2150
A001 280.3-281.3	<1	8	41	<2	700	<5	650
A001 281.3-282.3	<1	8	36	2	650	<5	650
A001 282.3-283.3	<1	14	23	<2	490	<5	<500
A001 283.3-284.3	<1	42	47	6	1000	5	1050
A001 284.3-285.3	<1	36	52	7	1050	5	1650
A001 285.3-286.3	<1	16	110	10	2700	5	4350
A001 286.3-287.3	<1	12	46	4	850	5	1200
A001 287.3-288.3	<1	14	130	17	3750	15	6300
A001 288.3-289.3	<1	10	41	<2	900	<5	800
A001 289.3-290.3	<1	8	58	19	1150	15	1450
A001 290.3-291.3	<1	8	52	3	900	<5	1150
A001 291.3-292.3	<1	8	65	4	1150	5	1800
A001 292.3-293.3	<1	10	93	7	2150	15	3050
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	3	2	2	2	5	500
SCHEME	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E
UPPER SCHEME					MET1R		

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Job: 8AD0292
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ANALYTICAL REPORT

SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A001 293.3-294.3	<1	12	69	56	1250	60	2050
A001 294.3-295.3	<1	12	64	5	1300	5	1700
A001 295.3-296.3	<1	12	59	6	1200	5	1500
A001 296.3-297.3	<1	10	82	7	1600	5	2800
A001 297.3-298.3	<1	12	81	16	1650	10	3900
A001 298.3-299.3	<1	12	105	20	2350	5	6400
A001 299.3-300.3	<1	12	92	27	2000	15	4850
A001 300.3-301.3	<1	10	140	23	3900	10	8500
A001 301.3-302.3	<1	10	110	17	2700	10	6200
A001 302.3-303.3	<1	10	105	12	2450	5	5400
A001 303.3-304.3	<1	12	91	9	2150	5	4050
A001 304.3-305.3	<1	12	70	3	1650	5	2300
A001 305.3-306.3	<1	24	70	41	1550	35	3300
A001 306.3-307.3	<1	135	99	22	2800	15	5150
A001 307.3-308.3	<1	10	73	<2	1750	<5	2250
A001 308.3-309.3	<1	12	64	<2	1300	<5	1400
A001 309.3-310.3	<1	12	65	<2	1200	10	1250
A001 310.3-311.3	<1	12	72	<2	1350	10	1300
A001 311.3-312.3	<1	10	66	4	1300	<5	1500
A001 312.3-313.3	<1	8	68	<2	1400	5	1300
A001 313.3-314.3	<1	10	61	62	1200	65	1250
A001 314.3-315.3	<1	8	63	<2	1250	10	950
A001 315.3-316.3	<1	8	61	<2	1200	10	950
A001 14.6-15.6	<1	8	30	57	100	25	<500
A001 19.6-20.6	<1	4	22	23	55	15	<500
A001 47.4-48.3	<1	12	51	<2	320	5	<500
A001 48.3-49.3	7	300	50	7	1200	350	1000
A001 49.3-50.3	<1	20	54	17	550	60	<500
A001 50.3-51.3	<1	24	65	130	550	10	<500
A001 51.3-52.3	<1	34	78	170	900	15	550
A001 52.3-53.3	<1	4	99	57	1300	15	<500
A001 53.3-54.3	<1	38	110	4	1500	<5	<500
A001 54.3-55.3	6	28	89	240	2050	700	3050
A001 55.3-56.3	9	14	76	135	1550	1750	2350
A001 56.3-57.3	6	4	51	26	850	1400	1500
A001 57.3-58.3	9	18	33	4	850	1550	1550
A001 58.3-59.2	5	46	35	52	1000	950	2100
A001 59.2-60.2	13	54	52	240	1150	750	1.75%
A001 60.2-61.2	4	32	67	430	1450	230	3.97%
A001 61.2-62.5	3	52	77	350	1400	75	11.3%
A001 62.5-63.3	1	20	53	54	550	130	5450
A001 63.3-64.9	1	6	76	430	200	330	4850
A001 64.9-66.2	<1	8	80	130	145	140	4150
A001 66.2-67.2	<1	4	110	7	240	100	<500
A001 67.2-68.2	<1	4	89	3	270	15	<500
A001 68.2-69.2	<1	6	85	46	370	15	600
A001 69.2-70.0	<1	4	81	50	350	30	850
A001 159.2-160.2	<1	10	32	6	105	55	<500
A001 160.2-161.2	<1	8	31	19	150	185	550
A001 161.2-162.2	<1	12	23	29	77	550	1300
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	3	2	2	2	5	500
SCHEME	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E

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615219

Job: 8AD0292
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Final

ANALYTICAL REPORT

SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A001 162.2-163.2	<1	8	37	3	170	20	<500
A001 163.2-164.2	<1	8	33	23	160	140	1550
A001 164.2-165.8	<1	8	23	25	105	145	2600
A001 165.8-166.8	<1	6	30	4	185	30	<500
A001 166.8-167.8	<1	12	28	16	150	75	<500
A001 167.8-169.6	<1	8	27	4	135	65	<500
A001 169.6-170.6	<1	14	20	<2	155	15	<500
A001 170.6-171.6	<1	8	30	3	145	40	<500
A001 171.6-172.6	<1	12	23	2	145	25	<500
A001 172.6-173.6	<1	6	25	<2	195	5	<500
A001 173.6-174.6	<1	10	22	3	120	5	<500
A001 174.6-175.6	<1	8	17	4	94	10	<500
A001 175.6-176.6	<1	12	22	12	130	50	<500
A001 176.6-177.6	<1	6	26	5	220	85	<500
A001 177.6-178.6	<1	10	22	3	180	<5	<500
A001 178.6-179.8	<1	8	22	12	115	15	<500
A001 179.8-180.8	<1	12	24	4	190	50	<500
A001 148.2-149.4	5	14	46	82	210	350	4600
A001 149.4-150.6	1	20	43	26	230	280	2050
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	3	2	2	2	5	500
SCHEME	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E

amdel

615220

Job: 8AD0292
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Zn
A001 242.9-243.9	86
A001 243.9-244.3	700
A001 244.3-245.3	47
A001 245.3-246.3	34
A001 246.3-247.6	38
A001 247.6-248.6	71
A001 248.6-249.6	86
A001 249.6-250.6	330
A001 250.6-251.6	185
A001 251.6-252.6	165
A001 252.6-253.6	270
A001 253.6-254.6	150
A001 254.6-255.6	130
A001 255.6-256.6	65
A001 256.6-257.6	93
A001 257.6-258.6	82
A001 258.6-259.6	110
A001 259.6-260.6	57
A001 260.6-261.6	37
A001 261.6-262.6	51
A001 262.6-263.6	38
A001 263.6-264.6	25
A001 264.6-265.6	39
A001 265.6-266.6	75
A001 266.6-267.6	105
A001 267.6-268.6	105
A001 268.6-269.6	50
A001 269.6-270.6	90
A001 270.6-271.6	115
A001 271.6-272.6	58
A001 272.6-273.6	67
A001 273.6-274.6	56
A001 274.6-275.6	41
A001 275.6-277.3	50
A001 277.3-278.3	49
A001 278.3-279.3	28
A001 279.3-280.3	51
A001 280.3-281.3	25
A001 281.3-282.3	35
A001 282.3-283.3	30
A001 283.3-284.3	52
A001 284.3-285.3	56
A001 285.3-286.3	85
A001 286.3-287.3	36
A001 287.3-288.3	220
A001 288.3-289.3	27
A001 289.3-290.3	45
A001 290.3-291.3	73
A001 291.3-292.3	49
A001 292.3-293.3	96
UNITS	ppm
DET.LIM	2
SCHEME	IC3E

amdel

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O/N:

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SAMPLE	Zn
A001 293.3-294.3	86
A001 294.3-295.3	40
A001 295.3-296.3	26
A001 296.3-297.3	75
A001 297.3-298.3	67
A001 298.3-299.3	45
A001 299.3-300.3	68
A001 300.3-301.3	67
A001 301.3-302.3	55
A001 302.3-303.3	57
A001 303.3-304.3	47
A001 304.3-305.3	17
A001 305.3-306.3	39
A001 306.3-307.3	160
A001 307.3-308.3	24
A001 308.3-309.3	20
A001 309.3-310.3	22
A001 310.3-311.3	21
A001 311.3-312.3	36
A001 312.3-313.3	68
A001 313.3-314.3	22
A001 314.3-315.3	25
A001 315.3-316.3	20
A001 14.6-15.6	57
A001 19.6-20.6	53
A001 47.4-48.3	57
A001 48.3-49.3	400
A001 49.3-50.3	145
A001 50.3-51.3	105
A001 51.3-52.3	195
A001 52.3-53.3	380
A001 53.3-54.3	140
A001 54.3-55.3	1350
A001 55.3-56.3	800
A001 56.3-57.3	750
A001 57.3-58.3	550
A001 58.3-59.2	1150
A001 59.2-60.2	1300
A001 60.2-61.2	900
A001 61.2-62.5	250
A001 62.5-63.3	430
A001 63.3-64.9	1200
A001 64.9-66.2	750
A001 66.2-67.2	310
A001 67.2-68.2	120
A001 68.2-69.2	140
A001 69.2-70.0	330
A001 159.2-160.2	330
A001 160.2-161.2	700
A001 161.2-162.2	1600
UNITS	ppm
DET.LIM	2
SCHEME	IC3E

amdel

615223

Job: 8AD0292
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Zn
A001 162.2-163.2	79
A001 163.2-164.2	2200
A001 164.2-165.8	3950
A001 165.8-166.8	290
A001 166.8-167.8	550
A001 167.8-169.6	900
A001 169.6-170.6	63
A001 170.6-171.6	420
A001 171.6-172.6	105
A001 172.6-173.6	76
A001 173.6-174.6	59
A001 174.6-175.6	120
A001 175.6-176.6	650
A001 176.6-177.6	97
A001 177.6-178.6	600
A001 178.6-179.8	700
A001 179.8-180.8	145
A001 148.2-149.4	5850
A001 149.4-150.6	2050
UNITS	ppm
DET.LIM	2
SCHEME	IC3E

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MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

615223

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 9AD0512

Sample rec'd : 05/03/99

Results reported : 12/03/99

No. of samples : 31

Report comprises a cover sheet and pages 1 to 1

Approved Signature:

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

amdel

Job: 9AD0512 615224
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Ni
242.9-243.9	0.155
243.9-244.3	24.8
244.3-245.3	0.560
245.3-246.3	0.310
246.3-247.6	0.460
247.6-248.6	0.610
248.6-249.6	0.310
249.6-250.6	1.62
250.6-251.6	1.40
251.6-252.6	1.10
252.6-253.6	1.06
253.6-254.6	0.810
254.6-255.6	0.870
255.6-256.6	0.270
256.6-257.6	0.575
257.6-258.6	0.370
258.6-259.6	0.345
259.6-260.6	0.200
260.6-261.6	0.170
261.6-262.6	0.200
262.6-263.6	0.240
263.6-264.6	0.235
264.6-265.6	0.235
265.6-266.6	0.460
266.6-267.6	1.48
267.6-268.6	0.360
268.6-269.6	0.235
269.6-270.6	0.415
270.6-271.6	1.07
271.6-272.6	0.350
272.6-273.6	1.17
UNITS	%
DET.LIM	0.005
SCHEME	IC3B

Appendix 5

Final assay data as received

See Appendices 3 and 4 for final assays for parts of A001 and A003

MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

615227

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 8AD0438

Sample rec'd : 25/02/98

Results reported : 10/03/98

No. of samples : 77

Report comprises a cover sheet and pages 1 to 2

Approved Signature:

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

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615228

Job: 8AD0438
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Sn	Au	Au Dpl	Pt	Pt Dpl	Pd	Pd Dpl
A001 47.4-48.3	<4	--	--	--	--	--	--
A001 48.3-49.3	5	--	--	--	--	--	--
A001 49.3-50.3	17	--	--	--	--	--	--
A001 50.3-51.3	7	--	--	--	--	--	--
A001 51.3-52.3	<4	--	--	--	--	--	--
A001 52.3-53.3	<4	--	--	--	--	--	--
A001 53.3-54.3	10	--	--	--	--	--	--
A001 54.3-55.3	15	--	--	--	--	--	--
A001 55.3-56.3	<4	--	--	--	--	--	--
A001 56.3-57.3	9	--	--	--	--	--	--
A001 57.3-58.3	<4	--	--	--	--	--	--
A001 58.3-59.2	<4	--	--	--	--	--	--
A001 59.2-60.2	<4	--	--	--	--	--	--
A001 60.2-61.2	4	--	--	--	--	--	--
A001 61.2-62.5	6	--	--	--	--	--	--
A001 62.5-63.3	12	--	--	--	--	--	--
A001 63.3-64.9	23	--	--	--	--	--	--
A001 64.9-66.2	18	--	--	--	--	--	--
A001 66.2-67.2	6	--	--	--	--	--	--
A001 67.2-68.2	85	--	--	--	--	--	--
A001 68.2-69.2	120	--	--	--	--	--	--
A001 69.2-70.0	74	--	--	--	--	--	--
A001 148.2-149.4	58	--	--	--	--	--	--
A001 149.4-150.6	45	--	--	--	--	--	--
A001 159.2-160.2	6	--	--	--	--	--	--
A001 160.2-161.2	23	--	--	--	--	--	--
A001 161.2-162.2	18	--	--	--	--	--	--
A001 162.2-163.2	8	--	--	--	--	--	--
A001 163.2-164.2	9	--	--	--	--	--	--
A001 164.2-165.8	31	--	--	--	--	--	--
A001 165.8-166.8	18	--	--	--	--	--	--
A001 166.8-167.8	6	--	--	--	--	--	--
A001 167.8-169.6	5	--	--	--	--	--	--
A001 169.6-170.6	37	--	--	--	--	--	--
A001 170.6-171.6	16	--	--	--	--	--	--
A001 171.6-172.6	27	--	--	--	--	--	--
A001 172.6-173.6	11	--	--	--	--	--	--
A001 173.6-174.6	28	--	--	--	--	--	--
A001 174.6-175.6	27	--	--	--	--	--	--
A001 175.6-176.6	13	--	--	--	--	--	--
A001 176.6-177.6	9	--	--	--	--	--	--
A001 177.6-178.6	65	--	--	--	--	--	--
A001 178.6-179.8	6	--	--	--	--	--	--
A001 179.8-180.8	12	--	--	--	--	--	--
A001 242.9-243.9	--	1	1	5	5	10	11
A001 243.9-244.3	--	40	60	<5	<5	<1	--
A001 244.3-245.3	--	7	--	<5	--	1	--
A001 245.3-246.3	--	4	--	<5	--	<1	--
A001 246.3-247.6	--	5	--	<5	--	<1	--
A001 247.6-248.6	--	4	--	<5	--	2	--
UNITS	ppm	ppb	ppb	ppb	ppb	ppb	ppb
DET.LIM	4	1	1	5	5	1	1
SCHEME	XRF1	FA3	FA3	FA3	FA3	FA3	FA3

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615229

Job: 8AD0438
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Sn	Au	Au Dpl	Pt	Pt Dpl	Pd	Pd Dpl
A001 248.6-249.6	--	2	--	<5	--	<1	--
A001 249.6-250.6	--	6	--	<5	--	2	--
A001 250.6-251.6	--	2	--	<5	--	<1	--
A001 251.6-252.6	--	<1	--	<5	--	<1	--
A001 252.6-253.6	--	11	--	<5	--	<1	--
A001 253.6-254.6	--	5	--	<5	--	<1	--
A001 254.6-255.6	--	1	--	<5	--	<1	--
A001 255.6-256.6	--	3	--	<5	--	<1	--
A001 256.6-257.6	--	2	--	<5	--	<1	--
A001 257.6-258.6	--	3	--	<5	--	1	--
A001 258.6-259.6	--	5	--	<5	--	<1	--
A001 259.6-260.6	--	3	--	<5	--	<1	--
A001 260.6-261.6	--	2	--	<5	--	<1	--
A001 261.6-262.6	--	4	--	<5	--	<1	--
A001 262.6-263.6	--	3	--	<5	--	<1	--
A001 263.6-264.6	--	3	--	<5	--	<1	--
A001 264.6-265.6	--	4	--	<5	--	<1	--
A001 265.6-266.6	--	5	--	<5	--	<1	--
A001 266.6-267.6	--	8	--	<5	--	2	--
A001 267.6-268.6	--	6	--	<5	--	<1	--
A001 268.6-269.6	--	4	--	<5	--	1	--
A001 269.6-270.6	--	9	6	<5	<5	1	3
A001 270.6-271.6	--	4	--	<5	--	1	--
A001 271.6-272.6	--	16	8	<5	<5	<1	<1
A001 272.6-273.6	--	4	--	<5	--	<1	--
A001 273.6-274.6	--	3	4	<5	<5	5	7
A001 274.6-275.6	--	5	5	<5	<5	2	2

UNITS	ppm	ppb	ppb	ppb	ppb	ppb	ppb
DET.LIM	4	1	1	5	5	1	1
SCHEME	XRF1	FA3	FA3	FA3	FA3	FA3	FA3

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615230

MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 8AD0613

Sample rec'd : 13/03/98

Results reported : 23/03/98

No. of samples : 20

Report comprises a cover sheet and pages 1 to 1

Approved Signature:

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

amdel

615231

Job: 8AD0613
O/N:

Final

ANALYTICAL REPORT

	SAMPLE	Au	Au Dpl
A001	48.3- 49.3	6	--
A001	53.3- 54.3	1	--
A001	54.3- 55.3	1	--
A001	55.3- 56.3	2	--
A001	56.3- 57.3	2	--
A001	57.3- 58.3	4	--
A001	58.3- 59.2	2	--
A001	59.2- 60.2	2	--
A001	60.2- 61.2	2	--
A001	61.2- 62.5	2	--
A001	62.5- 63.3	2	--
A001	63.3- 64.9	4	--
A001	64.9- 66.2	2	--
A001	148.2-149.4	2	--
A001	149.4-150.6	2	--
A001	160.2-161.2	1	--
A001	161.2-162.2	2	--
A001	162.2-163.2	1	--
A001	163.2-164.2	1	--
A001	164.2-165.8	2	2

UNITS	ppb	ppb
DET.LIM	1	1
SCHEME	FA3	FA3

615232

ANALABS

Our reference : BU016143
Your reference : **Batch 1999/7**
Project code : A001
Report date : 27/04/99
Report status : Final
Page : 1 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A001 465.7-466.7	2360	40	105	<125	130	<25
A001 466.7-467.7	4290	76	165	<125	230	<25
A001 467.7-468.7	2030	54	100	<125	115	<25
A001 468.7-469.7	2690	44	115	<125	145	<25
A001 469.7-470.7	3360	52	125	<125	120	<25
A001 470.7-471.7	2930	<15	110	<125	78	<25
A001 471.7-472.7	3220	<15	115	<125	100	<25
A001 472.7-473.7	3570	44	120	<125	88	<25
A001 473.7-474.7	6060	54	205	<125	120	<25
A001 474.7-475.7	7910	64	240	<125	120	<25
A001 475.7-476.7	7540	46	210	<125	265	<25
A001 476.7-477.7	1.34%	76	335	<125	88	<25
A001 477.7-478.7	5620	26	150	<125	145	<25
A001 478.7-479.7	4920	30	135	<125	115	<25
A001 479.7-480.7	5660	18	150	<125	130	<25
A001 480.7-481.7	1860	<15	82	<125	76	<25
A001 481.7-482.7	2310	<15	96	<125	72	<25
A001 482.7-483.7	1750	<15	82	<125	62	<25
A001 483.7-484.7	1710	16	82	<125	90	<25
A001 484.7-485.7	1600	<15	80	<125	82	<25
A001 485.7-486.7	1570	<15	80	<125	94	<25
A001 486.7-487.7	1770	<15	78	<125	60	<25
A001 487.7-488.7	6930	28	175	<125	115	<25
A001 488.7-489.7	5570	34	155	<125	125	<25
A001 489.7-490.7	1530	<15	76	<125	64	<25
A001 490.7-491.7	1530	<15	82	<125	82	<25
A001 491.7-492.7	1300	32	74	<125	190	<25
A001 492.7-493.7	1370	<15	78	<125	94	<25
A001 493.7-494.7	1390	<15	78	<125	88	<25
A001 494.7-495.7	1600	<15	82	<125	110	<25
A001 495.7-496.7	1550	<15	86	<125	42	<25
A001 496.7-497.7	1280	<15	82	<125	<15	<25
A001 497.7-498.7	1060	<15	68	<125	38	<25
A001 498.7-499.7	1150	<15	68	<125	26	<25
A001 499.7-500.7	1160	<15	70	<125	<15	<25
A001 500.7-501.7	2140	<15	105	<125	155	<25
A001 501.7-502.9	1120	<15	62	<125	50	<25
A001 502.9-503.9	1170	<15	28	<125	150	<25
A001 503.9-504.9	3920	46	92	<125	215	<25
A001 504.9-506.1	1920	16	52	<125	145	<25
A001 506.1-507.1	1770	265	74	1210	1380	<25
A001 507.1-508.1	1580	16	82	<125	300	<25
A001 508.1-509.1	1180	<15	64	<125	185	<25
A001 509.1-510.1	920	18	54	<125	170	<25
A001 510.1-511.1	1050	<15	56	<125	42	<25
*Rep 001 480.7-481.7	1820	<15	78	<125	24	<25
*Rep 001 488.7-489.7	5530	30	155	<125	92	<25
*Blk BLANK	28	16	<15	<125	94	<25
*Std SU_1A	1.18%	9350	365	<125	205	<25
*Std GI2A	4610	3710	4670	3850	6790	<25
Method	1105	1105	1105	1105	1105	1105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	15	15	125	15	25

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615233

ANALABS

Our reference : BU016143
Your reference : **Batch 1999/7**
Project code : A001
Report date : 27/04/99
Report status : Final

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A001 511.1-512.1	1300	<15	66	<125	215	<25
A001 512.1-513.1	1770	18	78	<125	210	<25
A001 513.1-514.1	2300	<15	88	<125	145	<25
A001 514.1-515.1	1510	<15	68	<125	125	<25
A001 515.1-516.1	1440	<15	68	<125	84	<25
A001 516.1-517.1	1580	<15	72	<125	120	<25
A001 517.1-518.1	2550	16	92	<125	98	<25
A001 518.1-519.1	1570	<15	72	<125	88	<25
A001 519.1-520.1	1490	<15	70	<125	34	<25
A001 520.1-521.1	1320	34	66	<125	195	<25
A001 521.1-522.1	1440	54	66	<125	115	<25
A001 522.1-523.1	1600	34	70	<125	100	<25
A001 523.1-524.1	2260	48	92	<125	165	<25
A001 524.1-525.1	1810	18	84	<125	180	<25
A001 525.1-526.1	1460	58	66	<125	140	<25
A001 526.1-527.1	1580	24	66	<125	60	<25
A001 527.1-528.1	2050	<15	78	<125	38	<25
A001 528.1-529.1	2550	24	88	<125	80	<25
A001 529.1-530.1	2140	<15	84	<125	82	<25
A001 530.1-531.1	2030	16	82	<125	115	<25
A001 531.1-532.6	1270	<15	60	<125	56	<25
*SS 001 473.7-474.7	5810	30	195	<125	86	<25
*SS 001 498.7-499.7	1150	<15	66	<125	32	<25
*SS 001 524.1-525.1	1710	<15	78	<125	155	<25
*Rep 001 511.1-512.1	1360	<15	68	<125	160	<25
*Blk BLANK	<25	<15	<15	<125	44	<25
*Std SU_1A	1.16%	9010	360	<125	200	<25
*Std BM_44	1.24%	685	370	<125	72	<25
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	15	15	125	15	25

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615234

ANALABS

Our reference : BU016143
Your reference : Batch 1999/7
Project code : A001
Report date : 27/04/99
Report status : Final

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A001 465.7-466.7	0.4%
A001 466.7-467.7	0.7%
A001 467.7-468.7	0.3%
A001 468.7-469.7	0.4%
A001 469.7-470.7	0.5%
A001 470.7-471.7	0.4%
A001 471.7-472.7	0.4%
A001 472.7-473.7	0.6%
A001 473.7-474.7	1.1%
A001 474.7-475.7	1.4%
A001 475.7-476.7	1.2%
A001 476.7-477.7	2.0%
A001 477.7-478.7	0.8%
A001 478.7-479.7	0.7%
A001 479.7-480.7	0.7%
A001 480.7-481.7	<2500
A001 481.7-482.7	0.3%
A001 482.7-483.7	<2500
A001 483.7-484.7	<2500
A001 484.7-485.7	<2500
A001 485.7-486.7	0.3%
A001 486.7-487.7	0.3%
A001 487.7-488.7	1.0%
A001 488.7-489.7	1.0%
A001 489.7-490.7	<2500
A001 490.7-491.7	0.3%
A001 491.7-492.7	0.3%
A001 492.7-493.7	<2500
A001 493.7-494.7	<2500
A001 494.7-495.7	<2500
A001 495.7-496.7	<2500
A001 496.7-497.7	<2500
A001 497.7-498.7	<2500
A001 498.7-499.7	<2500
A001 499.7-500.7	<2500
A001 500.7-501.7	0.3%
A001 501.7-502.9	<2500
A001 502.9-503.9	<2500
A001 503.9-504.9	0.9%
A001 504.9-506.1	0.5%
A001 506.1-507.1	0.5%
A001 507.1-508.1	0.6%
A001 508.1-509.1	0.3%
A001 509.1-510.1	<2500
A001 510.1-511.1	<2500
*Rep 001 480.7-481.7	<2500
*Rep 001 488.7-489.7	1.0%
*Blk BLANK	<2500
*Std SU 1A	6.6%
*Std GT2A	3.6%
Method	I105
Units	ppm
Detection Limit	2500

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615235

ANALABS

Our reference : BU016143
Your reference : Batch 1999/7
Project code : A001
Report date : 27/04/99
Report status : Final
Page : 4 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A001 511.1-512.1	<2500
A001 512.1-513.1	0.4%
A001 513.1-514.1	0.4%
A001 514.1-515.1	0.3%
A001 515.1-516.1	<2500
A001 516.1-517.1	0.3%
A001 517.1-518.1	0.5%
A001 518.1-519.1	0.3%
A001 519.1-520.1	<2500
A001 520.1-521.1	0.4%
A001 521.1-522.1	<2500
A001 522.1-523.1	0.3%
A001 523.1-524.1	0.6%
A001 524.1-525.1	0.6%
A001 525.1-526.1	0.3%
A001 526.1-527.1	0.3%
A001 527.1-528.1	0.4%
A001 528.1-529.1	0.7%
A001 529.1-530.1	0.6%
A001 530.1-531.1	0.7%
A001 531.1-532.6	0.4%
*SS 001 473.7-474.7	1.0%
*SS 001 498.7-499.7	<2500
*SS 001 524.1-525.1	0.6%
*Rep 001 511.1-512.1	<2500
*Blk BLANK	<2500
*Std SU_1A	6.2%
*Std BM_44	2.0%
Method	I105
Units	ppm
Detection Limit	2500

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

amdel

615236

Job: 8AD0642A
O/N: SAMPLE BATCH 3

Final

ANALYTICAL REPORT

SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A002 60.4- 70.4	<1	8	26	29	175	25	<500
A002 73.4- 74.4	<1	<3	31	16	150	10	<500
A002 90.6- 91.6	<1	8	36	82	91	55	2850
A002 98.0- 99.0	<1	26	33	33	105	25	<500
A002 102.0-103.0	<1	8	36	12	79	10	<500
A002 115.8-117.3	<1	165	86	230	900	15	550
A002 117.3-118.3	<1	82	49	120	600	25	650
A002 118.3-119.3	<1	125	35	17	1400	25	750
A002 119.3-120.3	<1	240	44	10	1250	20	800
A002 120.3-121.3	<1	380	37	16	1050	20	1350
A002 121.3-122.3	<1	66	57	<2	950	15	1250
A002 122.3-123.3	<1	61	51	<2	800	20	1050
A002 123.3-124.3	<1	57	45	<2	700	10	<500
A002 136.0-137.0	<1	32	80	<2	1900	20	1700
A002 151.0-152.0	<1	42	80	<2	2000	10	2750
A002 157.8-158.8	<1	26	65	5	850	10	<500
A002 158.8-159.8	<1	52	39	115	390	45	<500
A002 172.0-173.0	<1	<3	44	8	155	15	<500
A002 173.0-174.0	<1	<3	45	20	210	20	<500
A002 186.6-187.6	<1	24	97	<2	1550	10	<500
A002 187.6-188.0	<1	99	260	32	9000	60	7200
A002 188.0-189.0	<1	96	55	<2	2350	<5	700
A002 189.0-190.0	<1	40	39	<2	1700	<5	<500
A002 301.0-302.0	<1	38	80	<2	1900	5	550
A002 302.0-303.0	<1	30	71	<2	1750	<5	<500
A002 303.0-304.0	<1	30	75	<2	1850	5	<500
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	3	2	2	2	5	500
SCHEME	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E

amdel

615237

Job: 8AD0642A
O/N: SAMPLE BATCH 3

Final

ANALYTICAL REPORT

SAMPLE		Zn
A002	60.4- 70.4	175
A002	73.4- 74.4	250
A002	90.6- 91.6	130
A002	98.0- 99.0	185
A002	102.0-103.0	180
A002	115.8-117.3	270
A002	117.3-118.3	170
A002	118.3-119.3	155
A002	119.3-120.3	150
A002	120.3-121.3	240
A002	121.3-122.3	125
A002	122.3-123.3	155
A002	123.3-124.3	180
A002	136.0-137.0	105
A002	151.0-152.0	100
A002	157.8-158.8	160
A002	158.8-159.8	87
A002	172.0-173.0	89
A002	173.0-174.0	140
A002	186.6-187.6	185
A002	187.6-188.0	600
A002	188.0-189.0	360
A002	189.0-190.0	135
A002	301.0-302.0	110
A002	302.0-303.0	105
A002	303.0-304.0	115

UNITS	ppm
DET.LIM	2
SCHEME	IC3E

615238

ANALABS

Our reference : BU015750
Your reference : Batch 1999/1
Project code : Core
Report date : 05/02/99
Report status : Final
Page : 1 of 1

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Cu	Pb	Zn	Co	Ni	S
A003 35.6-36.6	<0.01	0.01	0.03	0.01	0.13	0.028
A003 36.6-37.6	<0.01	0.02	0.01	0.01	0.15	0.077
A003 37.6-39.1	<0.01	0.04	0.03	<0.01	0.12	0.115
A003 39.1-40.1	<0.01	0.03	0.04	0.01	0.23	0.218
A003 40.1-41.1	<0.01	0.01	0.01	0.01	0.17	0.153
A003 41.1-42.1	<0.01	0.01	0.01	0.01	0.17	0.147
A003 42.1-43.4	<0.01	<0.01	0.01	0.01	0.15	0.117
A003 43.4-44.4	<0.01	<0.01	0.01	0.01	0.18	0.184
A003 44.4-45.4	<0.01	0.01	0.02	0.01	0.18	0.173
A003 45.4-46.4	<0.01	0.01	0.02	0.01	0.17	0.214
A003 46.4-47.4	<0.01	0.01	0.02	0.01	0.18	0.179
A003 47.4-48.4	<0.01	0.02	0.01	0.01	0.16	0.186
A003 48.4-49.4	<0.01	0.01	0.01	0.01	0.16	0.168
A003 49.4-50.4	<0.01	0.02	0.01	0.01	0.17	0.237
A003 50.4-51.4	<0.01	0.02	0.02	0.01	0.17	0.230
A003 51.4-52.4	<0.01	0.03	0.02	0.01	0.16	0.207
A003 52.4-53.4	<0.01	<0.01	0.01	0.01	0.16	0.213
A003 53.4-54.4	<0.01	0.01	0.02	0.01	0.18	0.196
A003 54.4-55.4	<0.01	<0.01	0.01	0.01	0.16	0.139
A003 55.4-56.4	<0.01	<0.01	0.01	0.01	0.18	0.161
A003 56.4-57.4	<0.01	<0.01	0.01	0.01	0.19	0.162
A003 57.4-58.6	<0.01	<0.01	0.01	0.01	0.17	0.096
A003 58.6-59.6	<0.01	<0.01	0.02	0.01	0.12	0.036
A003 59.6-60.6	<0.01	<0.01	0.02	0.01	0.13	0.028
A003 60.6-61.7	<0.01	<0.01	0.01	0.01	0.15	0.047
A003 61.7-62.7	<0.01	0.01	0.01	0.01	0.16	0.094
A003 62.7-63.7	<0.01	<0.01	0.02	0.01	0.19	0.102
A003 63.7-64.7	<0.01	<0.01	0.02	0.01	0.28	0.202
A003 64.7-65.7	<0.01	<0.01	0.01	0.01	0.19	0.040
A003 65.7-66.7	<0.01	<0.01	0.01	<0.01	0.13	0.045
A003 66.7-67.7	<0.01	<0.01	0.02	<0.01	0.14	0.105
A003 67.7-68.7	<0.01	0.01	0.01	0.01	0.18	0.104
A003 68.7-69.7	<0.01	<0.01	0.02	0.01	0.20	0.095
A003 69.7-70.7	<0.01	0.01	0.02	0.01	0.20	0.144
A003 70.7-71.7	<0.01	0.01	0.01	0.01	0.20	0.160
A003 71.7-73.0	<0.01	<0.01	0.01	0.01	0.17	0.132
A003 73.0-74.0	<0.01	0.01	0.02	0.01	0.16	0.060
A003 74.0-75.0	<0.01	0.01	0.02	<0.01	0.13	0.043
A003 75.0-76.0	<0.01	<0.01	0.08	<0.01	0.05	0.097
A003 76.0-77.0	<0.01	0.01	0.08	<0.01	0.10	0.085
A003 77.0-78.0	<0.01	<0.01	0.01	<0.01	0.10	0.174
A003 78.0-79.0	<0.01	<0.01	<0.01	<0.01	0.07	0.100
A003 79.0-80.0	<0.01	<0.01	0.01	<0.01	0.11	0.167
A003 80.0-81.0	<0.01	<0.01	0.01	<0.01	0.17	0.036
A003 81.0-82.0	<0.01	<0.01	0.02	<0.01	0.16	0.064
A003 82.0-83.0	<0.01	0.01	0.03	<0.01	0.14	0.074
A003 83.0-84.0	<0.01	<0.01	0.02	<0.01	0.11	0.073
A003 84.0-85.4	<0.01	0.01	0.02	<0.01	0.11	0.095
A003 85.4-86.4	<0.01	<0.01	0.03	0.01	0.22	0.303
A003 86.4-87.4	<0.01	<0.01	0.04	0.01	0.13	0.103
Method	A103	A103	A103	A103	A103	V821
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.005

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615239 A N A L A B S

Our reference : BU015792
Your reference : BATCH 1999/3
Project code : CORE
Report date : 22/02/99
Report status : Final
Page : 1 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 87.2-88.2	0.09	<0.01	<0.01	<0.01	0.02	<0.01
A003 88.2-89.2	0.15	<0.01	<0.01	<0.01	0.02	0.06
A003 89.2-90.2	0.13	<0.01	<0.01	<0.01	0.02	0.06
A003 90.2-91.2	0.08	<0.01	<0.01	<0.01	0.03	<0.01
A003 91.2-92.2	0.16	<0.01	<0.01	<0.01	0.05	0.15
A003 92.2-93.2	0.07	<0.01	<0.01	<0.01	0.03	<0.01
A003 93.2-94.2	0.09	<0.01	<0.01	<0.01	0.02	<0.01
A003 94.2-95.2	0.05	<0.01	<0.01	<0.01	0.02	<0.01
A003 95.2-96.2	0.08	<0.01	<0.01	<0.01	0.01	<0.01
A003 96.2-97.2	0.16	<0.01	<0.01	<0.01	0.02	0.07
A003 97.2-98.2	0.10	<0.01	<0.01	<0.01	0.03	<0.01
A003 98.2-99.2	0.15	<0.01	<0.01	<0.01	0.04	0.12
A003 99.2-100.1	0.08	<0.01	<0.01	<0.01	0.03	<0.01
A003 100.1-101.1	0.19	<0.01	<0.01	<0.01	0.01	0.23
A003 101.1-102.1	0.13	<0.01	<0.01	<0.01	0.01	0.10
A003 102.1-103.1	0.14	<0.01	<0.01	<0.01	0.02	0.02
A003 103.1-104.1	0.12	<0.01	<0.01	<0.01	0.01	0.02
A003 104.1-105.1	0.13	<0.01	<0.01	<0.01	0.02	<0.01
A003 105.1-106.6	0.14	<0.01	<0.01	<0.01	0.01	0.05
A003 106.6-107.6	0.20	<0.01	<0.01	<0.01	<0.01	0.10
A003 107.6-108.6	0.14	<0.01	<0.01	<0.01	<0.01	0.01
A003 108.6-109.6	0.16	<0.01	<0.01	<0.01	<0.01	0.07
A003 109.6-110.6	0.17	<0.01	0.01	<0.01	<0.01	0.08
A003 110.6-111.6	0.16	<0.01	<0.01	<0.01	<0.01	0.06
A003 111.6-112.6	0.17	<0.01	<0.01	<0.01	<0.01	0.05
A003 112.6-113.6	0.19	<0.01	<0.01	<0.01	<0.01	0.04
A003 113.6-114.6	0.17	<0.01	<0.01	<0.01	<0.01	0.04
A003 114.6-115.6	0.17	<0.01	<0.01	<0.01	<0.01	0.03
A003 115.6-116.6	0.18	<0.01	<0.01	<0.01	<0.01	<0.01
A003 116.6-[illegible]	0.19	<0.01	<0.01	<0.01	<0.01	<0.01
A003 117.6-118.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 118.6-119.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 119.6-120.6	0.17	<0.01	<0.01	<0.01	<0.01	<0.01
A003 120.6-121.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 121.6-122.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 122.6-123.6	0.13	<0.01	<0.01	<0.01	<0.01	<0.01
A003 123.6-124.6	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 124.6-125.6	0.18	<0.01	<0.01	<0.01	<0.01	<0.01
A003 125.6-126.6	0.16	<0.01	<0.01	<0.01	<0.01	0.02
A003 126.6-127.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 127.6-128.6	0.18	<0.01	<0.01	<0.01	<0.01	<0.01
A003 128.6-129.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 129.6-130.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 130.6-131.6	0.17	<0.01	<0.01	<0.01	<0.01	<0.01
A003 131.6-132.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 132.6-133.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 133.6-134.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 134.6-135.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 135.6-136.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 136.6-137.6	0.17	<0.01	<0.01	<0.01	<0.01	<0.01
Method	A103	A103	A103	A103	A103	A103
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.01

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, I. N.R. = listed not received

615240 A N A L A B S

Our reference : BU015792
Your reference : **BATCH 1999/3**
Project code : CORE
Report date : 22/02/99
Report status : Final
Page : 2 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 137.6-138.6	0.19	<0.01	<0.01	<0.01	<0.01	<0.01
A003 138.6-139.6	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 139.6-140.6	0.19	<0.01	<0.01	<0.01	<0.01	<0.01
A003 140.6-141.6	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 141.6-142.6	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
A003 142.6-143.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 143.6-144.6	0.17	<0.01	<0.01	<0.01	<0.01	<0.01
A003 144.6-145.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 145.6-146.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 146.6-147.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 147.6-148.6	0.20	<0.01	<0.01	<0.01	<0.01	<0.01
A003 148.6-149.6	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
A003 149.6-150.6	0.16	<0.01	<0.01	<0.01	<0.01	<0.01
A003 150.6-152.0	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
Method	A103	A103	A103	A103	A103	A103
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.01	0.01	0.01	0.01

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

A N A L A B S

615241

Our reference : BU015792
Your reference : **BATCH 1999/3**
Project code : CORE
Report date : 22/02/99
Report status : Final
Page : 3 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A003 87.2-88.2	0.033
A003 88.2-89.2	0.065
A003 89.2-90.2	0.072
A003 90.2-91.2	0.048
A003 91.2-92.2	0.080
A003 92.2-93.2	0.127
A003 93.2-94.2	0.102
A003 94.2-95.2	0.106
A003 95.2-96.2	0.180
A003 96.2-97.2	0.045
A003 97.2-98.2	0.025
A003 98.2-99.2	0.115
A003 99.2-100.1	0.050
A003 100.1-101.1	0.021
A003 101.1-102.1	0.023
A003 102.1-103.1	0.050
A003 103.1-104.1	0.070
A003 104.1-105.1	0.046
A003 105.1-106.6	0.053
A003 106.6-107.6	0.111
A003 107.6-108.6	0.117
A003 108.6-109.6	0.146
A003 109.6-110.6	0.094
A003 110.6-111.6	0.088
A003 111.6-112.6	0.086
A003 112.6-113.6	0.100
A003 113.6-114.6	0.084
A003 114.6-115.6	0.073
A003 115.6-116.6	0.066
A003 116.6-117.6	0.079
A003 117.6-118.6	0.062
A003 118.6-119.6	0.100
A003 119.6-120.6	0.077
A003 120.6-121.6	0.075
A003 121.6-122.6	0.084
A003 122.6-123.6	0.073
A003 123.6-124.6	0.068
A003 124.6-125.6	0.076
A003 125.6-126.6	0.073
A003 126.6-127.6	0.063
A003 127.6-128.6	0.076
A003 128.6-129.6	0.078
A003 129.6-130.6	0.066
A003 130.6-131.6	0.065
A003 131.6-132.6	0.088
A003 132.6-133.6	0.065
A003 133.6-134.6	0.063
A003 134.6-135.6	0.059
A003 135.6-136.6	0.080
A003 136.6-137.6	0.083
Method	V821
Units	%
Detection Limit	0.005

Note: A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615242 ANALABS

Our reference : BU015792
Your reference : **BATCH 1999/3**
Project code : CORE
Report date : 22/02/99
Report status : Final
Page : 4 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S					
A003 137.6-138.6	0.095					
A003 138.6-139.6	0.141					
A003 139.6-140.6	0.079					
A003 140.6-141.6	0.068					
A003 141.6-142.6	0.085					
A003 142.6-143.6	0.084					
A003 143.6-144.6	0.049					
A003 144.6-145.6	0.052					
A003 145.6-146.6	0.053					
A003 146.6-147.6	0.046					
A003 147.6-148.6	0.075					
A003 148.6-149.6	0.066					
A003 149.6-150.6	0.074					
A003 150.6-152.0	0.079					
Method	V821					
Units	%					
Detection Limit	0.005					

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

amdel

615243

MINERAL CHEMISTRY

Amdel Laboratories Ltd
PO Box 338
Torrensville Plaza SA 5031
ACN 009 076 555

Telephone (08) 8416 5300
Facsimile (08) 8234 0321

Mr Mick McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

FINAL ANALYSIS REPORT

Your Order No:

Our Job Number : 9AD0600

Sample rec'd : 16/03/99

Results reported : 25/03/99

No. of samples : 141

Report comprises a cover sheet and pages 1 to 6

Approved Signature:

for
Alan Ciplys
Manager - Mineral Chemistry

Report Codes:
N.A. - Not Available.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

amdel

615244

Job: 9AD0600
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A004 40.5-41.5	<2	<50	50	<0.005	150	0.005	<0.01
A004 41.5-42.5	<2	<50	60	<0.005	150	0.005	<0.01
A004 42.5-43.7	<2	<50	40	<0.005	250	<0.005	<0.01
A004 43.7-44.7	<2	50	70	<0.005	1050	0.005	<0.01
A004 44.7-45.9	<2	<50	<20	<0.005	200	0.005	0.10
A004 45.9-46.9	<2	<50	<20	<0.005	450	<0.005	<0.01
A004 46.9-47.9	<2	<50	20	<0.005	550	<0.005	<0.01
A004 47.9-48.9	<2	<50	20	<0.005	650	<0.005	<0.01
A004 48.9-50.1	<2	150	<20	<0.005	950	0.010	<0.01
A004 50.1-51.3	<2	500	<20	<0.005	1500	0.005	0.02
A004 51.3-52.3	<2	850	20	<0.005	2850	<0.005	0.18
A004 52.3-53.3	<2	250	20	<0.005	2700	0.040	0.21
A004 53.3-54.3	<2	300	<20	<0.005	2700	0.020	0.47
A004 54.3-55.3	<2	200	40	<0.005	5450	<0.005	0.42
A004 55.3-56.3	<2	100	<20	<0.005	2400	<0.005	0.14
A004 56.3-57.3	<2	<50	<20	<0.005	1450	<0.005	0.07
A004 57.3-58.3	<2	<50	<20	<0.005	1700	<0.005	0.08
A004 58.3-59.3	<2	50	<20	<0.005	1700	<0.005	0.10
A004 59.3-60.3	<2	250	30	<0.005	2450	<0.005	0.18
A004 60.3-61.2	<2	850	20	<0.005	2200	0.010	0.11
A004 61.2-62.2	<2	300	70	<0.005	2550	<0.005	0.12
A004 62.2-63.2	<2	50	70	<0.005	2300	<0.005	0.12
A004 63.2-64.2	<2	150	80	<0.005	2400	<0.005	0.12
A004 64.2-65.2	<2	300	60	<0.005	2150	<0.005	0.10
A004 65.2-66.2	<2	100	60	<0.005	2150	<0.005	0.14
A004 66.2-67.2	<2	250	70	<0.005	2100	<0.005	0.14
A004 67.2-68.2	<2	350	60	<0.005	2000	<0.005	0.16
A004 68.2-69.2	<2	150	50	<0.005	1700	0.005	0.18
A004 69.2-70.2	<2	350	60	<0.005	2000	0.005	0.20
A004 70.2-71.2	<2	200	60	<0.005	1900	0.010	0.17
A004 71.2-72.2	<2	150	60	<0.005	1800	<0.005	0.15
A004 72.2-73.2	<2	100	70	<0.005	1800	0.005	0.14
A004 73.2-74.2	<2	100	70	<0.005	1750	0.005	0.15
A004 74.2-75.2	<2	100	60	<0.005	1700	0.010	0.16
A004 75.2-76.2	<2	150	60	<0.005	1800	0.015	0.17
A004 76.2-77.2	<2	250	60	<0.005	1950	0.010	0.18
A004 77.2-78.2	<2	1000	100	<0.005	2800	0.005	0.19
A004 78.2-79.2	<2	200	70	<0.005	1950	0.010	0.13
A004 79.2-80.2	<2	100	70	<0.005	2000	0.010	0.16
A004 80.2-81.2	<2	50	70	<0.005	1850	<0.005	0.13
A004 81.2-82.2	<2	50	70	<0.005	1950	<0.005	0.14
A004 82.2-83.2	<2	50	70	<0.005	1850	<0.005	0.14
A004 83.2-84.2	<2	100	60	<0.005	1950	<0.005	0.13
A004 84.2-85.2	<2	100	50	<0.005	1700	<0.005	0.17
A004 85.2-86.3	<2	100	50	<0.005	1950	<0.005	0.08
A004 86.3-87.3	<2	50	30	<0.005	1500	<0.005	0.02
A004 87.3-88.2	<2	50	20	<0.005	1300	<0.005	0.02
A004 088.2-089.2	<2	200	20	<0.005	1400	<0.005	<0.01
A004 089.2-090.2	<2	<50	20	<0.005	1300	<0.005	0.01
A004 090.2-091.2	<2	<50	30	<0.005	1550	<0.005	0.01
UNITS	ppm	ppm	ppm	%	ppm	%	%
DET.LIM	2	50	20	0.005	50	0.005	0.01
SCHEME	MET1	MET1	MET1	MET1	MET1	MET1	MET1

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SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A004 091.2-092.2	2	<50	50	<0.005	1700	<0.005	0.04
A004 092.2-093.2	<2	<50	50	<0.005	1700	<0.005	0.04
A004 093.2-094.2	<2	<50	50	<0.005	1750	<0.005	0.04
A004 094.2-095.2	<2	<50	40	<0.005	1450	<0.005	0.08
A004 095.2-096.2	<2	200	30	<0.005	1800	<0.005	<0.01
A004 096.2-097.2	<2	600	50	<0.005	3150	0.005	0.12
A004 097.2-098.2	<2	1000	60	<0.005	4500	0.010	0.09
A004 098.2-099.2	<2	1750	50	<0.005	4800	0.010	0.07
A004 099.2-100.2	<2	200	50	<0.005	2850	<0.005	0.06
A004 100.2-101.5	<2	1500	50	<0.005	3550	<0.005	0.07
A004 101.5-102.5	<2	750	50	<0.005	2800	<0.005	0.18
A004 102.5-103.5	<2	1400	70	<0.005	3750	<0.005	0.19
A004 103.5-104.5	<2	500	50	<0.005	2950	<0.005	0.18
A004 104.5-105.5	<2	150	50	<0.005	2200	<0.005	0.14
A004 105.5-106.5	<2	1400	70	<0.005	3500	<0.005	0.13
A004 106.5-107.5	<2	1300	70	<0.005	3200	<0.005	0.11
A004 107.5-108.5	<2	600	60	<0.005	2450	<0.005	0.12
A004 108.5-109.5	<2	1000	70	<0.005	2750	<0.005	0.09
A004 109.5-110.5	<2	950	70	<0.005	2800	<0.005	0.08
A004 110.5-111.5	<2	350	60	<0.005	2200	<0.005	0.08
A004 111.5-112.5	<2	2500	100	<0.005	4200	<0.005	0.07
A004 112.5-113.5	2	2300	120	<0.005	4050	<0.005	0.07
A004 113.5-114.5	<2	450	60	<0.005	2150	<0.005	0.12
A004 114.5-115.5	3	1900	70	<0.005	3850	<0.005	0.13
A004 115.5-116.5	<2	1100	60	<0.005	3000	<0.005	0.17
A004 116.5-117.5	<2	850	50	<0.005	2600	<0.005	0.14
A004 117.5-118.5	<2	1050	60	<0.005	2850	<0.005	0.12
A004 118.5-119.5	<2	1150	60	<0.005	3100	<0.005	0.13
A004 119.5-120.5	<2	700	60	<0.005	3350	<0.005	0.18
A004 120.5-121.5	<2	150	60	<0.005	3100	<0.005	0.21
A004 121.5-122.8	2	50	80	<0.005	5000	<0.005	0.37
A004 122.8-124.1	<2	<50	40	<0.005	1750	<0.005	0.23
A004 124.1-125.1	2	<50	50	<0.005	1600	<0.005	0.20
A004 125.1-126.1	3	<50	50	<0.005	1850	<0.005	0.14
A004 126.1-127.1	2	<50	70	<0.005	2400	<0.005	0.20
A004 127.1-128.1	<2	<50	70	<0.005	2150	<0.005	0.18
A004 128.1-129.1	<2	<50	80	<0.005	2750	<0.005	0.24
A004 129.1-130.1	<2	<50	80	<0.005	2300	<0.005	0.22
A004 130.1-131.1	<2	<50	80	<0.005	3250	<0.005	0.36
A004 131.1-132.1	<2	50	120	<0.005	5450	<0.005	0.52
A004 132.1-133.9	<2	200	120	<0.005	6200	<0.005	0.56
A004 133.9-134.9	<2	50	110	<0.005	5000	<0.005	0.47
A004 134.9-136.1	2	<50	110	<0.005	5150	<0.005	0.51
A004 136.1-137.3	3	<50	80	<0.005	3450	<0.005	0.38
A004 137.3-138.3	2	100	280	0.005	1.19%	<0.005	1.44
A004 138.3-139.3	<2	100	270	0.005	1.34%	0.010	1.47
A004 139.3-140.3	<2	100	330	0.010	1.57%	0.015	1.85
A004 140.3-141.3	<2	100	240	<0.005	1.04%	<0.005	1.17
A004 141.3-142.3	<2	50	100	<0.005	3600	<0.005	0.42
A004 142.3-143.3	<2	350	340	0.010	1.44%	<0.005	1.68
UNITS	ppm	ppm	ppm	%	ppm	%	%
DET.LIM	2	50	20	0.005	50	0.005	0.01
SCHEME	MET1	MET1	MET1	MET1	MET1	MET1	MET1

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SAMPLE	Ag	As	Co	Cu	Ni	Pb	S
A004 143.3-144.3	<2	50	150	<0.005	7100	<0.005	0.81
A004 144.3-145.3	<2	<50	90	<0.005	3850	<0.005	0.49
A004 145.3-146.3	<2	50	260	0.010	1.11%	<0.005	1.46
A004 146.3-147.3	<2	<50	70	<0.005	2750	<0.005	0.37
A004 147.3-148.3	<2	50	110	<0.005	4300	<0.005	0.57
A004 148.3-149.3	<2	<50	70	<0.005	2800	<0.005	0.42
A004 149.3-150.1	<2	100	70	<0.005	1850	<0.005	0.14
A004 150.1-151.1	<2	100	120	<0.005	5250	<0.005	0.79
A004 151.1-152.1	2	350	320	0.010	1.38%	<0.005	1.80
A004 152.1-153.1	<2	1150	370	0.010	1.62%	<0.005	1.97
A004 153.1-154.1	<2	600	150	<0.005	6100	<0.005	0.78
A004 154.1-155.1	<2	750	150	<0.005	6150	<0.005	0.77
A004 155.1-156.1	<2	2750	400	0.010	1.92%	<0.005	2.31
A004 156.1-157.1	<2	1.14%	750	<0.005	1.60%	<0.005	1.04
A004 157.1-158.1	<2	900	90	<0.005	1900	<0.005	0.17
A004 158.1-159.1	<2	2950	230	<0.005	3450	<0.005	0.18
A004 159.1-159.9	<2	7300	500	<0.005	1.00%	<0.005	0.69
A004 159.9-160.9	<2	2950	280	<0.005	4800	<0.005	0.32
A004 160.9-161.9	<2	500	120	<0.005	4200	<0.005	0.47
A004 161.9-162.9	<2	50	90	<0.005	3600	<0.005	0.41
A004 162.9-163.9	3	150	150	0.005	6300	<0.005	0.86
A004 163.9-164.9	3	250	400	0.015	1.88%	<0.005	2.71
A004 164.9-165.9	2	2000	300	<0.005	5500	<0.005	0.61
A004 165.9-166.9	<2	2250	330	<0.005	4000	<0.005	0.30
A004 166.9-167.9	<2	100	100	<0.005	2450	<0.005	0.33
A004 167.9-168.9	<2	600	110	0.005	4050	<0.005	0.57
A004 168.9-169.9	<2	6750	330	<0.005	7050	<0.005	0.25
A004 169.9-170.9	<2	5750	240	0.005	1.06%	<0.005	1.09
A004 170.9-172.0	<2	7300	300	<0.005	8400	<0.005	0.47
A004 172.0-173.1	<2	5050	290	<0.005	4900	<0.005	0.24
A004 173.1-174.9	<2	100	80	0.015	2200	<0.005	1.50
A004 174.9-175.9	<2	<50	110	0.030	2300	<0.005	2.52
A004 175.9-176.9	<2	<50	320	0.070	8100	<0.005	4.88
A004 176.9-177.9	<2	<50	190	0.040	4100	<0.005	2.74
A004 177.9-178.9	<2	300	220	0.055	3750	<0.005	2.55
A004 178.9-179.9	<2	200	360	0.080	6050	<0.005	4.11
A004 179.9-180.9	<2	50	150	0.035	2350	<0.005	2.60
A004 180.9-182.2	<2	<50	190	0.135	1450	<0.005	2.09
A004 182.2-183.2	<2	50	170	0.115	1500	<0.005	1.10
A004 183.2-184.2	<2	500	220	0.070	2150	<0.005	1.62
A004 184.2-185.0	5	450	120	0.010	1600	<0.005	0.28
UNITS	ppm	ppm	ppm	%	ppm	%	%
DET.LIM	2	50	20	0.005	50	0.005	0.01
SCHEME	MET1	MET1	MET1	MET1	MET1	MET1	MET1

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ANALYTICAL REPORT

SAMPLE	Zn
A004 40.5-41.5	0.015
A004 41.5-42.5	0.020
A004 42.5-43.7	0.030
A004 43.7-44.7	0.025
A004 44.7-45.9	0.190
A004 45.9-46.9	0.025
A004 46.9-47.9	0.055
A004 47.9-48.9	0.055
A004 48.9-50.1	0.045
A004 50.1-51.3	0.025
A004 51.3-52.3	0.020
A004 52.3-53.3	0.115
A004 53.3-54.3	0.055
A004 54.3-55.3	0.020
A004 55.3-56.3	0.010
A004 56.3-57.3	0.015
A004 57.3-58.3	0.010
A004 58.3-59.3	0.005
A004 59.3-60.3	0.010
A004 60.3-61.2	0.040
A004 61.2-62.2	0.010
A004 62.2-63.2	0.015
A004 63.2-64.2	0.015
A004 64.2-65.2	0.015
A004 65.2-66.2	0.020
A004 66.2-67.2	0.025
A004 67.2-68.2	0.020
A004 68.2-69.2	0.030
A004 69.2-70.2	0.025
A004 70.2-71.2	0.020
A004 71.2-72.2	0.020
A004 72.2-73.2	0.020
A004 73.2-74.2	0.020
A004 74.2-75.2	0.025
A004 75.2-76.2	0.030
A004 76.2-77.2	0.025
A004 77.2-78.2	0.025
A004 78.2-79.2	0.015
A004 79.2-80.2	0.015
A004 80.2-81.2	0.010
A004 81.2-82.2	0.010
A004 82.2-83.2	0.010
A004 83.2-84.2	0.010
A004 84.2-85.2	0.010
A004 85.2-86.3	0.010
A004 86.3-87.3	0.010
A004 87.3-88.2	0.010
A004 088.2-089.2	0.010
A004 089.2-090.2	0.010
A004 090.2-091.2	0.010
UNITS	%
DET.LIM	0.005
SCHEME	MET1

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ANALYTICAL REPORT

SAMPLE	Zn
A004 091.2-092.2	0.010
A004 092.2-093.2	0.010
A004 093.2-094.2	0.010
A004 094.2-095.2	0.010
A004 095.2-096.2	0.010
A004 096.2-097.2	0.010
A004 097.2-098.2	0.010
A004 098.2-099.2	0.020
A004 099.2-100.2	0.010
A004 100.2-101.5	0.010
A004 101.5-102.5	0.010
A004 102.5-103.5	0.005
A004 103.5-104.5	0.010
A004 104.5-105.5	0.010
A004 105.5-106.5	0.010
A004 106.5-107.5	0.010
A004 107.5-108.5	0.010
A004 108.5-109.5	0.010
A004 109.5-110.5	0.010
A004 110.5-111.5	0.010
A004 111.5-112.5	0.010
A004 112.5-113.5	0.010
A004 113.5-114.5	0.010
A004 114.5-115.5	0.010
A004 115.5-116.5	0.010
A004 116.5-117.5	0.010
A004 117.5-118.5	0.010
A004 118.5-119.5	0.005
A004 119.5-120.5	0.015
A004 120.5-121.5	0.005
A004 121.5-122.8	0.010
A004 122.8-124.1	0.010
A004 124.1-125.1	0.010
A004 125.1-126.1	0.010
A004 126.1-127.1	0.010
A004 127.1-128.1	0.005
A004 128.1-129.1	0.010
A004 129.1-130.1	0.010
A004 130.1-131.1	0.015
A004 131.1-132.1	0.015
A004 132.1-133.9	0.010
A004 133.9-134.9	0.010
A004 134.9-136.1	0.005
A004 136.1-137.3	0.005
A004 137.3-138.3	0.005
A004 138.3-139.3	0.020
A004 139.3-140.3	0.045
A004 140.3-141.3	0.015
A004 141.3-142.3	0.010
A004 142.3-143.3	0.010
UNITS	%
DET.LIM	0.005
SCHEME	MET1

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SAMPLE	Zn
A004 143.3-144.3	0.010
A004 144.3-145.3	0.005
A004 145.3-146.3	0.010
A004 146.3-147.3	0.005
A004 147.3-148.3	0.010
A004 148.3-149.3	0.010
A004 149.3-150.1	0.150
A004 150.1-151.1	0.020
A004 151.1-152.1	0.015
A004 152.1-153.1	0.010
A004 153.1-154.1	0.010
A004 154.1-155.1	0.010
A004 155.1-156.1	0.010
A004 156.1-157.1	0.010
A004 157.1-158.1	0.005
A004 158.1-159.1	0.010
A004 159.1-159.9	0.015
A004 159.9-160.9	0.005
A004 160.9-161.9	0.010
A004 161.9-162.9	0.010
A004 162.9-163.9	0.010
A004 163.9-164.9	0.010
A004 164.9-165.9	0.005
A004 165.9-166.9	0.010
A004 166.9-167.9	0.010
A004 167.9-168.9	0.010
A004 168.9-169.9	0.010
A004 169.9-170.9	0.010
A004 170.9-172.0	0.010
A004 172.0-173.1	0.015
A004 173.1-174.9	0.005
A004 174.9-175.9	0.005
A004 175.9-176.9	<0.005
A004 176.9-177.9	<0.005
A004 177.9-178.9	0.005
A004 178.9-179.9	0.010
A004 179.9-180.9	0.025
A004 180.9-182.2	0.010
A004 182.2-183.2	0.020
A004 183.2-184.2	0.010
A004 184.2-185.0	0.020
UNITS	%
DET.LIM	0.005
SCHEME	MET1

615250 ANALABS

Our reference : BU016295
Your reference : Batch 1999/10
Project code : Drill Core
Report date : 31/05/99
Report status : Final
Page : 1 of 2

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ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A006 314.1-315.0	2980	<25	98	<50	135	<100
A006 315.0-316.0	2790	<25	90	<50	76	<100
A006 316.0-317.0	2580	<25	86	<50	52	<100
A006 317.0-318.0	2830	<25	82	<50	68	<100
A006 318.0-319.0	5910	<25	140	170	385	<100
A006 319.0-320.0	3880	<25	105	<50	58	<100
A006 320.0-321.0	3100	<25	90	<50	46	<100
A006 321.0-322.0	3660	<25	105	<50	56	<100
A006 322.0-323.0	4710	<25	120	<50	230	<100
A006 323.0-324.0	2580	<25	80	<50	38	<100
A006 324.0-325.0	2290	<25	78	<50	<25	<100
A006 325.0-326.0	3220	<25	86	<50	60	<100
A006 326.0-327.0	3600	<25	94	<50	76	<100
A006 327.0-328.0	2020	<25	70	<50	<25	<100
A006 328.0-329.0	2360	<25	80	<50	28	<100
A006 329.0-330.4	2140	<25	76	<50	<25	<100
A006 330.4-331.4	1970	<25	72	<50	<25	<100
A006 331.4-332.4	2140	<25	72	<50	76	<100
A006 332.4-333.4	3430	<25	110	<50	68	<100
A006 333.4-334.4	4220	<25	125	<50	50	<100
A006 334.4-335.4	4240	<25	130	<50	50	<100
A006 335.4-336.4	2860	<25	98	<50	<25	<100
A006 336.4-337.4	3090	<25	100	<50	30	<100
A006 337.4-338.4	2710	<25	100	<50	82	<100
A006 338.4-339.4	2380	<25	88	<50	<25	<100
A006 339.4-340.4	2570	<25	86	<50	<25	<100
A006 340.4-341.4	4170	<25	125	<50	26	<100
A006 341.4-342.4	1710	<25	76	<50	80	<100
A006 342.4-343.4	2170	<25	80	<50	64	<100
A006 343.4-344.4	1860	<25	80	<50	38	<100
A006 344.4-345.4	1560	42	82	<50	56	<100
A006 345.4-346.4	2760	62	92	<50	<25	<100
A006 346.4-347.3	2710	42	94	<50	48	<100
A006 347.3-348.3	3500	46	125	<50	56	<100
A006 348.3-349.3	6740	78	185	<50	26	<100
A006 349.3-350.3	8220	105	245	<50	70	<100
A006 350.3-351.3	2770	38	90	<50	30	<100
A006 351.3-352.3	3090	40	98	<50	<25	<100
A006 352.3-353.7	4490	38	125	<50	44	<100
A006 353.7-354.7	5720	<25	135	<50	56	<100
A006 354.7-355.7	5450	<25	135	<50	94	<100
A006 355.7-356.7	3150	<25	90	<50	36	<100
A006 356.7-358.2	2410	<25	82	<50	220	<100
*SS 006 323.0-324.0	2560	<25	80	<50	<25	<100
*SS 006 348.3-349.3	6790	80	190	<50	40	<100
*Rep 006 327.0-328.0	1990	38	72	<50	<25	<100
*Rep 006 344.4-345.4	1450	58	76	<50	58	<100
*Blk BLANK	<25	<25	<25	<50	<25	<100
*Std SU 1A	1.21%	9530	390	85	250	<100
*Std GT2A	4270	3530	4450	3520	6280	<100
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	25	25	50	25	100

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615251

ANALABS

Our reference : BU016295
Your reference : **Batch 1999/10**
Project code : Drill Core
Report date : 31/05/99
Report status : Final
Page : 2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S					
A006 314.1-315.0	3900					
A006 315.0-316.0	3600					
A006 316.0-317.0	3000					
A006 317.0-318.0	3450					
A006 318.0-319.0	6700					
A006 319.0-320.0	4350					
A006 320.0-321.0	3350					
A006 321.0-322.0	4050					
A006 322.0-323.0	5250					
A006 323.0-324.0	2900					
A006 324.0-325.0	2600					
A006 325.0-326.0	3600					
A006 326.0-327.0	4200					
A006 327.0-328.0	2250					
A006 328.0-329.0	2850					
A006 329.0-330.4	2650					
A006 330.4-331.4	2650					
A006 331.4-332.4	3050					
A006 332.4-333.4	6350					
A006 333.4-334.4	6550					
A006 334.4-335.4	7000					
A006 335.4-336.4	4200					
A006 336.4-337.4	4100					
A006 337.4-338.4	4450					
A006 338.4-339.4	3700					
A006 339.4-340.4	4350					
A006 340.4-341.4	7450					
A006 341.4-342.4	3500					
A006 342.4-343.4	5750					
A006 343.4-344.4	6900					
A006 344.4-345.4	8250					
A006 345.4-346.4	1.15%					
A006 346.4-347.3	9550					
A006 347.3-348.3	9050					
A006 348.3-349.3	1.43%					
A006 349.3-350.3	1.98%					
A006 350.3-351.3	5900					
A006 351.3-352.3	7550					
A006 352.3-353.7	1.05%					
A006 353.7-354.7	9950					
A006 354.7-355.7	9800					
A006 355.7-356.7	4850					
A006 356.7-358.2	4300					
*SS 006 323.0-324.0	2800					
*SS 006 348.3-349.3	1.41%					
*Rep 006 327.0-328.0	2250					
*Rep 006 344.4-345.4	7450					
*Blk BLANK	<500					
*Std SU 1A	6.60%					
*Std GT2A	3.40%					
Method	1105					
Units	ppm					
Detection Limit	500					

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615252

Our reference : BU016246
Your reference : Batch 1999/11
Project code : A006
Report date : 12/05/99
Report status : Final
Page : 1 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	S
A006 358.2-359.2	4370	56	120	<50	36	1.32%
A006 359.2-360.2	4470	48	110	<50	54	8300
A006 360.2-361.0	5340	46	115	<50	70	7850
A006 361.0-362.0	4840	42	110	<50	100	7350
A006 362.0-363.0	6490	60	130	<50	96	7850
A006 363.0-364.0	1940	<25	60	<50	<25	1650
A006 364.0-365.0	3010	<25	74	<50	<25	2350
A006 365.0-366.0	1.02%	<25	185	<50	<25	8550
A006 366.0-367.0	5280	<25	115	<50	<25	4450
A006 367.0-368.0	2920	<25	96	<50	<25	2150
A006 368.0-369.0	5470	<25	140	<50	<25	5000
A006 369.0-370.0	4800	<25	110	<50	<25	4700
A006 370.0-371.0	4160	<25	115	<50	<25	4000
A006 371.0-372.0	3560	<25	94	<50	<25	3400
A006 372.0-373.0	3750	<25	105	<50	<25	3600
A006 373.0-374.0	3260	<25	98	<50	<25	2750
A006 374.0-375.0	1860	<25	66	<50	<25	1200
A006 375.0-376.0	2070	<25	66	<50	<25	1500
A006 376.0-377.0	2770	520	76	<50	60	2550
A006 377.0-378.0	5060	<25	125	<50	315	5050
A006 378.0-379.0	6480	42	145	<50	590	7800
A006 379.0-380.0	6560	32	150	<50	285	7750
A006 380.0-381.0	2790	<25	70	<50	<25	2950
A006 381.0-382.0	6670	<25	155	<50	36	9000
A006 382.0-383.0	5770	<25	135	<50	54	6500
A006 383.0-384.0	4390	<25	105	<50	130	4450
A006 384.0-385.0	2110	<25	74	55	<25	1400
A006 385.0-386.0	6640	<25	165	<50	74	7550
A006 386.0-387.0	2900	<25	82	<50	28	3000
A006 387.0-388.0	7350	<25	170	<50	190	8700
A006 388.0-389.0	4220	<25	120	<50	125	4400
A006 389.0-390.0	2380	<25	80	<50	30	3550
A006 390.0-391.0	2060	<25	66	<50	190	3900
A006 391.0-392.0	4470	<25	110	<50	38	4700
A006 392.0-393.0	3940	<25	105	<50	<25	3550
A006 393.0-394.0	2290	<25	66	<50	92	2450
A006 394.0-395.0	1730	<25	72	<50	165	2200
A006 395.0-396.0	3390	<25	110	<50	70	4100
A006 396.0-397.0	5390	60	140	<50	460	1.44%
A006 397.0-398.0	2900	<25	90	<50	<25	3800
A006 398.0-399.0	2320	<25	58	<50	36	4150
A006 399.0-400.0	3210	<25	105	<50	30	2800
A006 400.0-401.0	2970	<25	115	<50	66	2700
A006 401.0-402.0	1950	<25	84	<50	<25	1100
A006 402.0-403.0	2610	<25	96	<50	<25	2150
*Rep 006 374.0-375.0	1670	<25	60	<50	<25	950
*Rep 006 395.0-396.0	3690	<25	115	<50	42	4200
*Blk BLANK	28	<25	<25	<50	<25	<500
*Std SU 1A	1.19%	9350	380	75	160	5.95%
*Std GT2A	4700	3690	4660	3690	6540	3.30%
Method	1105	1105	1105	1105	1105	1105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	25	25	50	25	500

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615253 ANALABS

Our reference : BU016246
Your reference : Batch 1999/11
Project code : A006
Report date : 12/05/99
Report status : Final
Page : 2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	S
A006 403.0-404.0	2640	40	100	50	<25	2600
A006 404.0-405.0	3980	<25	100	<50	<25	2950
A006 405.0-406.0	3950	<25	105	<50	<25	3000
A006 406.0-407.0	8260	26	175	<50	<25	9200
A006 407.0-408.0	8210	<25	170	<50	68	9400
A006 408.0-409.0	2040	<25	78	<50	<25	2550
A006 409.0-410.0	2570	<25	80	<50	48	2750
*SS 006 367.0-368.0	2920	<25	96	<50	<25	2100
*SS 006 392.0-393.0	3820	<25	100	<50	<25	3400
*Rep 006 409.0-410.0	2510	<25	78	<50	50	2600
*Blk BLANK	<25	<25	<25	<50	<25	<500
*Std SU_1A	1.13%	8890	355	65	190	5.55%
*Std BM_44	1.33%	840	410	<50	110	2.15%
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	25	25	50	25	500

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615254 ANALABS

Our reference : BU016246
Your reference : Batch 1999/11
Project code : A006
Report date : 13/05/99
Report status : Final
Page : 3 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	As					
A006 358.2-359.2	<100					
A006 359.2-360.2	<100					
A006 360.2-361.0	<100					
A006 361.0-362.0	<100					
A006 362.0-363.0	<100					
A006 363.0-364.0	<100					
A006 364.0-365.0	<100					
A006 365.0-366.0	<100					
A006 366.0-367.0	<100					
A006 367.0-368.0	<100					
A006 368.0-369.0	<100					
A006 369.0-370.0	<100					
A006 370.0-371.0	<100					
A006 371.0-372.0	<100					
A006 372.0-373.0	<100					
A006 373.0-374.0	<100					
A006 374.0-375.0	<100					
A006 375.0-376.0	<100					
A006 376.0-377.0	<100					
A006 377.0-378.0	<100					
A006 378.0-379.0	<100					
A006 379.0-380.0	<100					
A006 380.0-381.0	<100					
A006 381.0-382.0	<100					
A006 382.0-383.0	<100					
A006 383.0-384.0	<100					
A006 384.0-385.0	<100					
A006 385.0-386.0	<100					
A006 386.0-387.0	<100					
A006 387.0-388.0	<100					
A006 388.0-389.0	<100					
A006 389.0-390.0	<100					
A006 390.0-391.0	<100					
A006 391.0-392.0	<100					
A006 392.0-393.0	<100					
A006 393.0-394.0	<100					
A006 394.0-395.0	<100					
A006 395.0-396.0	<100					
A006 396.0-397.0	<100					
A006 397.0-398.0	<100					
A006 398.0-399.0	<100					
A006 399.0-400.0	<100					
A006 400.0-401.0	<100					
A006 401.0-402.0	<100					
A006 402.0-403.0	<100					
A006 403.0-404.0	<100					
A006 404.0-405.0	<100					
A006 405.0-406.0	<100					
A006 406.0-407.0	<100					
A006 407.0-408.0	<100					
Method	I105					
Units	ppm					
Detection Limit	100					

Notes: - = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615255 ANALABS

Our reference : BU016246
Your reference : **Batch 1999/11**
Project code : A006
Report date : 13/05/99
Report status : Final
Page : 4 of 4

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	As
A006 408.0-409.0	<100
A006 409.0-410.0	<100
Method	I105
Units	ppm
Detection Limit	100

Notes: - = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615256

ANALABS

Our reference : BU016289
Your reference : Batch 1999/12
Project code : Drill Core
Report date : 10/06/99
Report status : Final
Page : 1 of 6

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A006 410.0-411.0	1860	<15	88	<125	36	<25
A006 411.0-412.0	3390	<15	115	<125	<15	<25
A006 412.0-413.0	4390	<15	145	<125	26	<25
A006 413.0-414.0	2500	18	105	<125	56	<25
A006 414.0-415.0	2370	<15	82	<125	18	<25
A006 415.0-416.1	2030	54	82	<125	260	<25
A006 416.1-417.0	5260	54	170	<125	78	<25
A006 417.0-418.0	1890	16	82	<125	54	<25
A006 418.0-419.0	2640	30	98	<125	36	<25
A006 419.0-420.0	3720	16	105	<125	20	<25
A006 420.0-421.0	3940	20	135	<125	40	<25
A006 421.0-422.0	2590	28	90	<125	28	<25
A006 422.0-423.0	1370	18	70	<125	52	<25
A006 423.0-424.0	1870	36	72	<125	38	<25
A006 424.0-425.0	1570	80	84	<125	<15	<25
A006 425.0-426.0	2920	42	135	<125	72	<25
A006 426.0-427.0	2620	84	135	<125	80	<25
A006 427.0-428.0	4330	195	215	<125	78	<25
A006 428.0-429.0	3640	160	180	<125	76	<25
A006 429.0-430.0	1150	60	74	<125	<15	<25
A006 430.0-431.0	1460	66	92	<125	<15	<25
A006 431.0-432.0	1940	96	135	<125	30	<25
A006 432.0-433.0	3070	170	155	<125	86	<25
A006 433.0-434.0	4610	54	170	<125	<15	<25
A006 434.0-435.0	2860	66	115	<125	42	<25
A006 435.0-436.0	3730	58	130	<125	32	<25
A006 436.0-437.5	4700	145	170	<125	130	<25
A006 437.5-438.5	890	125	20	<125	120	<25
A006 438.5-439.5	1470	80	30	<125	105	<25
A006 439.5-440.5	1120	78	26	<125	110	<25
A006 440.5-441.5	845	70	22	<125	180	<25
A006 441.5-442.5	840	58	40	<125	185	<25
A006 442.5-443.5	800	58	26	<125	140	<25
A006 443.5-444.5	870	60	26	<125	120	<25
A006 444.5-445.5	755	42	24	<125	140	<25
A006 445.5-446.5	1090	76	24	<125	125	<25
A006 446.5-447.5	785	66	24	<125	120	<25
A006 447.5-448.5	1090	60	48	<125	140	<25
A006 448.5-449.5	850	62	56	<125	165	<25
A006 449.5-450.5	1020	78	72	130	265	<25
A006 450.5-451.5	785	58	46	<125	145	<25
A006 451.5-452.5	760	60	40	<125	130	<25
A006 452.5-453.5	745	36	40	<125	130	<25
A006 453.5-454.62	510	40	34	<125	105	<25
A006 454.62-454.80	1450	190	92	<125	600	<25
*Rep 006 427.0-428.0	4600	200	235	<125	82	<25
*Rep 006 452.5-453.5	755	60	42	<125	155	<25
*Blk BLANK	<25	22	<15	<125	22	<25
*Std SU 1A	1.22%	9650	390	<125	250	<25
*Std GT2A	4750	3920	4920	3870	6930	<25
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	15	15	125	15	25

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615257

A N A L A B S

Our reference : BU016289
Your reference : **Batch 1999/12**
Project code : Drill Core
Report date : 10/06/99
Report status : Final
Page : 2 of 6

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A006 454.80-455.5	400	42	34	<125	165	<25
A006 455.5-456.5	530	42	24	<125	135	<25
A006 456.5-457.5	740	36	30	<125	130	<25
A006 457.5-458.5	770	48	28	<125	120	<25
A006 458.5-459.5	490	34	24	<125	110	<25
*SS 006 419.0-420.0	3580	<15	100	<125	18	<25
*SS 006 444.5-445.5	740	42	22	<125	92	<25
*Rep 006 456.5-457.5	715	20	30	<125	94	<25
*Blk BLANK	<25	18	<15	<125	24	<25
*Std SU_1A	1.20%	9600	385	<125	245	<25
*Std BM_44	1.31%	755	405	<125	115	<25
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	15	15	125	15	25

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615258

A N A L A B S

Our reference : BU016289
Your reference : **Batch 1999/12**
Project code : Drill Core
Report date : 10/06/99
Report status : Final
Page : 3 of 6

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A006 410.0-411.0	1890
A006 411.0-412.0	2760
A006 412.0-413.0	4040
A006 413.0-414.0	2740
A006 414.0-415.0	2640
A006 415.0-416.1	1.55%
A006 416.1-417.0	7740
A006 417.0-418.0	1570
A006 418.0-419.0	2080
A006 419.0-420.0	3100
A006 420.0-421.0	3580
A006 421.0-422.0	2200
A006 422.0-423.0	750
A006 423.0-424.0	1680
A006 424.0-425.0	2020
A006 425.0-426.0	5130
A006 426.0-427.0	6110
A006 427.0-428.0	1.33%
A006 428.0-429.0	9410
A006 429.0-430.0	1660
A006 430.0-431.0	2650
A006 431.0-432.0	5250
A006 432.0-433.0	7920
A006 433.0-434.0	6930
A006 434.0-435.0	3150
A006 435.0-436.0	3780
A006 436.0-437.5	8710
A006 437.5-438.5	595
A006 438.5-439.5	760
A006 439.5-440.5	505
A006 440.5-441.5	1120
A006 441.5-442.5	1380
A006 442.5-443.5	1710
A006 443.5-444.5	1920
A006 444.5-445.5	1360
A006 445.5-446.5	1910
A006 446.5-447.5	1580
A006 447.5-448.5	1110
A006 448.5-449.5	740
A006 449.5-450.5	1230
A006 450.5-451.5	1060
A006 451.5-452.5	930
A006 452.5-453.5	585
A006 453.5-454.62	395
A006 454.62-454.80	8.90%
*Rep 006 427.0-428.0	1.41%
*Rep 006 452.5-453.5	555
*Blk BLANK	<20
*Std SU 1A	6.75%
*Std GT2A	3.70%
Method	1105
Units	ppm
Detection Limit	20

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615259 ANALABS

Our reference : BU016289
Your reference : Batch 1999/12
Project code : Drill Core
Report date : 10/06/99
Report status : Final
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Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A006 454.80-455.5	650
A006 455.5-456.5	540
A006 456.5-457.5	420
A006 457.5-458.5	625
A006 458.5-459.5	285
*SS 006 419.0-420.0	2840
*SS 006 444.5-445.5	1380
*Rep 006 456.5-457.5	475
*Blk BLANK	<20
*Std SU_1A	6.35%
*Std BM_44	2.20%
Method	I105
Units	ppm
Detection Limit	20

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615260 ANALABS

Our reference : BU016289
Your reference : **Batch 1999/12**
Project code : Drill Core
Report date : 10/06/99
Report status : Final

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St. Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

	Sample	W	Sn	Mo	Cr		
	A006 410.0-411.0	<50	<00	<50	1900		
	A006 411.0-412.0	<50	<00	<50	1670		
	A006 412.0-413.0	<50	<00	<50	1830		
	A006 413.0-414.0	<50	<00	<50	2040		
	A006 414.0-415.0	<50	<00	<50	1440		
	A006 415.0-416.1	<50	<00	<50	1690		
	A006 416.1-417.0	<50	<00	<50	1390		
	A006 417.0-418.0	<50	<00	<50	1500		
	A006 418.0-419.0	<50	<00	<50	1320		
	A006 419.0-420.0	<50	<00	<50	1690		
	006 419.0-420.0	<50	<00	<50	--		
	A006 420.0-421.0	<50	<00	<50	2770		
	A006 421.0-422.0	<50	<00	<50	1460		
	A006 422.0-423.0	<50	<00	<50	1700		
	A006 423.0-424.0	<50	<00	<50	2010		
	A006 424.0-425.0	<50	<00	<50	1330		
	A006 425.0-426.0	<50	<00	<50	1650		
	A006 426.0-427.0	<50	<00	<50	1690		
	A006 427.0-428.0	<50	<00	<50	1270		
	A006 428.0-429.0	<50	<00	<50	1230		
	A006 429.0-430.0	<50	<00	<50	1220		
	A006 430.0-431.0	<50	<00	<50	1220		
	A006 431.0-432.0	<50	<00	<50	1130		
	A006 432.0-433.0	<50	<00	<50	1450		
	A006 433.0-434.0	<50	<00	<50	1190		
	A006 434.0-435.0	<50	<00	<50	1330		
	A006 435.0-436.0	<50	<00	<50	1720		
	A006 436.0-437.5	<50	<00	<50	2920		
	A006 437.5-438.5	<50	<00	<50	940		
	A006 438.5-439.5	<50	<00	<50	1200		
	A006 439.5-440.5	<50	<00	<50	1660		
	A006 440.5-441.5	<50	<00	<50	1440		
	A006 441.5-442.5	<50	<00	<50	1820		
	A006 442.5-443.5	<50	<00	<50	1180		
	A006 443.5-444.5	<50	<00	<50	1190		
	A006 444.5-445.5	<50	<00	<50	1320		
*SS	006 444.5-445.5	<50	<00	<50	--		
	A006 445.5-446.5	<50	<00	<50	1520		
	A006 446.5-447.5	<50	<00	<50	1140		
	A006 447.5-448.5	<50	<00	<50	1220		
	A006 448.5-449.5	<50	<00	<50	1710		
	A006 449.5-450.5	<50	<00	<50	1040		
	A006 450.5-451.5	<50	<00	<50	1180		
	A006 451.5-452.5	<50	<00	<50	1110		
	A006 452.5-453.5	<50	<00	<50	1010		
	A006 453.5-454.62	<50	<00	<50	695		
	A006 454.62-454.80	<50	<00	<50	1060		
	A006 454.80-455.5	<50	<00	<50	870		
	A006 455.5-456.5	<50	<00	<50	795		
	A006 456.5-457.5	<50	<00	<50	1160		
	Method	I151	I151	I151	I151		
	Units	ppm		ppm	ppm		
	Detection Limit	50	00	50	50		

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615261 A N A L A B S

Our reference : BU016289
Your reference : **Batch 1999/12**
Project code : Drill Core
Report date : 10/06/99
Report status : Final
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Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	W	Sn	Mo	Cr		
A006 457.5-458.5	<50	<00	<50	1510		
A006 458.5-459.5	<50	<00	<50	1450		
Method	I151	I151	I151	I151		
Units	ppm		ppm	ppm		
Detection Limit	50	00	50	50		

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

A N A L A B S

615262

Our reference : BU016370
Your reference : Batch 1999/13
Project code : Drill Core
Report date : 08/06/99
Report status : Final
Page : 1 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	Ni	Cu	Co	Pb	Zn	As
A003 279.1-280.0	1.63%	92	640	<50	250	1.36%
A003 280.0-281.0	770	42	66	<50	120	<100
A003 281.0-282.0	645	<25	60	<50	140	<100
A003 282.0-283.0	420	<25	50	<50	130	<100
A003 283.0-284.0	345	<25	54	<50	245	<100
A006 97.9-98.9	845	<25	32	450	365	<100
A006 98.9-99.9	1680	42	32	385	225	<100
A006 99.9-100.9	1660	<25	40	165	265	<100
A006 100.9-101.9	1880	<25	52	545	230	<100
A006 101.9-103.1	1010	<25	52	150	735	<100
A006 103.1-104.0	2050	30	225	385	450	<100
A006 104.0-105.0	2320	74	180	605	8590	160
A006 105.0-106.0	1300	<25	72	265	315	<100
A006 106.0-107.0	2640	<25	140	<50	325	160
A006 107.0-108.0	1370	<25	76	<50	270	160
A006 108.0-109.0	2150	<25	96	<50	220	170
A006 109.0-110.0	1880	<25	76	<50	185	<100
*SS 006 101.9-103.1	1040	<25	50	150	740	<100
*Rep 003 281.0-282.0	635	<25	56	<50	120	<100
*Blk BLANK	<25	<25	<25	<50	<25	<100
*Std SU 1A	1.17%	8990	375	95	180	<100
*Std GT2A	4610	3750	4790	3660	6470	<100
Method	I105	I105	I105	I105	I105	I105
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	25	25	25	50	25	100

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615263 ANALABS

Our reference : BU016370
Your reference : **Batch 1999/13**
Project code : Drill Core
Report date : 08/06/99
Report status : Final
Page : 2 of 2

Analabs Pty. Ltd.
ACN 004 591 664
14 Thirkell St, Burnie
Tasmania 7320
Telephone : (03) 6431 6837
Facsimile : (03) 6431 8890

ANALYTICAL DATA

Sample	S
A003 279.1-280.0	7650
A003 280.0-281.0	650
A003 281.0-282.0	600
A003 282.0-283.0	550
A003 283.0-284.0	900
A006 97.9-98.9	1100
A006 98.9-99.9	1600
A006 99.9-100.9	1450
A006 100.9-101.9	1450
A006 101.9-103.1	1400
A006 103.1-104.0	1350
A006 104.0-105.0	4800
A006 105.0-106.0	900
A006 106.0-107.0	1650
A006 107.0-108.0	1050
A006 108.0-109.0	1700
A006 109.0-110.0	1100
*SS 006 101.9-103.1	1400
*Rep 003 281.0-282.0	550
*Blk BLANK	< 500
*Std SU 1A	6.55%
*Std GT2A	3.10%
Method	I105
Units	ppm
Detection Limit	500

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

615264

Appendix 6

Surveys of diamond drill hole collars

615265

Diamond Drill Holes : Avebury Project

Up-date: 13 April 1999

DDH	East	North	RL	Bearing	Dip	Method
ZA1	354839	5357278	173			GPS (L'ton base)
ZA2	355620	5357342	177			GPS (L'ton base)
ZA3	355782	5357134	163			GPS (L'ton base)
A001	354648.1	5357224.9	152.1	4° 50'	-46.7*	traverse, to collar
A002	355225	5357586	175			GPS (L'ton base)
A003	354730.2	5357281.6	163.4	4° 32'	-47.8	traverse, to collar
A004	354625.3	5357371.9	146.0	352° 43'	-49.3	traverse, to rig
A005	354520.9	5357467.4	171.3	353° 50'	-47.4*	traverse, to collar
A006	354735.8	5357189.7	150.0	0° 26'	-43.5*	traverse, to rig

Note: * indicates the dip was observed, with a clinometer, on either the PVC collar-pipe or the actual diamond drill rod.

615266

Appendix 7

Consolidated magnetic susceptibility data

615267

bhid	from	to	magsus
A001	0.0	1.0	0.0
A001	1.0	2.0	0.0
A001	2.0	3.0	0.0
A001	3.0	4.0	0.0
A001	4.0	5.0	0.0
A001	5.0	6.0	0.0
A001	6.0	7.0	0.0
A001	7.0	8.0	0.0
A001	8.0	9.0	0.0
A001	9.0	10.0	0.0
A001	10.0	11.0	0.0
A001	11.0	12.0	0.0
A001	12.0	13.0	0.0
A001	13.0	14.0	0.0
A001	14.0	15.0	0.0
A001	15.0	16.0	0.0
A001	16.0	17.0	0.0
A001	17.0	18.0	0.0
A001	18.0	19.0	0.0
A001	19.0	20.0	0.0
A001	20.0	21.0	0.0
A001	21.0	22.0	0.0
A001	22.0	23.0	0.0
A001	23.0	24.0	0.0
A001	24.0	25.0	0.0
A001	25.0	26.0	0.0
A001	26.0	27.0	0.0
A001	27.0	28.0	0.0
A001	28.0	29.0	0.0
A001	29.0	30.0	0.0
A001	30.0	31.0	0.0
A001	31.0	32.0	0.0
A001	32.0	33.0	0.0
A001	33.0	34.0	0.0
A001	34.0	35.0	0.0
A001	35.0	36.0	0.0
A001	36.0	37.0	0.2
A001	37.0	38.0	0.1
A001	38.0	39.0	0.2
A001	39.0	40.0	0.0
A001	40.0	41.0	0.0
A001	41.0	42.0	0.0
A001	42.0	43.0	0.0
A001	43.0	44.0	0.0

615268

bhid	from	to	magsus
A001	44.0	45.0	0.0
A001	45.0	46.0	0.0
A001	46.0	47.0	0.0
A001	47.0	48.0	0.0
A001	48.0	49.0	0.1
A001	49.0	50.0	0.1
A001	50.0	51.0	0.1
A001	51.0	52.0	0.1
A001	52.0	53.0	0.1
A001	53.0	54.0	0.1
A001	54.0	55.0	0.1
A001	55.0	56.0	0.1
A001	56.0	57.0	0.1
A001	57.0	58.0	0.5
A001	58.0	59.0	0.2
A001	59.0	60.0	7.1
A001	60.0	61.0	3.5
A001	61.0	62.0	6
A001	62.0	63.0	6.1
A001	63.0	64.0	0.0
A001	64.0	65.0	3.3
A001	65.0	66.0	32
A001	66.0	67.0	0.1
A001	67.0	68.0	0.0
A001	68.0	69.0	0.0
A001	69.0	70.0	0.0
A001	70.0	71.0	0.0
A001	71.0	72.0	0.0
A001	72.0	73.0	0.0
A001	73.0	74.0	0.0
A001	74.0	75.0	0.0
A001	75.0	76.0	0.0
A001	76.0	77.0	0.0
A001	77.0	78.0	0.0
A001	78.0	79.0	0.0
A001	79.0	80.0	0.0
A001	80.0	81.0	0.0
A001	81.0	82.0	0.0
A001	82.0	83.0	0.0
A001	83.0	84.0	0.0
A001	84.0	85.0	0.0
A001	85.0	86.0	0.0
A001	86.0	87.0	0.0
A001	87.0	88.0	0.0

615269

bhid	from	to	magsus
A001	88.0	89.0	0.1
A001	89.0	90.0	0.1
A001	90.0	91.0	0.0
A001	91.0	92.0	0.0
A001	92.0	93.0	0.0
A001	93.0	94.0	0.0
A001	94.0	95.0	0.0
A001	95.0	96.0	0.0
A001	96.0	97.0	0.1
A001	97.0	98.0	0.1
A001	98.0	99.0	0.1
A001	99.0	100.0	0.1
A001	100.0	101.0	0.1
A001	101.0	102.0	0.1
A001	102.0	103.0	0.1
A001	103.0	104.0	0.1
A001	104.0	105.0	0.1
A001	105.0	106.0	0.1
A001	106.0	107.0	0.2
A001	107.0	108.0	0.0
A001	108.0	109.0	0.0
A001	109.0	110.0	0.1
A001	110.0	111.0	0.0
A001	111.0	112.0	0.1
A001	112.0	113.0	0.1
A001	113.0	114.0	0.1
A001	114.0	115.0	0.1
A001	115.0	116.0	0.3
A001	116.0	117.0	0.5
A001	117.0	118.0	0.1
A001	118.0	119.0	0.1
A001	119.0	120.0	0.3
A001	120.0	121.0	0.2
A001	121.0	122.0	0.3
A001	122.0	123.0	0.5
A001	123.0	124.0	0.1
A001	124.0	125.0	0.1
A001	125.0	126.0	0.2
A001	126.0	127.0	0.2
A001	127.0	128.0	0.2
A001	128.0	129.0	0.1
A001	129.0	130.0	0.1
A001	130.0	131.0	0.1
A001	131.0	132.0	0.1

615270

bhid	from	to	magsus
A001	132.0	133.0	0.1
A001	133.0	134.0	0.1
A001	134.0	135.0	0.1
A001	135.0	136.0	0.1
A001	136.0	137.0	0.0
A001	137.0	138.0	0.0
A001	138.0	139.0	0.0
A001	139.0	140.0	0.0
A001	140.0	141.0	0.1
A001	141.0	142.0	0.1
A001	142.0	143.0	0.1
A001	143.0	144.0	0.1
A001	144.0	145.0	0.1
A001	145.0	146.0	0.1
A001	146.0	147.0	0.1
A001	147.0	148.0	0.1
A001	148.0	149.0	0.1
A001	149.0	150.0	0.1
A001	150.0	151.0	0.0
A001	151.0	152.0	0.0
A001	152.0	153.0	0.1
A001	153.0	154.0	0.1
A001	154.0	155.0	0.1
A001	155.0	156.0	0.1
A001	156.0	157.0	0.1
A001	157.0	158.0	0.1
A001	158.0	159.0	0.1
A001	159.0	160.0	0.1
A001	160.0	161.0	0.1
A001	161.0	162.0	0.0
A001	162.0	163.0	0.0
A001	163.0	164.0	0.0
A001	164.0	165.0	0.0
A001	165.0	166.0	0.0
A001	166.0	167.0	0.0
A001	167.0	168.0	0.0
A001	168.0	169.0	0.0
A001	169.0	170.0	0.0
A001	170.0	171.0	0.0
A001	171.0	172.0	0.0
A001	172.0	173.0	0.1
A001	173.0	174.0	0.1
A001	174.0	175.0	0.1
A001	175.0	176.0	0.0

615271

bhid	from	to	magsus
A001	176.0	177.0	0.0
A001	177.0	178.0	0.0
A001	178.0	179.0	0.0
A001	179.0	180.0	0.0
A001	180.0	181.0	0.0
A001	181.0	182.0	0.0
A001	182.0	183.0	0.0
A001	183.0	184.0	0.0
A001	184.0	185.0	0.0
A001	185.0	186.0	0.1
A001	186.0	187.0	0.1
A001	187.0	188.0	0.1
A001	188.0	189.0	0.1
A001	189.0	190.0	0.1
A001	190.0	191.0	0.1
A001	191.0	192.0	0.1
A001	192.0	193.0	0.1
A001	193.0	194.0	0.1
A001	194.0	195.0	0.1
A001	195.0	196.0	0.1
A001	196.0	197.0	0.1
A001	197.0	198.0	0.1
A001	198.0	199.0	0.1
A001	199.0	200.0	0.1
A001	200.0	201.0	0.1
A001	201.0	202.0	0.1
A001	202.0	203.0	0.1
A001	203.0	204.0	0.1
A001	204.0	205.0	0.1
A001	205.0	206.0	0.0
A001	206.0	207.0	0.0
A001	207.0	208.0	0.0
A001	208.0	209.0	0.0
A001	209.0	210.0	0.0
A001	210.0	211.0	0.0
A001	211.0	212.0	0.0
A001	212.0	213.0	0.0
A001	213.0	214.0	0.0
A001	214.0	215.0	0.0
A001	215.0	216.0	0.0
A001	216.0	217.0	0.0
A001	217.0	218.0	0.0
A001	218.0	219.0	0.0
A001	219.0	220.0	0.0

615272

bhid	from	to	magsus
A001	220.0	221.0	0.0
A001	221.0	222.0	0.0
A001	222.0	223.0	0.0
A001	223.0	224.0	0.0
A001	224.0	225.0	0.0
A001	225.0	226.0	0.0
A001	226.0	227.0	0.0
A001	227.0	228.0	0.1
A001	228.0	229.0	0.1
A001	229.0	230.0	0.1
A001	230.0	231.0	0.1
A001	231.0	232.0	0.1
A001	232.0	233.0	0.1
A001	233.0	234.0	0.1
A001	234.0	235.0	0.1
A001	235.0	236.0	0.1
A001	236.0	237.0	0.1
A001	237.0	238.0	0.0
A001	238.0	239.0	0.1
A001	239.0	240.0	0.1
A001	240.0	241.0	0.1
A001	241.0	242.0	0.2
A001	242.0	243.0	2.6
A001	243.0	244.0	4.6
A001	244.0	245.0	19
A001	245.0	246.0	19
A001	246.0	247.0	7.5
A001	247.0	248.0	17
A001	248.0	249.0	12
A001	249.0	250.0	17
A001	250.0	251.0	27
A001	251.0	252.0	25
A001	252.0	253.0	20
A001	253.0	254.0	16
A001	254.0	255.0	15
A001	255.0	256.0	11
A001	256.0	257.0	12
A001	257.0	258.0	11
A001	258.0	259.0	8.5
A001	259.0	260.0	16
A001	260.0	261.0	13
A001	261.0	262.0	14
A001	262.0	263.0	13
A001	263.0	264.0	14

615273

bhid	from	to	magsus
A001	264.0	265.0	13
A001	265.0	266.0	15
A001	266.0	267.0	20
A001	267.0	268.0	12
A001	268.0	269.0	14
A001	269.0	270.0	12
A001	270.0	271.0	18
A001	271.0	272.0	17
A001	272.0	273.0	17
A001	273.0	274.0	14
A001	274.0	275.0	14
A001	275.0	276.0	20
A001	276.0	277.0	12
A001	277.0	278.0	8.8
A001	278.0	279.0	12
A001	279.0	280.0	9.4
A001	280.0	281.0	8.8
A001	281.0	282.0	9.2
A001	282.0	283.0	17
A001	283.0	284.0	23
A001	284.0	285.0	9.4
A001	285.0	286.0	15
A001	286.0	287.0	10
A001	287.0	288.0	19
A001	288.0	289.0	18
A001	289.0	290.0	7.5
A001	290.0	291.0	12
A001	291.0	292.0	20
A001	292.0	293.0	11
A001	293.0	294.0	14
A001	294.0	295.0	19
A001	295.0	296.0	13
A001	296.0	297.0	14
A001	297.0	298.0	13
A001	298.0	299.0	7.7
A001	299.0	300.0	11
A001	300.0	301.0	8.9
A001	301.0	302.0	15
A001	302.0	303.0	10
A001	303.0	304.0	8.3
A001	304.0	305.0	14
A001	305.0	306.0	13
A001	306.0	307.0	12
A001	307.0	308.0	16

615274

bhid	from	to	magsus
A001	308.0	309.0	15
A001	309.0	310.0	16
A001	310.0	311.0	13
A001	311.0	312.0	11
A001	312.0	313.0	12
A001	313.0	314.0	19
A001	314.0	315.0	13
A001	315.0	316.3	15
A001	316.0	317.0	13
A001	317.0	318.0	12
A001	318.0	319.0	11
A001	319.0	320.0	11
A001	320.0	321.0	9.9
A001	321.0	322.0	13
A001	322.0	323.0	12
A001	323.0	324.0	11
A001	324.0	325.0	13
A001	325.0	326.0	11
A001	326.0	327.0	12
A001	327.0	328.0	14
A001	328.0	329.0	13
A001	329.0	330.0	10
A001	330.0	331.0	13
A001	331.0	332.0	11
A001	332.0	333.0	10
A001	333.0	334.0	13
A001	334.0	335.0	11
A001	335.0	336.0	13
A001	336.0	337.0	10
A001	337.0	338.0	11
A001	338.0	339.0	11
A001	339.0	340.0	11
A001	340.0	341.0	12
A001	341.0	342.0	11
A001	342.0	343.0	10
A001	343.0	344.0	9.6
A001	344.0	345.0	10
A001	345.0	346.0	16
A001	346.0	347.0	15
A001	347.0	348.0	16
A001	348.0	349.0	18
A001	349.0	350.0	9.4
A001	350.0	351.0	18
A001	351.0	352.0	17

615275

bhid	from	to	magsus
A001	352.0	353.0	13
A001	353.0	354.0	12
A001	354.0	355.0	15
A001	355.0	356.0	13
A001	356.0	357.0	13
A001	357.0	358.0	14
A001	358.0	359.0	13
A001	359.0	360.0	14
A001	360.0	361.0	14
A001	361.0	362.0	13
A001	362.0	363.0	12
A001	363.0	364.0	11
A001	364.0	365.0	9.2
A001	365.0	366.0	8.7
A001	366.0	367.0	14
A001	367.0	368.0	11
A001	368.0	369.0	11
A001	369.0	370.0	13
A001	370.0	371.0	9.6
A001	371.0	372.0	9.6
A001	372.0	373.0	8.9
A001	373.0	374.0	14
A001	374.0	375.0	9.7
A001	375.0	376.0	7.1
A001	376.0	377.0	9.0
A001	377.0	378.0	9.4
A001	378.0	379.0	8.6
A001	379.0	380.0	9.8
A001	380.0	381.0	9.2
A001	381.0	382.0	7.7
A001	382.0	383.0	8.4
A001	383.0	384.0	10
A001	384.0	385.0	11
A001	385.0	386.0	11
A001	386.0	387.0	16
A001	387.0	388.0	12
A001	388.0	389.0	15
A001	389.0	390.0	15
A001	390.0	391.0	15
A001	391.0	392.0	14
A001	392.0	393.0	14
A001	393.0	394.0	11
A001	394.0	395.0	19
A001	395.0	396.0	19

615276

bhid	from	to	magsus
A001	396.0	397.0	14
A001	397.0	398.0	10
A001	398.0	399.0	14
A001	399.0	400.0	11
A001	400.0	401.0	15
A001	401.0	402.0	9
A001	402.0	403.0	11
A001	403.0	404.0	12
A001	404.0	405.0	13
A001	405.0	406.0	12
A001	406.0	407.0	13
A001	407.0	408.0	9.8
A001	408.0	409.0	10
A001	409.0	410.0	16
A001	410.0	411.0	16
A001	411.0	412.0	12
A001	412.0	413.0	9.8
A001	413.0	414.0	13
A001	414.0	415.0	14
A001	415.0	416.0	21
A001	416.0	417.0	16
A001	417.0	418.0	15
A001	418.0	419.0	13
A001	419.0	420.0	14
A001	420.0	421.0	8.5
A001	421.0	422.0	6.1
A001	422.0	423.0	9.5
A001	423.0	424.0	8.2
A001	424.0	425.0	9.7
A001	425.0	426.0	9.0
A001	426.0	427.0	8.8
A001	427.0	428.0	8.3
A001	428.0	429.0	9.6
A001	429.0	430.0	11
A001	430.0	431.0	11
A001	431.0	432.0	12
A001	432.0	433.0	11
A001	433.0	434.0	9.4
A001	434.0	435.0	7.6
A001	435.0	436.0	8.7
A001	436.0	437.0	3.9
A001	437.0	438.0	7.9
A001	438.0	439.0	18
A001	439.0	440.0	16

615277

bhid	from	to	magsus
A001	440.0	441.0	23
A001	441.0	442.0	17
A001	442.0	443.0	22
A001	443.0	444.0	28
A001	444.0	445.0	25
A001	445.0	446.0	23
A001	446.0	447.0	9.8
A001	447.0	448.0	13
A001	448.0	449.0	12
A001	449.0	450.0	11
A001	450.0	451.0	17
A001	451.0	452.0	14
A001	452.0	453.0	19
A001	453.0	454.0	24
A001	454.0	455.0	16
A001	455.0	456.0	18
A001	456.0	457.0	16
A001	457.0	458.0	14
A001	458.0	459.0	14
A001	459.0	460.0	15
A001	460.0	461.0	16
A001	461.0	462.0	17
A001	462.0	463.0	21
A001	463.0	464.0	18
A001	464.0	465.0	20
A001	465.0	466.0	18
A001	466.0	467.0	16
A001	467.0	468.0	16
A001	468.0	469.0	16
A001	469.0	470.0	14
A001	470.0	471.0	13
A001	471.0	472.0	15
A001	472.0	473.0	20
A001	473.0	474.0	18
A001	474.0	475.0	19
A001	475.0	476.0	12
A001	476.0	477.0	11
A001	477.0	478.0	14
A001	478.0	479.0	11
A001	479.0	480.0	12
A001	480.0	481.0	13
A001	481.0	482.0	12
A001	482.0	483.0	15
A001	483.0	484.0	16

615278

bhid	from	to	magsus
A001	484.0	485.0	18
A001	485.0	486.0	18
A001	486.0	487.0	16
A001	487.0	488.0	14
A001	488.0	489.0	17
A001	489.0	490.0	15
A001	490.0	491.0	13
A001	491.0	492.0	10
A001	492.0	493.0	12
A001	493.0	494.0	12
A001	494.0	495.0	11
A001	495.0	496.0	11
A001	496.0	497.0	11
A001	497.0	498.0	14
A001	498.0	499.0	15
A001	499.0	500.0	16
A001	500.0	501.0	10
A001	501.0	502.0	8.9
A001	502.0	503.0	6.2
A001	503.0	504.0	0.1
A001	504.0	505.0	1.0
A001	505.0	506.0	0.2
A001	506.0	507.0	7.0
A001	507.0	508.0	9.3
A001	508.0	509.0	9.7
A001	509.0	510.0	8.0
A001	510.0	511.0	8.0
A001	511.0	512.0	10
A001	512.0	513.0	9.0
A001	513.0	514.0	9.4
A001	514.0	515.0	9.3
A001	515.0	516.0	7.8
A001	516.0	517.0	7.8
A001	517.0	518.0	8.0
A001	518.0	519.0	8.2
A001	519.0	520.0	7.8
A001	520.0	521.0	6.9
A001	521.0	522.0	7.1
A001	522.0	523.0	7.7
A001	523.0	524.0	7.4
A001	524.0	525.0	7.5
A001	525.0	526.0	7.3
A001	526.0	527.0	8.2
A001	527.0	528.0	6.9

615279

bhid	from	to	magsus
A001	528.0	529.0	8.1
A001	529.0	530.0	8.2
A001	530.0	531.0	8.0
A001	531.0	532.0	8.0
A001	532.0	532.6	5.8

615280

bhid	from	to	magsus
A002	29.0	30.0	0
A002	30.0	31.0	0
A002	31.0	32.0	0
A002	32.0	33.0	0
A002	33.0	34.0	0
A002	34.0	35.0	0
A002	35.0	36.0	0
A002	36.0	37.0	0
A002	37.0	38.0	0
A002	38.0	39.0	0
A002	39.0	40.0	0
A002	40.0	41.0	0
A002	41.0	42.0	0
A002	42.0	43.0	0
A002	43.0	44.0	0
A002	44.0	45.0	0
A002	45.0	46.0	0
A002	46.0	47.0	0
A002	47.0	48.0	0.4
A002	48.0	49.0	0.5
A002	49.0	50.0	0.1
A002	50.0	51.0	0
A002	51.0	52.0	0
A002	52.0	53.0	0
A002	53.0	54.0	0
A002	54.0	55.0	0
A002	55.0	56.0	0
A002	56.0	57.0	0
A002	57.0	58.0	0
A002	58.0	59.0	0
A002	59.0	60.0	0
A002	60.0	61.0	0
A002	61.0	62.0	0.1
A002	62.0	63.0	0
A002	63.0	64.0	0
A002	64.0	65.0	0
A002	65.0	66.0	0
A002	66.0	67.0	0
A002	67.0	68.0	0
A002	68.0	69.0	0
A002	69.0	70.0	0
A002	70.0	71.0	0.1
A002	71.0	72.0	0
A002	72.0	73.0	0
A002	73.0	74.0	0
A002	74.0	75.0	0
A002	75.0	76.0	0

615281

bhid	from	to	magsus
A002	76.0	77.0	0.1
A002	77.0	78.0	0.1
A002	78.0	79.0	0.1
A002	79.0	80.0	0
A002	80.0	81.0	0
A002	81.0	82.0	0
A002	82.0	83.0	0
A002	83.0	84.0	0
A002	84.0	85.0	0
A002	85.0	86.0	0
A002	86.0	87.0	0
A002	87.0	88.0	0
A002	88.0	89.0	0
A002	89.0	90.0	0
A002	90.0	91.0	0
A002	91.0	92.0	0.1
A002	92.0	93.0	0.1
A002	93.0	94.0	0.1
A002	94.0	95.0	0.1
A002	95.0	96.0	0.1
A002	96.0	97.0	0.1
A002	97.0	98.0	0
A002	98.0	99.0	0
A002	99.0	100.0	0
A002	100.0	101.0	0
A002	101.0	102.0	0
A002	102.0	103.0	0.1
A002	103.0	104.0	0.1
A002	104.0	105.0	0
A002	105.0	106.0	0
A002	106.0	107.0	0
A002	107.0	108.0	0
A002	108.0	109.0	0
A002	109.0	110.0	0
A002	110.0	111.0	0
A002	111.0	112.0	0.1
A002	112.0	113.0	0.1
A002	113.0	114.0	0.1
A002	114.0	115.0	0
A002	115.0	116.0	0
A002	116.0	117.0	0.1
A002	117.0	118.0	0.1
A002	118.0	119.0	0.1
A002	119.0	120.0	0
A002	120.0	121.0	14
A002	121.0	122.0	36
A002	122.0	123.0	47

615282

bhid	from	to	magsus
A002	123.0	124.0	31
A002	124.0	125.0	38
A002	125.0	126.0	4.4
A002	126.0	127.0	5.6
A002	127.0	128.0	5.1
A002	128.0	129.0	22
A002	129.0	130.0	5.2
A002	130.0	131.0	8.5
A002	131.0	132.0	4.9
A002	132.0	133.0	7.4
A002	133.0	134.0	8.3
A002	134.0	135.0	6.1
A002	135.0	136.0	4.8
A002	136.0	137.0	8.1
A002	137.0	138.0	6.7
A002	138.0	139.0	5.1
A002	139.0	140.0	7.1
A002	140.0	141.0	6
A002	141.0	142.0	6.2
A002	142.0	143.0	5.9
A002	143.0	144.0	8
A002	144.0	145.0	6.4
A002	145.0	146.0	6.4
A002	146.0	147.0	6.5
A002	147.0	148.0	3.4
A002	148.0	149.0	3.5
A002	149.0	150.0	4.4
A002	150.0	151.0	5.8
A002	151.0	152.0	3.4
A002	152.0	153.0	3.9
A002	153.0	154.0	5.3
A002	154.0	155.0	6
A002	155.0	156.0	7.5
A002	156.0	157.0	9.8
A002	157.0	158.0	35
A002	158.0	159.0	0.4
A002	159.0	160.0	0.1
A002	160.0	161.0	0
A002	161.0	162.0	0
A002	162.0	163.0	0
A002	163.0	164.0	0
A002	164.0	165.0	0
A002	165.0	166.0	0
A002	166.0	167.0	0
A002	167.0	168.0	0
A002	168.0	169.0	0
A002	169.0	170.0	0

615283

bhid	from	to	magsus
A002	170.0	171.0	0
A002	171.0	172.0	0
A002	172.0	173.0	0
A002	173.0	174.0	0
A002	174.0	175.0	0
A002	175.0	176.0	0
A002	176.0	177.0	0
A002	177.0	178.0	0
A002	178.0	179.0	0
A002	179.0	180.0	0.1
A002	180.0	181.0	0.1
A002	181.0	182.0	0.1
A002	182.0	183.0	0.1
A002	183.0	184.0	1.2
A002	184.0	185.0	0.2
A002	185.0	186.0	3.6
A002	186.0	187.4	4.2
A002	187.4	188.4	16
A002	188.4	189.4	29
A002	189.4	190.4	20
A002	190.4	191.4	15
A002	191.4	192.4	29
A002	192.4	193.0	26
A002	193.0	194.0	10
A002	194.0	195.0	3.7
A002	195.0	196.0	3.1
A002	196.0	197.0	2.9
A002	197.0	198.0	3.2
A002	198.0	199.0	4.3
A002	199.0	200.0	5.3
A002	200.0	201.0	4
A002	201.0	202.0	5.4
A002	202.0	203.0	4.9
A002	203.0	204.0	4.2
A002	204.0	205.0	3.8
A002	205.0	206.0	4.6
A002	206.0	207.0	4.2
A002	207.0	208.0	6
A002	208.0	209.0	6.6
A002	209.0	210.0	6.7
A002	210.0	211.0	5.9
A002	211.0	212.0	5.6
A002	212.0	213.0	6.1
A002	213.0	214.0	4.8
A002	214.0	215.0	6.1
A002	215.0	216.0	5.5
A002	216.0	217.0	5.4

615284

bhid	from	to	magsus
A002	217.0	218.0	4.1
A002	218.0	219.0	6.3
A002	219.0	220.0	5.7
A002	220.0	221.0	4.7
A002	221.0	222.0	4.2
A002	222.0	223.0	4.7
A002	223.0	224.0	3.8
A002	224.0	225.0	4
A002	225.0	226.0	4.2
A002	226.0	227.0	3.5
A002	227.0	228.0	4.5
A002	228.0	229.0	3.6
A002	229.0	230.0	4.6
A002	230.0	231.0	4.2
A002	231.0	232.0	4.1
A002	232.0	233.0	5.2
A002	233.0	234.0	7.1
A002	234.0	235.0	2.8
A002	235.0	236.0	2.5
A002	236.0	237.0	2.4
A002	237.0	238.0	4
A002	238.0	239.0	2.5
A002	239.0	240.0	2.2
A002	240.0	241.0	3.9
A002	241.0	242.0	4
A002	242.0	243.0	3.7
A002	243.0	244.0	7.6
A002	244.0	245.0	5.5
A002	245.0	246.0	2.4
A002	246.0	247.0	4.9
A002	247.0	248.0	3.2
A002	248.0	249.0	2.7
A002	249.0	250.0	5.1
A002	250.0	251.0	4.2
A002	251.0	252.0	3.5
A002	252.0	253.0	3.8
A002	253.0	254.0	4.3
A002	254.0	255.0	3.1
A002	255.0	256.0	3.1
A002	256.0	257.0	1.4
A002	257.0	258.0	1.6
A002	258.0	259.0	3.1
A002	259.0	260.0	2.6
A002	260.0	261.0	2
A002	261.0	262.0	3.6
A002	262.0	263.0	0.8
A002	263.0	264.0	2.3

615285

bhid	from	to	magsus
A002	264.0	265.0	3.1
A002	265.0	266.0	2.4
A002	266.0	267.0	1.1
A002	267.0	268.0	1.7
A002	268.0	269.0	1.5
A002	269.0	270.0	1.2
A002	270.0	271.0	0.6
A002	271.0	272.0	1
A002	272.0	273.0	1.3
A002	273.0	274.0	1.4
A002	274.0	275.0	2.3
A002	275.0	276.0	2.6
A002	276.0	277.0	1.6
A002	277.0	278.0	1.9
A002	278.0	279.0	1.7
A002	279.0	280.0	2
A002	280.0	281.0	1.5
A002	281.0	282.0	1.8
A002	282.0	283.0	1.2
A002	283.0	284.0	2.7
A002	284.0	285.0	2
A002	285.0	286.0	2.1
A002	286.0	287.0	1.9
A002	287.0	288.0	1.5
A002	288.0	289.0	1.4
A002	289.0	290.0	1.4
A002	290.0	291.0	1.1
A002	291.0	292.0	0.8
A002	292.0	293.0	0.8
A002	293.0	294.0	1.3
A002	294.0	295.0	2.1
A002	295.0	296.0	2.5
A002	296.0	297.0	2.2
A002	297.0	298.0	1.5
A002	298.0	299.0	1.3
A002	299.0	300.0	1.5
A002	300.0	301.0	1.8
A002	301.0	302.0	0.7
A002	302.0	303.0	1.8
A002	303.0	304.0	2
A002	304.0	305.0	1.4
A002	305.0	306.0	3.1
A002	306.0	307.0	4.9

Magnetic susceptibility

bhid	from	to	magsus
A003	29.0	30.0	0
A003	30.0	31.0	0
A003	31.0	32.0	0
A003	32.0	33.0	0
A003	33.0	34.0	0
A003	34.0	35.0	0
A003	35.0	36.0	0
A003	36.0	37.0	0
A003	37.0	38.0	0
A003	38.0	39.0	0
A003	39.0	40.0	0
A003	40.0	41.0	0
A003	41.0	42.0	0
A003	42.0	43.0	0
A003	43.0	44.0	0
A003	44.0	45.0	0
A003	45.0	46.0	0
A003	46.0	47.0	0
A003	47.0	48.0	0
A003	48.0	49.0	0
A003	49.0	50.0	0
A003	50.0	51.0	0
A003	51.0	52.0	0
A003	52.0	53.0	0
A003	53.0	54.0	0
A003	54.0	55.0	0
A003	55.0	56.0	0
A003	56.0	57.0	0
A003	57.0	58.0	0
A003	58.0	59.0	0
A003	59.0	60.0	29
A003	60.0	61.0	27
A003	61.0	62.0	25
A003	62.0	63.0	14
A003	63.0	64.0	5.3
A003	64.0	65.0	17
A003	65.0	66.0	18
A003	66.0	67.0	14
A003	67.0	68.0	7.6
A003	68.0	69.0	5
A003	69.0	70.0	6.7
A003	70.0	71.0	5.7
A003	71.0	72.0	6.4
A003	72.0	73.0	17
A003	73.0	74.0	13
A003	74.0	75.0	0.3
A003	75.0	76.0	0.4

615287

bhid	from	to	magsus
A003	76.0	77.0	1.6
A003	77.0	78.0	4.1
A003	78.0	79.0	23
A003	79.0	80.0	33
A003	80.0	81.0	22
A003	81.0	82.0	4
A003	82.0	83.0	23
A003	83.0	84.0	24
A003	84.0	85.0	18
A003	85.0	86.0	36
A003	86.0	87.0	64
A003	87.0	88.0	41
A003	88.0	89.0	44
A003	89.0	90.0	80
A003	90.0	91.0	43
A003	91.0	92.0	27
A003	92.0	93.0	50
A003	93.0	94.0	59
A003	94.0	95.0	74
A003	95.0	96.0	47
A003	96.0	97.0	87
A003	97.0	98.0	47
A003	98.0	99.0	97
A003	99.0	100.0	45
A003	100.0	101.0	30
A003	101.0	102.0	14
A003	102.0	103.0	47
A003	103.0	104.0	34
A003	104.0	105.0	36
A003	105.0	106.0	8.6
A003	106.0	107.0	7.1
A003	107.0	108.0	6.8
A003	108.0	109.0	5.5
A003	109.0	110.0	4
A003	110.0	111.0	3.3
A003	111.0	112.0	5.6
A003	112.0	113.0	4.5
A003	113.0	114.0	4.1
A003	114.0	115.0	5
A003	115.0	116.0	5
A003	116.0	117.0	4.3
A003	117.0	118.0	4.1
A003	118.0	119.0	5
A003	119.0	120.0	3.3
A003	120.0	121.0	4.1
A003	121.0	122.0	4.8
A003	122.0	123.0	3.1

615288

bhid	from	to	magsus
A003	123.0	124.0	3.3
A003	124.0	125.0	2.3
A003	125.0	126.0	2.4
A003	126.0	127.0	3
A003	127.0	128.0	2.2
A003	128.0	129.0	2.2
A003	129.0	130.0	3.2
A003	130.0	131.0	2.9
A003	131.0	132.0	2.3
A003	132.0	133.0	6
A003	133.0	134.0	4.9
A003	134.0	135.0	4.3
A003	135.0	136.0	4.3
A003	136.0	137.0	4.7
A003	137.0	138.0	4.6
A003	138.0	139.0	5.9
A003	139.0	140.0	4.1
A003	140.0	141.0	6.4
A003	141.0	142.0	4.3
A003	142.0	143.0	4.8
A003	143.0	144.0	3.8
A003	144.0	145.0	3.4
A003	145.0	146.0	3.5
A003	146.0	147.0	4.2
A003	147.0	148.0	5.7
A003	148.0	149.0	4.4
A003	149.0	150.0	5.2
A003	150.0	151.0	4.5
A003	151.0	152.0	4.4
A003	152.0	153.0	4.5
A003	153.0	154.0	4.4
A003	154.0	155.0	4.5
A003	155.0	156.0	4
A003	156.0	157.0	5.2
A003	157.0	158.0	4.4
A003	158.0	159.0	5
A003	159.0	160.0	3.5
A003	160.0	161.0	4.2
A003	161.0	162.0	3.7
A003	162.0	163.0	3.1
A003	163.0	164.0	4.5
A003	164.0	165.0	2.9
A003	165.0	166.0	3.5
A003	166.0	167.0	4.8
A003	167.0	168.0	4.3
A003	168.0	169.0	4.7
A003	169.0	170.0	5

615289

bhid	from	to	magsus
A003	170.0	171.0	4.9
A003	171.0	172.0	4.8
A003	172.0	173.0	5
A003	173.0	174.0	4.6
A003	174.0	175.0	4.9
A003	175.0	176.0	4.5
A003	176.0	177.0	4.6
A003	177.0	178.0	6.8
A003	178.0	179.0	5
A003	179.0	180.0	4.9
A003	180.0	181.0	5.2
A003	181.0	182.0	6.7
A003	182.0	183.0	5.9
A003	183.0	184.0	6
A003	184.0	185.0	6.8
A003	185.0	186.0	8.4
A003	186.0	187.0	6.8
A003	187.0	188.0	6.3
A003	188.0	189.0	8.1
A003	189.0	190.0	8.6
A003	190.0	191.0	8.8
A003	191.0	192.0	12
A003	192.0	193.0	8.1
A003	193.0	194.0	7.6
A003	194.0	195.0	10
A003	195.0	196.0	8
A003	196.0	197.0	8.2
A003	197.0	198.0	0
A003	198.0	199.0	12
A003	199.0	200.0	17
A003	200.0	201.0	27
A003	201.0	202.0	18
A003	202.0	203.0	15
A003	203.0	204.0	18
A003	204.0	205.0	17
A003	205.0	206.0	19
A003	206.0	207.0	14
A003	207.0	208.0	22
A003	208.0	209.0	16
A003	209.0	210.0	18
A003	210.0	211.0	15
A003	211.0	212.0	19
A003	212.0	213.0	18
A003	213.0	214.0	15
A003	214.0	215.0	17
A003	215.0	216.0	18
A003	216.0	217.0	21

615290

bhid	from	to	magsus
A003	217.0	218.0	32
A003	218.0	219.0	17
A003	219.0	220.0	27
A003	220.0	221.0	24
A003	221.0	222.0	16
A003	222.0	223.0	28
A003	223.0	224.0	37
A003	224.0	225.0	26
A003	225.0	226.0	21
A003	226.0	227.0	30
A003	227.0	228.0	25
A003	228.0	229.0	25
A003	229.0	230.0	27
A003	230.0	231.0	25
A003	231.0	232.0	38
A003	232.0	233.0	39
A003	233.0	234.0	37
A003	234.0	235.0	29
A003	235.0	236.0	41
A003	236.0	237.0	44
A003	237.0	238.0	44
A003	238.0	239.0	31
A003	239.0	240.0	32
A003	240.0	241.0	49
A003	241.0	242.0	53
A003	242.0	243.0	53
A003	243.0	244.0	40
A003	244.0	245.0	45
A003	245.0	246.0	38
A003	246.0	247.0	44
A003	247.0	248.0	0.6
A003	248.0	249.0	0.4
A003	249.0	250.0	1
A003	250.0	251.0	0.6
A003	251.0	252.0	0.9
A003	252.0	253.0	0.8
A003	253.0	254.0	12
A003	254.0	255.0	12
A003	255.0	256.0	5.3
A003	256.0	257.0	18
A003	257.0	258.0	18
A003	258.0	259.0	23
A003	259.0	260.0	24
A003	260.0	261.0	21
A003	261.0	262.0	20
A003	262.0	263.0	27
A003	263.0	264.0	19

615291

bhid	from	to	magsus
A003	264.0	265.0	47
A003	265.0	266.0	25
A003	266.0	267.0	20
A003	267.0	268.0	29
A003	268.0	269.0	38
A003	269.0	270.0	44
A003	270.0	271.0	49
A003	271.0	272.0	72
A003	272.0	273.0	51
A003	273.0	274.0	47
A003	274.0	275.0	58
A003	275.0	276.0	46
A003	276.0	277.0	54
A003	277.0	278.0	72
A003	278.0	279.0	44
A003	279.0	280.0	0.4
A003	280.0	281.0	0
A003	281.0	282.0	0.2
A003	282.0	283.0	0.2
A003	283.0	284.0	0.2
A003	284.0	285.0	0.2
A003	285.0	286.0	0.1
A003	286.0	287.0	0
A003	287.0	288.0	0
A003	288.0	289.0	0
A003	289.0	290.0	0
A003	290.0	291.0	0
A003	291.0	292.0	0
A003	292.0	293.0	0
A003	293.0	294.0	0
A003	294.0	295.0	0
A003	295.0	296.0	0
A003	296.0	297.0	0
A003	297.0	298.0	0.1
A003	298.0	299.0	0
A003	299.0	300.0	0
A003	300.0	301.0	0
A003	301.0	302.0	0
A003	302.0	303.0	0.1
A003	303.0	304.0	0
A003	304.0	305.0	0
A003	305.0	306.0	0
A003	306.0	307.0	0
A003	307.0	308.0	0
A003	308.0	309.0	0
A003	309.0	310.0	0
A003	310.0	311.0	0

615292

bhid	from	to	magsus
A003	311.0	312.0	0
A003	312.0	313.0	0
A003	313.0	314.0	0
A003	314.0	315.0	0
A003	315.0	316.0	0
A003	316.0	317.0	0
A003	317.0	318.0	0
A003	318.0	319.0	0
A003	319.0	320.0	0
A003	320.0	321.0	0
A003	321.0	322.0	0
A003	322.0	323.0	0
A003	323.0	324.0	0
A003	324.0	325.0	0
A003	325.0	326.0	0
A003	326.0	327.0	0.1
A003	327.0	328.0	0.1
A003	328.0	329.0	0.1
A003	329.0	330.0	0.1
A003	330.0	331.0	0.1
A003	331.0	332.0	0.1
A003	332.0	333.0	0.1
A003	333.0	334.0	0.1
A003	334.0	335.0	0.1
A003	335.0	336.0	0.1
A003	336.0	337.0	0.1
A003	337.0	338.0	0.1
A003	338.0	339.0	0.1

615293

bhid	from	to	magsus
A004	58.0	59.0	13
A004	59.0	60.0	27
A004	60.0	61.0	19
A004	61.0	62.0	14
A004	62.0	63.0	11
A004	63.0	64.0	12
A004	64.0	65.0	12
A004	65.0	66.0	12
A004	66.0	67.0	11
A004	67.0	68.0	6.8
A004	68.0	69.0	8.4
A004	69.0	70.0	9.4
A004	70.0	71.0	11
A004	71.0	72.0	10
A004	72.0	73.0	10
A004	73.0	74.0	11
A004	74.0	75.0	10
A004	75.0	76.0	9.4
A004	76.0	77.0	9.9
A004	77.0	78.0	9.0
A004	78.0	79.0	10
A004	79.0	80.0	9.8
A004	80.0	81.0	12
A004	81.0	82.0	15
A004	82.0	83.0	13
A004	83.0	84.0	23
A004	84.0	85.0	9.2
A004	85.0	86.0	22
A004	86.0	87.0	29
A004	87.0	88.0	20
A004	88.0	89.0	33
A004	89.0	90.0	29
A004	90.0	91.0	46
A004	91.0	92.0	30
A004	92.0	93.0	31
A004	93.0	94.0	50
A004	94.0	95.0	22
A004	95.0	96.0	36
A004	96.0	97.0	52
A004	97.0	98.0	66
A004	98.0	99.0	74
A004	99.0	100.0	64
A004	100.0	101.0	58
A004	101.0	102.0	18
A004	102.0	103.0	23
A004	103.0	104.0	18
A004	104.0	105.0	35

615294

bhid	from	to	magsus
A004	105.0	106.0	33
A004	106.0	107.0	23
A004	107.0	108.0	18
A004	108.0	109.0	16
A004	109.0	110.0	14
A004	110.0	111.0	17
A004	111.0	112.0	15
A004	112.0	113.0	15
A004	113.0	114.0	16
A004	114.0	115.0	15
A004	115.0	116.0	15
A004	116.0	117.0	15
A004	117.0	118.0	16
A004	118.0	119.0	18
A004	119.0	120.0	18
A004	120.0	121.0	21
A004	121.0	122.0	19
A004	122.0	123.0	14
A004	123.0	124.0	12
A004	124.0	125.0	9.9
A004	125.0	126.0	16
A004	126.0	127.0	14
A004	127.0	128.0	14
A004	128.0	129.0	13
A004	129.0	130.0	21
A004	130.0	131.0	25
A004	131.0	132.0	14
A004	132.0	133.0	15
A004	133.0	134.0	21
A004	134.0	135.0	18
A004	135.0	136.0	9.7
A004	136.0	137.0	5.2
A004	137.0	138.0	6.6
A004	138.0	139.0	20
A004	139.0	140.0	13
A004	140.0	141.0	17
A004	141.0	142.0	16
A004	142.0	143.0	14
A004	143.0	144.0	14
A004	144.0	145.0	3.3
A004	145.0	146.0	8.7
A004	146.0	147.0	4.8
A004	147.0	148.0	8.9
A004	148.0	149.0	15
A004	149.0	150.0	7.2
A004	150.0	151.0	12
A004	151.0	152.0	39

615295

bhid	from	to	magsus
A004	152.0	153.0	45
A004	153.0	154.0	33
A004	154.0	155.0	24
A004	155.0	156.0	16
A004	156.0	157.0	37
A004	157.0	158.0	14
A004	158.0	159.0	19
A004	159.0	160.0	12
A004	160.0	161.0	13
A004	161.0	162.0	12
A004	162.0	163.0	18
A004	163.0	164.0	7.2
A004	164.0	165.0	6.6
A004	165.0	166.0	8.9
A004	166.0	167.0	10
A004	167.0	168.0	13
A004	168.0	169.0	7.1
A004	169.0	170.0	9.0
A004	170.0	171.0	8.1
A004	171.0	172.0	10
A004	172.0	173.0	12
A004	173.0	174.0	7.7
A004	174.0	175.0	8.3
A004	175.0	176.0	3.7
A004	176.0	177.0	0.7
A004	177.0	178.0	1.0
A004	178.0	179.0	1.2
A004	179.0	180.0	0.7
A004	180.0	181.0	0.7
A004	181.0	182.0	1.1
A004	182.0	183.0	0.9
A004	183.0	184.0	1.2
A004	184.0	185.0	0.6
A004	185.0	186.0	0.3
A004	186.0	187.0	0.3
A004	187.0	188.0	0.3
A004	188.0	189.0	0.0
A004	189.0	190.0	0.0
A004	190.0	191.0	0.0
A004	191.0	192.0	0.0
A004	192.0	193.0	0.0
A004	193.0	194.0	0.0
A004	194.0	195.0	0.0
A004	195.0	196.0	0.0
A004	196.0	197.0	0.0
A004	197.0	198.0	0.0
A004	198.0	199.0	0.0

615296

bhid	from	to	magsus
A004	199.0	200.0	0.0
A004	200.0	201.0	0.0
A004	201.0	202.0	0.0
A004	202.0	203.0	0.0
A004	203.0	204.0	0.0
A004	204.0	205.0	0.0
A004	205.0	206.0	0.0
A004	206.0	207.0	0.0
A004	207.0	208.0	0.0
A004	208.0	209.0	0.0
A004	209.0	210.0	0.0
A004	210.0	211.0	0.0
A004	211.0	212.0	0.0
A004	212.0	213.0	0.0
A004	213.0	214.0	0.0
A004	214.0	215.0	0.0
A004	215.0	216.0	0.0
A004	216.0	217.0	0.0
A004	217.0	218.0	0.0
A004	218.0	219.0	0.0
A004	219.0	220.0	0.0
A004	220.0	221.0	0.0
A004	221.0	222.0	0.0
A004	222.0	223.0	0.0
A004	223.0	224.0	0.0
A004	224.0	225.0	0.0
A004	225.0	226.0	0.0
A004	226.0	226.3	0.0

~~615296~~
615297

bhid	from	to	magsus
A006	29.0	30.0	0.1
A006	30.0	31.0	0.1
A006	31.0	32.0	0.1
A006	32.0	33.0	0.1
A006	33.0	34.0	0.1
A006	34.0	35.0	0.1
A006	35.0	36.0	0.1
A006	36.0	37.0	0.1
A006	37.0	38.0	0.0
A006	38.0	39.0	0.1
A006	39.0	40.0	0.0
A006	40.0	41.0	0.0
A006	41.0	42.0	0.0
A006	42.0	43.0	0.1
A006	43.0	44.0	0.1
A006	44.0	45.0	0.0
A006	45.0	46.0	0.0
A006	46.0	47.0	0.0
A006	47.0	48.0	0.0
A006	48.0	49.0	0.0
A006	49.0	50.0	0.0
A006	50.0	51.0	0.0
A006	51.0	52.0	0.0
A006	52.0	53.0	0.0
A006	53.0	54.0	0.0
A006	54.0	55.0	0.0
A006	55.0	56.0	0.0
A006	56.0	57.0	0.0
A006	57.0	58.0	0.0
A006	58.0	59.0	0.0
A006	59.0	60.0	0.0
A006	60.0	61.0	0.0
A006	61.0	62.0	0.0
A006	62.0	63.0	0.0
A006	63.0	64.0	0.0
A006	64.0	65.0	0.0
A006	65.0	66.0	0.1
A006	66.0	67.0	0.1
A006	67.0	68.0	0.0
A006	68.0	69.0	0.0
A006	69.0	70.0	0.0
A006	70.0	71.0	0.0
A006	71.0	72.0	0.0
A006	72.0	73.0	0.0
A006	73.0	74.0	0.0
A006	74.0	75.0	0.0
A006	75.0	76.0	0.0

615298

bhid	from	to	magsus
A006	76.0	77.0	0.0
A006	77.0	78.0	0.1
A006	78.0	79.0	0.0
A006	79.0	80.0	0.0
A006	80.0	81.0	0.0
A006	81.0	82.0	0.0
A006	82.0	83.0	7.1
A006	83.0	84.0	2.6
A006	84.0	85.0	0.1
A006	85.0	86.0	0.1
A006	86.0	87.0	5.4
A006	87.0	88.0	7.0
A006	88.0	89.0	0.3
A006	89.0	90.0	0.2
A006	90.0	91.0	0.2
A006	91.0	92.0	0.2
A006	92.0	93.0	0.2
A006	93.0	94.0	0.4
A006	94.0	95.0	0.4
A006	95.0	96.0	0.2
A006	96.0	97.0	0.1
A006	97.0	98.0	0.3
A006	98.0	99.0	0.7
A006	99.0	100.0	4.9
A006	100.0	101.0	15
A006	101.0	102.0	3.3
A006	102.0	103.0	20
A006	103.0	104.0	45
A006	104.0	105.0	66
A006	105.0	106.0	31
A006	106.0	107.0	39
A006	107.0	108.0	31
A006	108.0	109.0	22
A006	109.0	110.0	34
A006	110.0	111.0	20
A006	111.0	112.0	24
A006	112.0	113.0	20
A006	113.0	114.0	6.0
A006	114.0	115.0	16
A006	115.0	116.0	15
A006	116.0	117.0	14
A006	117.0	118.0	18
A006	118.0	119.0	16
A006	119.0	120.0	12
A006	120.0	121.0	20
A006	121.0	122.0	18
A006	122.0	123.0	11

615299

bhid	from	to	magsus
A006	123.0	124.0	8.1
A006	124.0	125.0	3.3
A006	125.0	126.0	10
A006	126.0	127.0	33
A006	127.0	128.0	21
A006	128.0	129.0	8.8
A006	129.0	130.0	6.4
A006	130.0	131.0	7.8
A006	131.0	132.0	7.1
A006	132.0	133.0	8.1
A006	133.0	134.0	6.7
A006	134.0	135.0	0.1
A006	135.0	136.0	3.9
A006	136.0	137.0	1.6
A006	137.0	138.0	6.7
A006	138.0	139.0	5.0
A006	139.0	140.0	3.5
A006	140.0	141.0	2.2
A006	141.0	142.0	2.4
A006	142.0	143.0	2.3
A006	143.0	144.0	5.1
A006	144.0	145.0	4.7
A006	145.0	146.0	2.7
A006	146.0	147.0	3.3
A006	147.0	148.0	3.2
A006	148.0	149.0	3.3
A006	149.0	150.0	4.2
A006	150.0	151.0	4.3
A006	151.0	152.0	4.3
A006	152.0	153.0	3.1
A006	153.0	154.0	2.1
A006	154.0	155.0	2.7
A006	155.0	156.0	3.2
A006	156.0	157.0	3.5
A006	157.0	158.0	4.7
A006	158.0	159.0	3.7
A006	159.0	160.0	4.9
A006	160.0	161.0	4.7
A006	161.0	162.0	3.9
A006	162.0	163.0	2.8
A006	163.0	164.0	4.0
A006	164.0	165.0	4.1
A006	165.0	166.0	3.6
A006	166.0	167.0	5.3
A006	167.0	168.0	7.0
A006	168.0	169.0	6.0
A006	169.0	170.0	3.2

615300

bhid	from	to	magsus
A006	170.0	171.0	3.3
A006	171.0	172.0	3.0
A006	172.0	173.0	3.2
A006	173.0	174.0	2.1
A006	174.0	175.0	2.6
A006	175.0	176.0	3.4
A006	176.0	177.0	4.3
A006	177.0	178.0	4.5
A006	178.0	179.0	4.7
A006	179.0	180.0	4.9
A006	180.0	181.0	3.4
A006	181.0	182.0	3.3
A006	182.0	183.0	4.1
A006	183.0	184.0	5.2
A006	184.0	185.0	8.6
A006	185.0	186.0	6.3
A006	186.0	187.0	6.8
A006	187.0	188.0	6.4
A006	188.0	189.0	6.9
A006	189.0	190.0	9.0
A006	190.0	191.0	11
A006	191.0	192.0	9.7
A006	192.0	193.0	11
A006	193.0	194.0	13
A006	194.0	195.0	16
A006	195.0	196.0	15
A006	196.0	197.0	12
A006	197.0	198.0	16
A006	198.0	199.0	12
A006	199.0	200.0	15
A006	200.0	201.0	9.4
A006	201.0	202.0	11
A006	202.0	203.0	10
A006	203.0	204.0	11
A006	204.0	205.0	15
A006	205.0	206.0	6.6
A006	206.0	207.0	8.0
A006	207.0	208.0	8.8
A006	208.0	209.0	12
A006	209.0	210.0	12
A006	210.0	211.0	15
A006	211.0	212.0	9.8
A006	212.0	213.0	7.9
A006	213.0	214.0	5.9
A006	214.0	215.0	7.5
A006	215.0	216.0	13
A006	216.0	217.0	11

615301

bhid	from	to	magsus
A006	217.0	218.0	7.6
A006	218.0	219.0	7.1
A006	219.0	220.0	6.4
A006	220.0	221.0	11
A006	221.0	222.0	16
A006	222.0	223.0	14
A006	223.0	224.0	16
A006	224.0	225.0	9.0
A006	225.0	226.0	12
A006	226.0	227.0	16
A006	227.0	228.0	15
A006	228.0	229.0	14
A006	229.0	230.0	10
A006	230.0	231.0	11
A006	231.0	232.0	10
A006	232.0	233.0	11
A006	233.0	234.0	12
A006	234.0	235.0	11
A006	235.0	236.0	14
A006	236.0	237.0	9.9
A006	237.0	238.0	8.5
A006	238.0	239.0	8.8
A006	239.0	240.0	9.7
A006	240.0	241.0	9.2
A006	241.0	242.0	8.9
A006	242.0	243.0	11
A006	243.0	244.0	10
A006	244.0	245.0	15
A006	245.0	246.0	15
A006	246.0	247.0	17
A006	247.0	248.0	17
A006	248.0	249.0	13
A006	249.0	250.0	13
A006	250.0	251.0	21
A006	251.0	252.0	16
A006	252.0	253.0	16
A006	253.0	254.0	16
A006	254.0	255.0	15
A006	255.0	256.0	14
A006	256.0	257.0	14
A006	257.0	258.0	14
A006	258.0	259.0	13
A006	259.0	260.0	15
A006	260.0	261.0	21
A006	261.0	262.0	12
A006	262.0	263.0	12
A006	263.0	264.0	14

615302

bhid	from	to	magsus
A006	264.0	265.0	19
A006	265.0	266.0	14
A006	266.0	267.0	17
A006	267.0	268.0	17
A006	268.0	269.0	16
A006	269.0	270.0	15
A006	270.0	271.0	11
A006	271.0	272.0	11
A006	272.0	273.0	16
A006	273.0	274.0	19
A006	274.0	275.0	13
A006	275.0	276.0	15
A006	276.0	277.0	22
A006	277.0	278.0	24
A006	278.0	279.0	22
A006	279.0	280.0	17
A006	280.0	281.0	20
A006	281.0	282.0	18
A006	282.0	283.0	19
A006	283.0	284.0	27
A006	284.0	285.0	27
A006	285.0	286.0	16
A006	286.0	287.0	16
A006	287.0	288.0	14
A006	288.0	289.0	15
A006	289.0	290.0	13
A006	290.0	291.0	13
A006	291.0	292.0	13
A006	292.0	293.0	14
A006	293.0	294.0	12
A006	294.0	295.0	16
A006	295.0	296.0	12
A006	296.0	297.0	11
A006	297.0	298.0	14
A006	298.0	299.0	12
A006	299.0	300.0	12
A006	300.0	301.0	12
A006	301.0	302.0	10
A006	302.0	303.0	10
A006	303.0	304.0	11
A006	304.0	305.0	9.4
A006	305.0	306.0	14
A006	306.0	307.0	13
A006	307.0	308.0	15
A006	308.0	309.0	14
A006	309.0	310.0	12
A006	310.0	311.0	12

615303

bhid	from	to	magsus
A006	311.0	312.0	7.3
A006	312.0	313.0	7.9
A006	313.0	314.0	7.4
A006	314.0	315.0	8.9
A006	315.0	316.0	7.0
A006	316.0	317.0	9.4
A006	317.0	318.0	8.0
A006	318.0	319.0	6.8
A006	319.0	320.0	6.4
A006	320.0	321.0	6.8
A006	321.0	322.0	7.9
A006	322.0	323.0	9.1
A006	323.0	324.0	7.4
A006	324.0	325.0	9.0
A006	325.0	326.0	9.0
A006	326.0	327.0	9.0
A006	327.0	328.0	6.3
A006	328.0	329.0	7.5
A006	329.0	330.0	7.5
A006	330.0	331.0	6.7
A006	331.0	332.0	8.9
A006	332.0	333.0	9.7
A006	333.0	334.0	6.7
A006	334.0	335.0	7.7
A006	335.0	336.0	9.7
A006	336.0	337.0	10
A006	337.0	338.0	10
A006	338.0	339.0	9.6
A006	339.0	340.0	8.7
A006	340.0	341.0	10
A006	341.0	342.0	9.7
A006	342.0	343.0	13
A006	343.0	344.0	11
A006	344.0	345.0	12
A006	345.0	346.0	11
A006	346.0	347.0	5.3
A006	347.0	348.0	12
A006	348.0	349.0	28
A006	349.0	350.0	47
A006	350.0	351.0	35
A006	351.0	352.0	31
A006	352.0	353.0	24
A006	353.0	354.0	46
A006	354.0	355.0	61
A006	355.0	356.0	54
A006	356.0	357.0	71
A006	357.0	358.0	58

615304

bhid	from	to	magsus
A006	358.0	359.0	35
A006	359.0	360.0	28
A006	360.0	361.0	34
A006	361.0	362.0	50
A006	362.0	363.0	40
A006	363.0	364.0	19
A006	364.0	365.0	32
A006	365.0	366.0	29
A006	366.0	367.0	33
A006	367.0	368.0	30
A006	368.0	369.0	34
A006	369.0	370.0	33
A006	370.0	371.0	34
A006	371.0	372.0	40
A006	372.0	373.0	37
A006	373.0	374.0	39
A006	374.0	375.0	64
A006	375.0	376.0	78
A006	376.0	377.0	63
A006	377.0	378.0	80
A006	378.0	379.0	70
A006	379.0	380.0	72
A006	380.0	381.0	65
A006	381.0	382.0	84
A006	382.0	383.0	62
A006	383.0	384.0	91
A006	384.0	385.0	67
A006	385.0	386.0	86
A006	386.0	387.0	85
A006	387.0	388.0	75
A006	388.0	389.0	76
A006	389.0	390.0	76
A006	390.0	391.0	59
A006	391.0	392.0	57
A006	392.0	393.0	40
A006	393.0	394.0	56
A006	394.0	395.0	39
A006	395.0	396.0	62
A006	396.0	397.0	42
A006	397.0	398.0	62
A006	398.0	399.0	46
A006	399.0	400.0	90
A006	400.0	401.0	68
A006	401.0	402.0	81
A006	402.0	403.0	54
A006	403.0	404.0	55
A006	404.0	405.0	64

615305

bhid	from	to	magsus
A006	405.0	406.0	59
A006	406.0	407.0	72
A006	407.0	408.0	68
A006	408.0	409.0	79
A006	409.0	410.0	66
A006	410.0	411.0	71
A006	411.0	412.0	63
A006	412.0	413.0	49
A006	413.0	414.0	51
A006	414.0	415.0	47
A006	415.0	416.0	36
A006	416.0	417.0	86
A006	417.0	418.0	68
A006	418.0	419.0	91
A006	419.0	420.0	70
A006	420.0	421.0	81
A006	421.0	422.0	85
A006	422.0	423.0	68
A006	423.0	424.0	70
A006	424.0	425.0	36
A006	425.0	426.0	57
A006	426.0	427.0	75
A006	427.0	428.0	46
A006	428.0	429.0	34
A006	429.0	430.0	43
A006	430.0	431.0	49
A006	431.0	432.0	40
A006	432.0	433.0	36
A006	433.0	434.0	54
A006	434.0	435.0	63
A006	435.0	436.0	76
A006	436.0	437.0	69
A006	437.0	438.0	22
A006	438.0	439.0	0.1
A006	439.0	440.0	0.0
A006	440.0	441.0	0.0
A006	441.0	442.0	0.0
A006	442.0	443.0	0.0
A006	443.0	444.0	0.1
A006	444.0	445.0	0.1
A006	445.0	446.0	0.1
A006	446.0	447.0	0.0
A006	447.0	448.0	0.0
A006	448.0	449.0	0.0
A006	449.0	450.0	0.0
A006	450.0	451.0	0.0
A006	451.0	452.0	0.1

615306

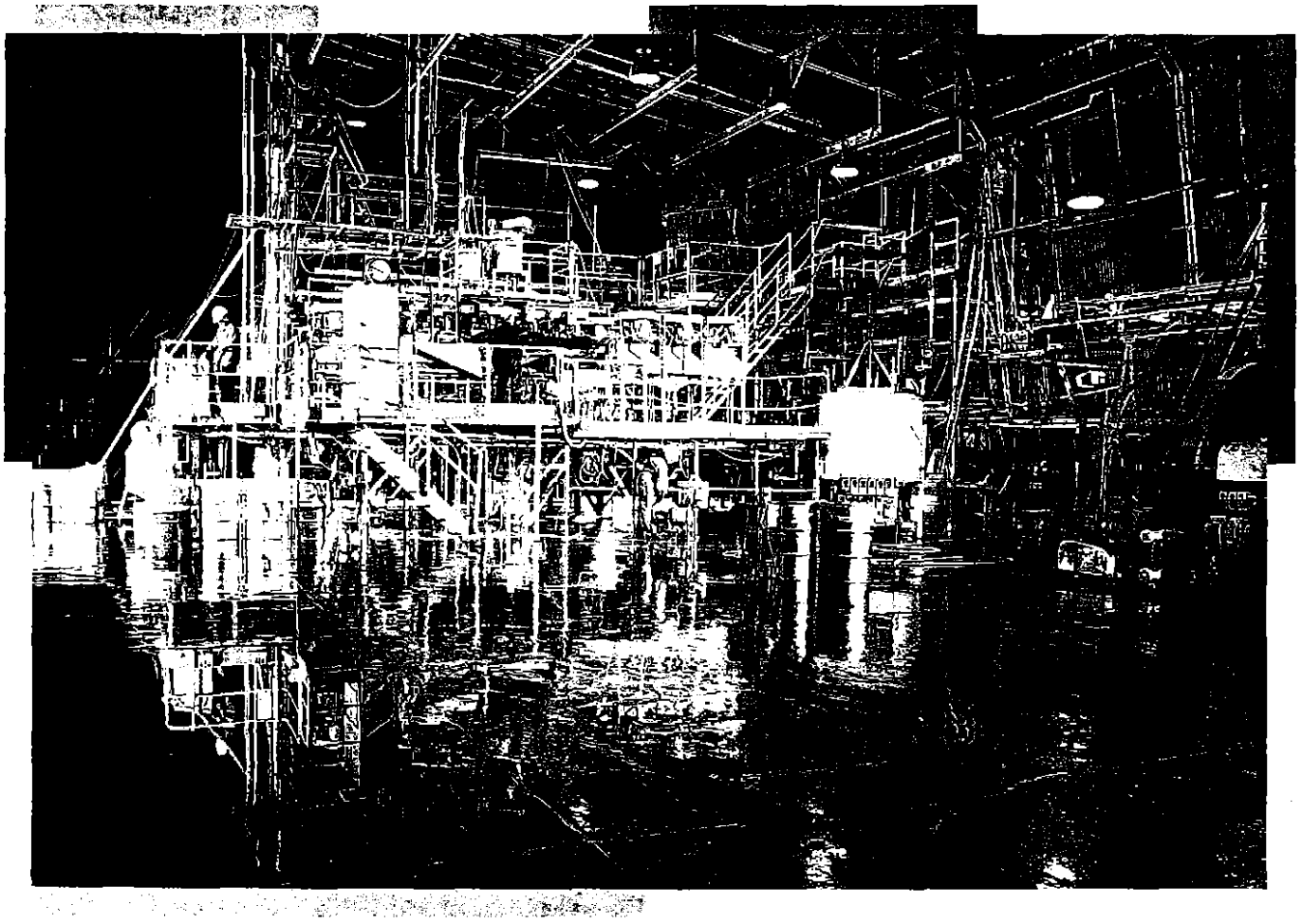
bhid	from	to	magsus
A006	452.0	453.0	0.0
A006	453.0	454.0	0.0
A006	454.0	455.0	0.1
A006	455.0	456.0	0.0
A006	456.0	457.0	0.0
A006	457.0	458.0	0.1
A006	458.0	459.0	0.1
A006	459.0	460.0	0.0
A006	460.0	461.0	0.0
A006	461.0	462.0	0.0
A006	462.0	463.0	0.1
A006	463.0	464.0	0.0
A006	464.0	465.0	0.0
A006	465.0	466.0	0.0
A006	466.0	467.0	0.1
A006	467.0	468.0	0.1
A006	468.0	469.0	0.1
A006	469.0	470.0	0.1
A006	470.0	471.0	0.1
A006	471.0	472.0	0.1
A006	472.0	473.0	0.1
A006	473.0	474.0	0.1
A006	474.0	475.0	0.0
A006	475.0	476.0	0.0
A006	476.0	477.0	0.0
A006	477.0	478.0	0.1
A006	478.0	479.0	0.0
A006	479.0	480.0	0.0
A006	480.0	481.0	0.0
A006	481.0	481.5	0.0

Appendix 8

Calibration of Scintrex SM5 susceptibility meter

615308

ALLEGIANCE MINING NL



DAVIS TUBE SEPARATIONS

Report No. N072LH99

31 May 1999

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REPORT N072LH99

DAVIS TUBE SEPARARTIONS

YOUR REFERENCE:	M McKeown, 24/5/99
SAMPLE IDENTIFICATION:	A003 intersections
MATERIAL:	not specified
LOCATION:	not specified
DATE RECEIVED:	24 May 1999
PROJECT MANAGER:	Paul Capps

P G Capps
Group Leader, Metallurgy

PGC:msm

cc: M McKeown
McKeown Mining Pty Ltd
PO Box 50
RIDGLEY TAS 7321

1. INTRODUCTION

During February/March 1999, Amdel carried out Ni assays on a number of drill intersection samples from drill hole A003 (Amdel job number 9AD0374). The samples were known to contain significant quantities of magnetite.

Amdel was subsequently requested by McKeown Mining, on behalf of Allegiance Mining, to carry out Davis Tube magnetic separation on 10 of the intersection samples. The samples to be tested were specified in a fax sent to Amdel from McKeown Mining on 20 May 1999.

2. PROCEDURE

The selected samples were retrieved from Amdel's assay laboratory as pulverised sample pulps. Sub-samples of approximately 20g were split from each pulp and slurried in water with the addition of Dispex to assist dispersion. The samples were separated in the Davis Tube magnetic separator using a magnetic filed strength of approximately 4,000 gauss. Magnetic and non-magnetic fractions were dried and weighed. Magnetic fractions were also assayed for acid-soluble Fe.

3. RESULTS

DAVIS TUBE MAGNETIC SEPARATION RESULTS

Intersection	Fraction Weight, %		Fe Assay (%) of Magnetic Fraction
	Magnetic	Non-Magnetic	
227.0 to 228.2	16.1	83.9	65.4
234.2 to 235.2	24.7	75.3	53.8
236.2 to 237.2	25.5	74.5	62.4
237.2 to 238.2	30.6	69.4	58.4
243.2 to 244.2	38.2	61.8	48.9
249.7 to 250.7	1.0	99.0	I.S.
253.7 to 254.7	11.1	88.9	50.6
271.1 to 272.1	42.4	57.6	68.5
274.1 to 275.1	31.8	68.2	51.5
277.1 to 278.1	40.9	59.1	62.7

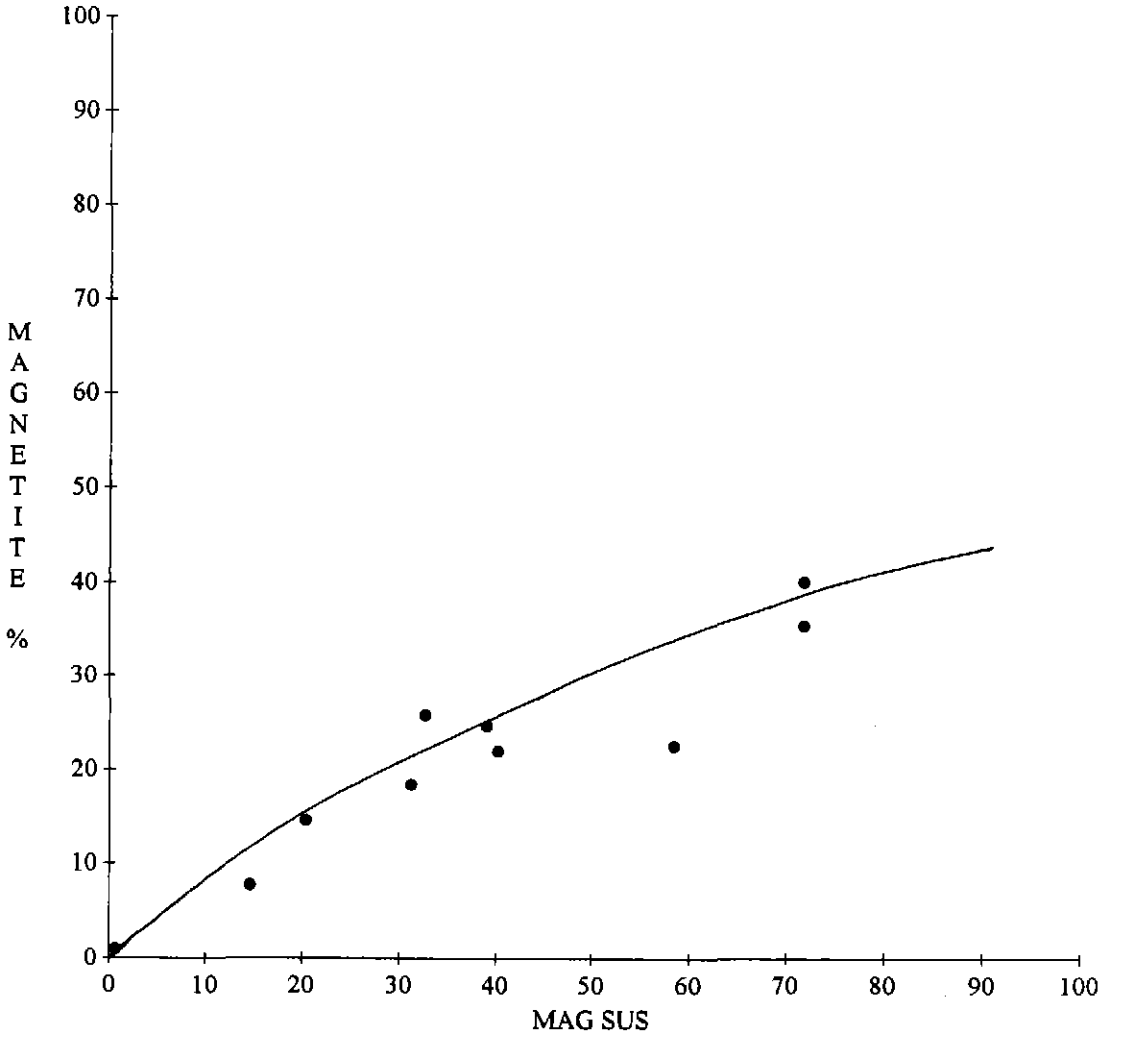
Insufficient magnetic fraction for assay was generated from sample 249.7 to 250.7, with only 1% by weight of the sample reporting to the magnetic fraction.

Concentrate grades varied between approximately 50% and 70% Fe. This could be the result of different grain size/liberation size characteristics and/or variations in particle size distributions resulting from pulverising.

615311

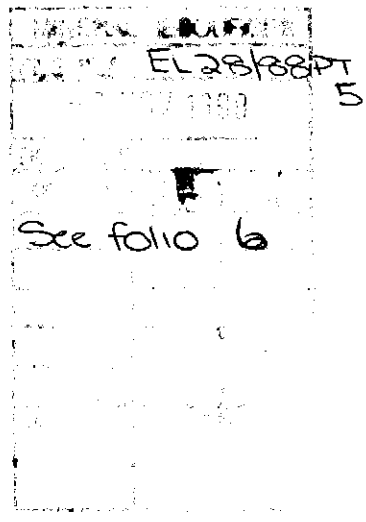
SM5 CALIBRATION

A003 INTERVALS



615312

Flagstaff GeoConsultants



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Geof Fethers	Geologist
Nigel Hungerford	Geophysicist
Paul Hamlyn	Geologist
Michael Asten	Geophysicist
Ross Caughey	Geologist
Alaster Edwards	Geologist
Jovun Silic	Geophysicist

Report for Allegiance Mining NL AVEBURY PROSPECT, ZEEHAN, TASMANIA Results of Surface and Borehole EM survey, April 1999

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

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INTRODUCTION

A surface and borehole EM survey was conducted on the Avebury Propect, Zeehan, Tasmania, in April 1999. The survey followed helicopter magnetic and ground gradient-array resistivity-IP surveys previously reported (Hungerford, 21/5/98, 10/12/98, 10/5/99).

The time-domain EM surveys were performed by Zonge Engineering, using a GDP32 receiver, 6 KW transmitter, vertical-component dB/dt surface EM receiver, and Sirotem slim-line axial-component receiver for the borehole surveys. The transmitter frequencies used were 8 Hz for the surface surveys, and 4 Hz for the borehole surveys.

The transmitter loops 1 and 2 were 600 by 300 m in size, placed north and south of the zone of interest, as shown in Figure 4.

Logarithmic plots of the surface and borehole profiles were produced by Zonge Engineering. Linear plots attached to this report were produced by Flagstaff GeoConsultants. The deep and subtle nature of the target conductors necessitated editting and filtering the surface data using a two-dimensional filter designed by Flagstaff GeoConsultants.

Linear plots of the original and the smoothed data are included with this report. Disc files of final data supplied by Zonge engineering, and working files produced by Flagstaff GeoConsultants, are also included. Note that the Flagstaff digital data files for Loop2 require sign inversion, due to an error in sign conventions in an early release of data from Zonge Engineering. The final digital data from Zonge, and all plots produced by Zonge and by Flagstaff, show the correct signs on the data.

ELECTRICAL CONDUCTORS LOCATED

The location of interpreted conductors is superimposed on images of heli-magnetic data and gradient-array IP data, in Figures 1, 2 and 3. The position of the EM transmitter loops, and conductor picks in greater detail, is shown in Figure 4.

There are three (or more) sub-vertical, east-west conductors;

a) The southern conductor is below the collar of hole A004. It is the weaker and shallower of the two – depth to top of order 50 to 100 m. It appears to be intersected in holes A001 and A003 at the top of intersected alteration zones. This conductor is imaged well using the Hilbert transform of Loop 2, Ch.16 data (Figure 7), and strongest between lines 54600E and 54700E.

b) The northern conductor is deeper, and is the better conductor. It is observed as causative of off-hole anomalies from holes A004, A001 and A003. It is located below hole A004 and above hole A001. Further surveys are required to determine whether its direction from hole A003 is above or below, but integration of all available EM and geological data favours location above hole A003. . This conductor is imaged well using the Hilbert transform of Loop 2, Ch.24 data (Figure 8), and strongest between lines 54600E and 54900E. The break in the

image in Figure 8, at line 5800E, is probably a feature of noise in the profile, rather than a genuine indication of lack of conductor continuity.

c) The third conductor is the south-west conductor, which lies in the south-west of the prospect, approximately 57250N. It is poorly defined by this survey since it lies below the southern transmitter loop.

The offhole conductor is believed to be the deep, northern conductor, ie. the same conductor as (b) above. It has minimum dimensions of 100 m strike length (open to both east and west), 40 m depth extent for its core (the most conductive - presumably thickest) zone, plus an additional vertical extent of 60 m of reduced conductivity. The top of the core is of order 200 m below surface. Depending on the direction from hole A003, it may be plunging east or west, but a westerly plunge (shallower to the east) is my favoured interpretation. The core conductor has a time-constant decay of order 10 msec, indicative of a conductivity-thickness product of 2000 S, which is consistent with either massive pentlandite-pyrrhotite mineralisation, or with the presence of graphite.

DRILL TARGETS RECOMMENDED FROM THE EM SURVEY

1) Drill above A001, target point 354650E 5357500N RL −100 m.
2) Drill above hole A003 (subject to a confirmatory EM survey). Target point is 354750E 5357500N RL -50 m .
3) Strike test the northern conductor surface EM anomaly (b) with a hole parallel to A003 and located 100 m east of A003.
✓4) Strike test the surface EM anomaly (b) with a hole parallel to A001 and located 100 m west of A001.

RECOMMENDATIONS

- Repeat DHEM in hole A003 to determine above/below direction to mineralisation
- DHEM in hole A006
- Surface EM using larger loops (800 by 500 m with profiles of length 1000 m from 6800N to 7800N) in order to better detect the deep conductor. Extend survey eastwards along strike of the Avebury magnetic feature.
- Surface EM using a pair of 600 by 300 m loops placed to map the south-west conductor detected in the 1999 EM survey.
- Perform laboratory conductivity measurements on core samples. Determine whether graphite, pyrrhotite or pentlandite is the determinant on conductivity.

FIGURE DESCRIPTIONS
(Figures 1-8 are attached to this report in a separate folder. All plotted EM data is attached in a second separate folder).

Figure 1. Position of drill-holes, conductors picked from surface and down-hole TEM surveys, superimposed on an image of the First vertical derivative of helicopter magnetics. The shallower southern conductors appear to align E-W along the trend of the magnetic signature. The deeper northern conductor appears to lie on the northern flank of the trend of the magnetic signature. The south-west conductor appears to lie on the northern flank of a subtle south-west extension of the magnetic trend.

Figure 2. Position of drill-holes and conductors picked from surface and down-hole TEM surveys, superimposed on an image of the Second vertical derivative of helicopter magnetics. This provides a higher resolution of the magnetic structures, but is more noisy.

Figure 3. Position of drill-holes and conductors picked from surface and down-hole TEM surveys, superimposed on an image of gradient-array Metal Factor (IP) response. The Metal Factor shows some alignment with the position of shallow EM conductors. It is possible that a weaker WNW-ESE Metal Factor trend on the north side of the main trend, is associated with the surface projection of the deeper conductor.

Figure 4. Position of TEM transmitter loops (red) and position of conductors, picked from detailed study of surface and down-hole EM profiles.
It is recommended that a future TEM surface survey should extend to the east, to trace the deep conductor, and extend west to detail the shallow south-west conductor. The recommended transmitter loop positions are shown in green.

Figure 5. Cross-section through drill-holes A001 and A004, showing the location of the priority drill target (the deep, northern conductor).

Figure 6. Cross-section through drill-holes A003 and A006, showing two alternative possible locations of the priority drill target. A further EM survey is required to resolve this ambiguity.

Figure 7. Hilbert transform of surface TEM data, Loop2 , Z-component, Channel 16. Conductors lie below the maxima (red color) of the transformed data.

Figure 8. Hilbert transform of surface TEM data, Loop2 , Z-component, Channel 24. Conductors lie below the maxima (red color) of the transformed data.

Figure 9 & 10. Example plots of surface TEM data, Loop 2, Z-component, for Line 7700E.
Figure 11. Example plot of surface TEM data, Loop2 , Z-component, for Line 7700E, after editting of doubtful data points, followed by two-dimensional smoothing (a proprietary process implemented only by Flagstaff GeoConsultants). This facilitates interpretation of the location of the deep conductor, and makes possible useful images of the Hilbert transform of the Z-component data, seen in Figures 7 and 8.

APPENDIX 1

Notes on TEM interpretation

The surface data presents a challenge in interpretation, since the three mapped conductors have overlapping signatures. This means that the actual position of conductors (picked from inflections on steepest slopes of Z-component profiles) is subject to some uncertainty. In addition, some of the conductive material lies close to the surface, and presents as a "thick conductor" which further complicates the separation of thick-conductor responses from the broad responses characteristic of deep conductors. Integration of surface and borehole data confirms that deep conductors do exist, and hence exrapolation of the deep conductor, east and west from holes A001 and A003, has been carried out.

The signature of the deep conductor is of low amplitude, and is best seen in plots enhanced by two-dimensional smoothing (after editting out obvious spikes in the data). Figures 9, 10 and 11 show a representative set of plots for Line 7700E, where near-surface conductors are best seen on unsmoothed data, while the deep conductor is most clearly visible on smoothed data (Fig. 11).

The two-dimensional smoothing process (a proprietary product of Flagstaff GeoConsultants) is an essential requirement in order to obtain meaningful images of the Hilbert transform of data near the noise thresh-hold, as in Figures 7 and 8.

Hilbert transformation of fixed-loop Z-component EM data is a process which converts profile slopes (indicative of conductors) into peaks, which can be usefully contoured and imaged. The Hilbert transform is superior to the Fraser filter (an alternative means of producing peaks over conductors), because the Fraser filter is also a high-pass filter which attenuates the signature of deep conductors 9which in this propect happens to be the most important information in the data).

A complete set of profiles, unsmoothed and smoothed, is included in a satchel of loose-leaf plots attached to this report.

APPENDIX 2

ZONGE TIME WINDOWS
TRANSMITTER FREQUECY 4 Hz
(Borehole surveys)

Zonge GDP16 4 Hz
NUMTIMES:31 OFFTIME:50.

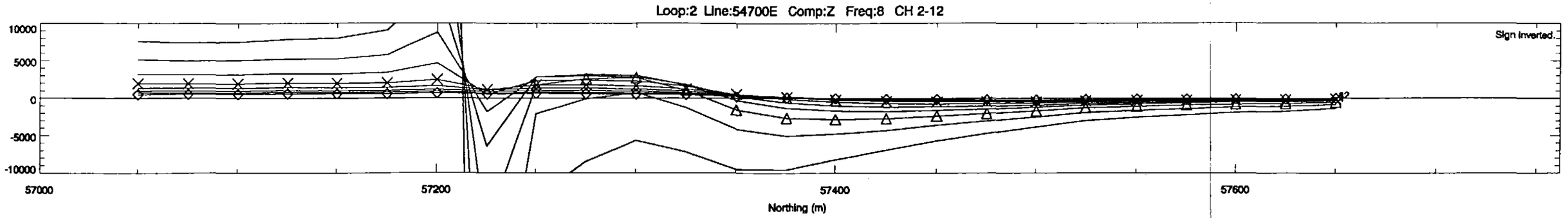
DELAY	WIDTH
.05262	.01
.08314	.01
0.1137	.01
0.1442	.01
0.1747	.01
0.2052	.01
0.2504	.01
0.3116	.01
0.3727	.01
0.4482	.01
0.5399	.01
0.6599	.01
0.8271	.01
1.0249	.01
1.2672	.01
1.5709	.01
1.9633	.01
2.4785	.01
3.1166	.01
3.9047	.01
4.8908	.01
6.1464	.01
7.7398	.01
9.7119	.01
12.196	.01
15.348	.01
19.306	.01
24.291	.01
30.58277	.01
38.46785	.01
48.43391	.01

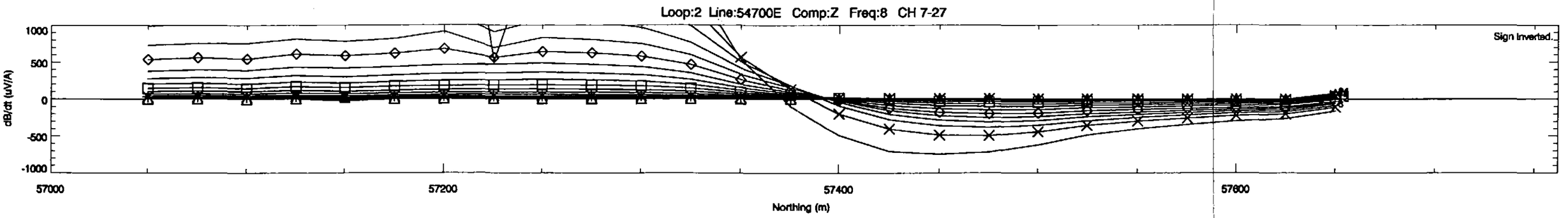
ZONGE TIME WINDOWS
TRANSMITTER FREQUECY 4 Hz
(Surface surveys)

GDP Zonge delay times
NUMTIMES:28

DELAY
0.05262
0.08314
0.11366
0.14418
0.17469
0.20521
0.2504
0.31157
0.37269
0.44818
0.53995
0.65992
0.82707
1.02488
1.26721
1.57085
1.96333
2.47853
3.11656
3.90473
4.89079
6.14637
7.73978
9.71191
12.19578
15.34842
19.30631
24.29111

615318





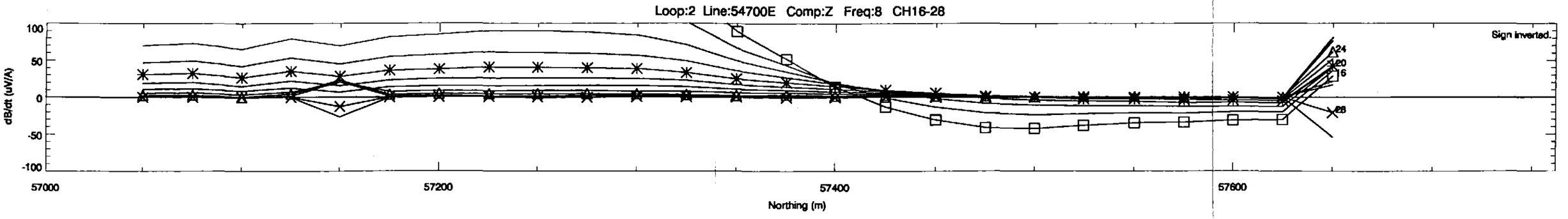
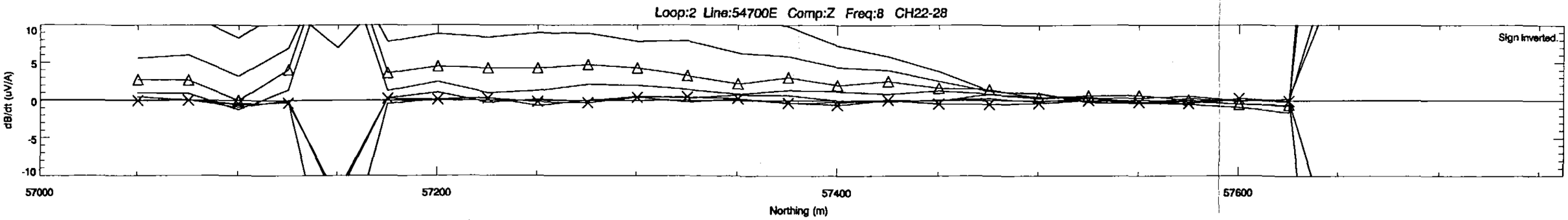
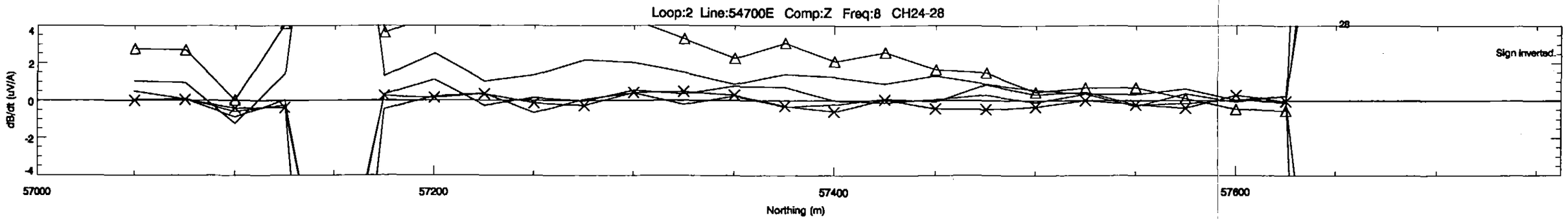


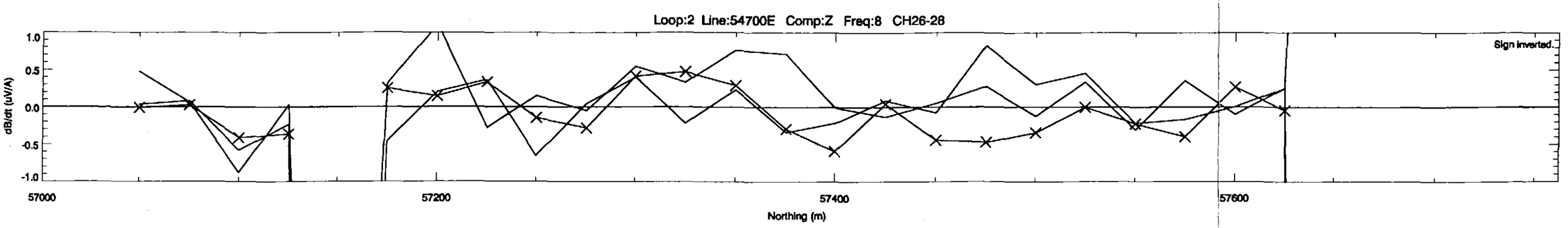
FIGURE 9.

Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS

615319





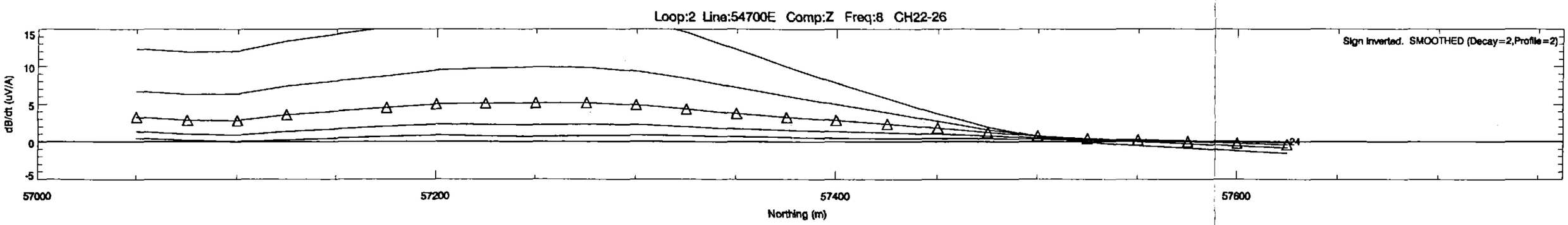


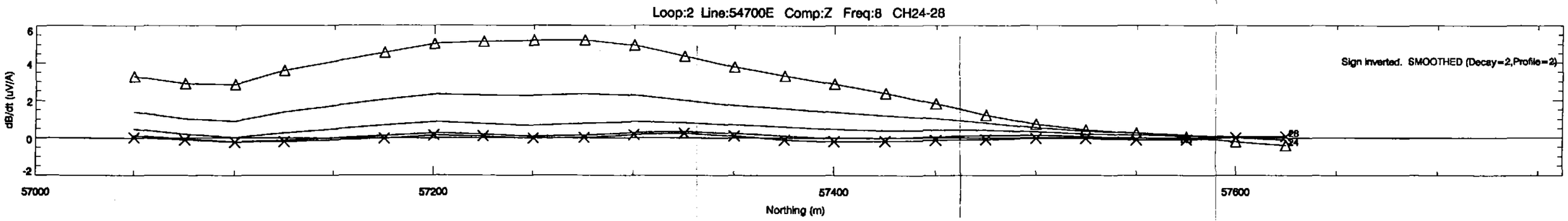
28

FIGURE 10.

Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS

615320





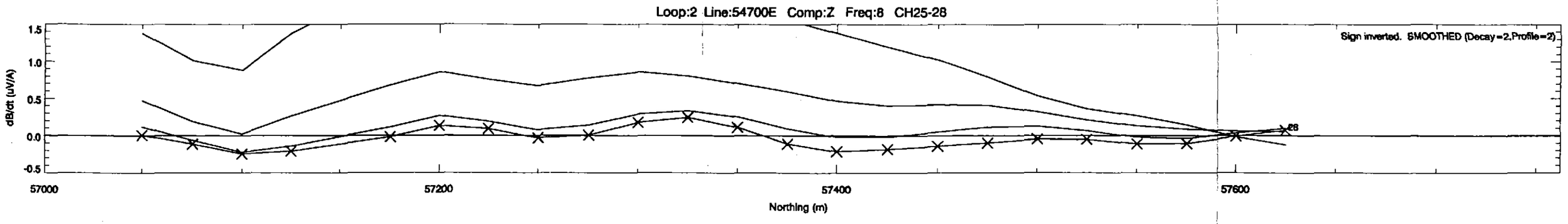


FIGURE 11.

Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS

615321

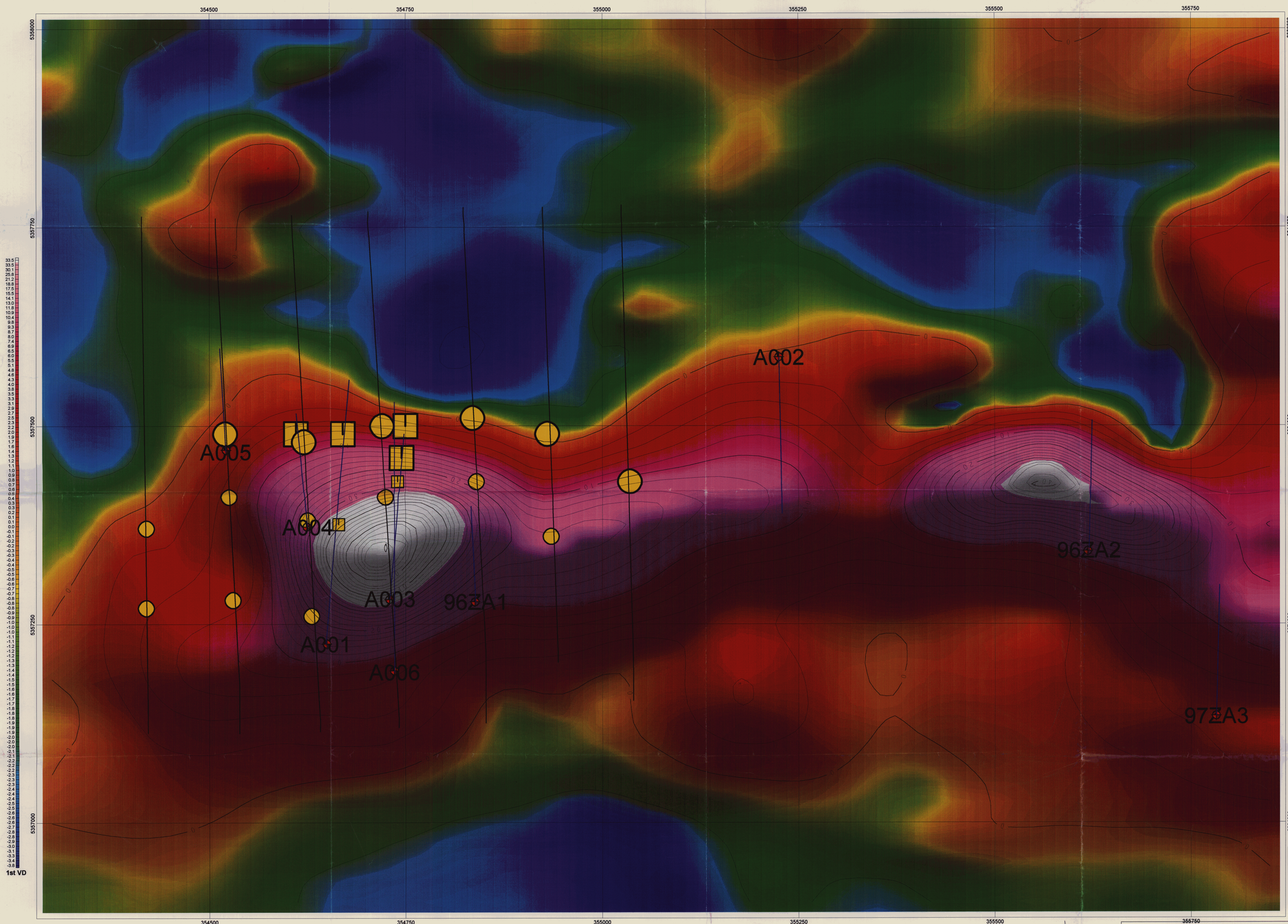
Report for Allegiance Mining NL
AVEBURY PROSPECT, ZEEHAN, TASMANIA
Result of Surface and Borehole EM survey, April 1999

ATTACHMENTS 1 of 2

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

99_4386B

Report for Allegiance Mining NL - Avebury Prospect, Zeehan. - Results of Surface and Borehole EM
Allegiance Mining NL*; Flagstaff Geo-Consultants
Asten, M. EL28/88



Scale 1:2000

25 0 25 50 75 100 125 150

metres

AGD66 / AMG zone 55

ALLEGIANCE MINING NL

AVEBURY PROSPECT, SW TASMANIA
DETAILED HELIMAG SURVEY; UTS 1999

1st VERTICAL DERIVATIVE, REDUCED TO POLE; MESH=13m
CONTOUR INTERVAL=2,10
TEM CONDUCTORS IN YELLOW: SURFACE DEEP=LARGE;
SURFACE SHALLOW=SMALL; DHEM =BOX

FLAGSTAFF GEO-CONSULTANTS (NH); 5/99

FIGURE 1.

5 cm

99_4386B

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Allegiance Mining NL*; Flagstaff Geo-Consultants
Asten, M. EL28/88

615322

354500 354750 355000 355250 355500 355750

5358000 5357750 5357500 5357250 5357000

A005 A004 A003 A001 A006 A002 96ΣA2 96ΣA1 97ΣA3

Scale 1:2000

25 0 25 50 75 100 125 150 metres

AGD84 / AMG zone 55

5 cm

FIGURE 2.

ALLEGIANCE MINING NL

AVEBURY PROSPECT, SW TASMANIA
DETAILED HELI-MAG; UTS 1998

2nd VERTICAL DERIVATIVE, REDUCED TO POLE
SUN FROM NNW
METAL FACTOR (IP) CONTOURS
YELLOW CIRCLES, BOXES= SURFACE, DHEM CONDUCTORS

FLAGSTAFF GEO-CONSULTANTS (NH); 5/99

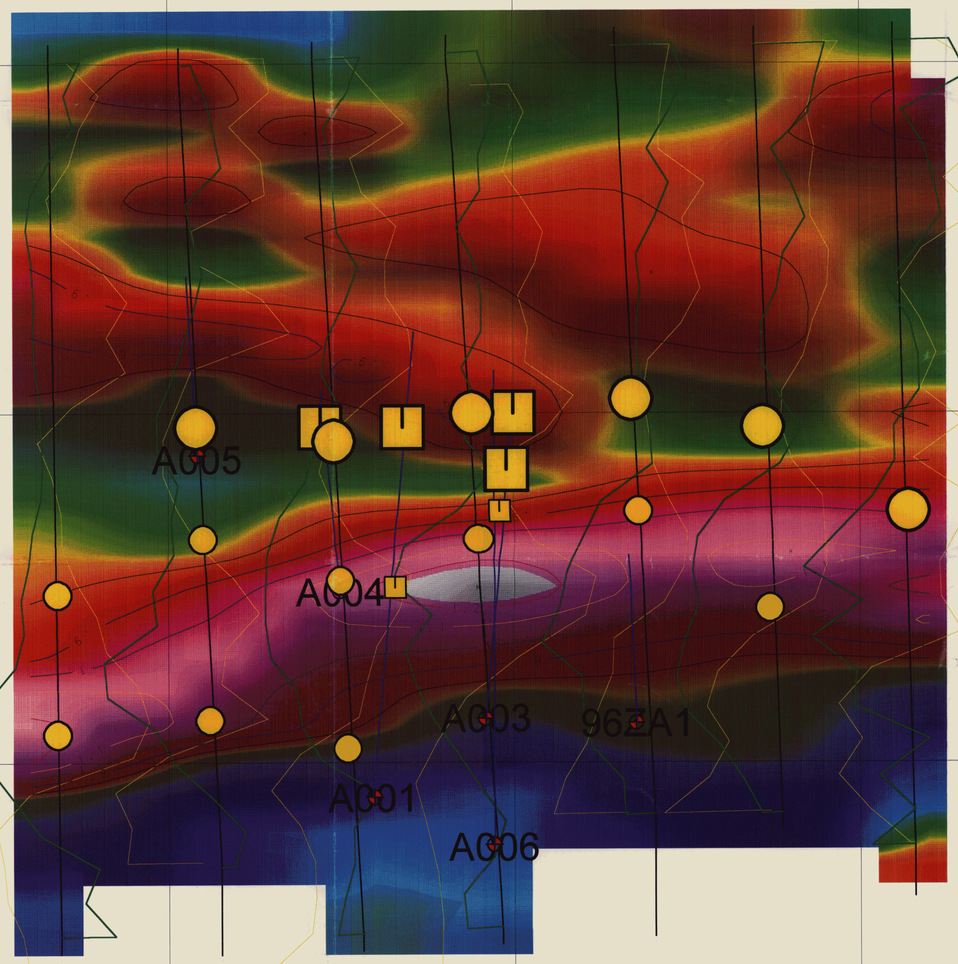
Flagstaff Geo-consultants

99_4386B

615323

354500 354750 355000 355250 355500 355750

5358000 5357750 5357500 5357250 5357000



A002

96ZA2

97ZA3

METAL FACTOR

99_4386B

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Allegiance Mining NL"; Flagstaff Geo-Consultants
Asten, M.W. EL28/88

Flagstaff Geo-consultants

Scale 1:2000

5 cm

25 0 25 50 75 100 125 150
metres
AGD84 / AMG zone 55

FIGURE 3.

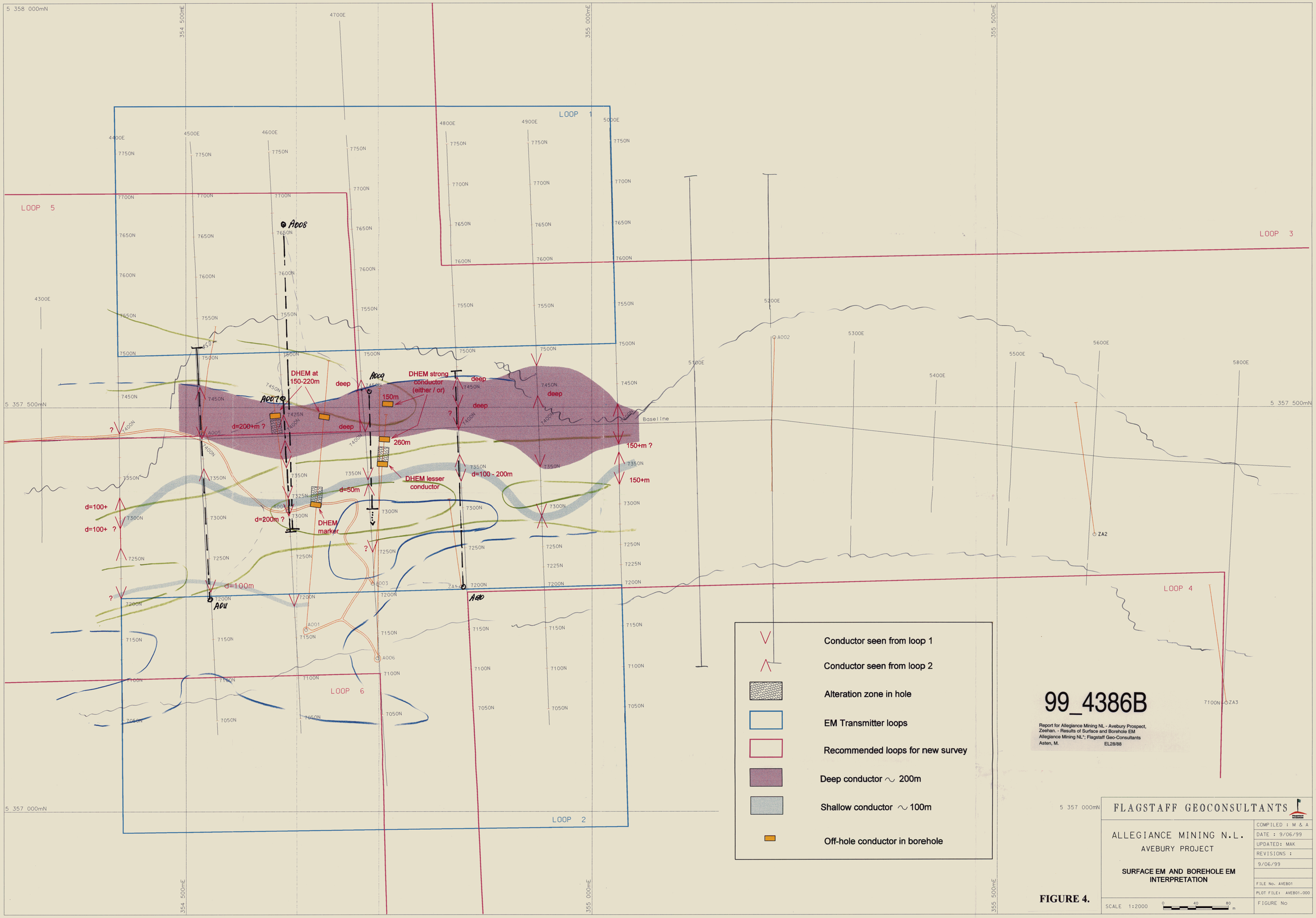
ALLEGIANCE MINING NL

AVEBURY PROSPECT, SW TASMANIA
IP/RESISTIVITY SURVEY; SCINTREX 1999
IMAGE:METAL FACTOR; SUN FROM NORTH; MESH=25m

1ST VERT DERIV MAGNETIC CONTOURS
YELLOW PROFILES:CHARGEABILITY (0.25mv/v per mm; BASE=20mv/v
GREEN PROFILES: APP RESISTIVITY (10*LOG);(0.25ohm-m per mm; base=30
YELLOW CIRCLES, BOXES= SURFACE, DHEM CONDUCTORS

FLAGSTAFF GEO-CONSULTANTS (NH); 5/99

615324



99_4386B

Report for Allegiance Mining NL - Avebury Prospect, Zeehan. - Results of Surface and Borehole EM
Allegiance Mining NL*; Flagstaff Geo-Consultants
Asten, M. EL28/88

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ALLEGIANCE MINING N.L.
AVEBURY PROJECT

SURFACE EM AND BOREHOLE EM INTERPRETATION

COMPILED :	M & A
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UPDATED:	MAK
REVISIONS :	
	9/06/99
FILE No.	AVEB01
PLOT FILE:	AVEB01.000
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FIGURE No	

FIGURE 4.

5 cm

615325

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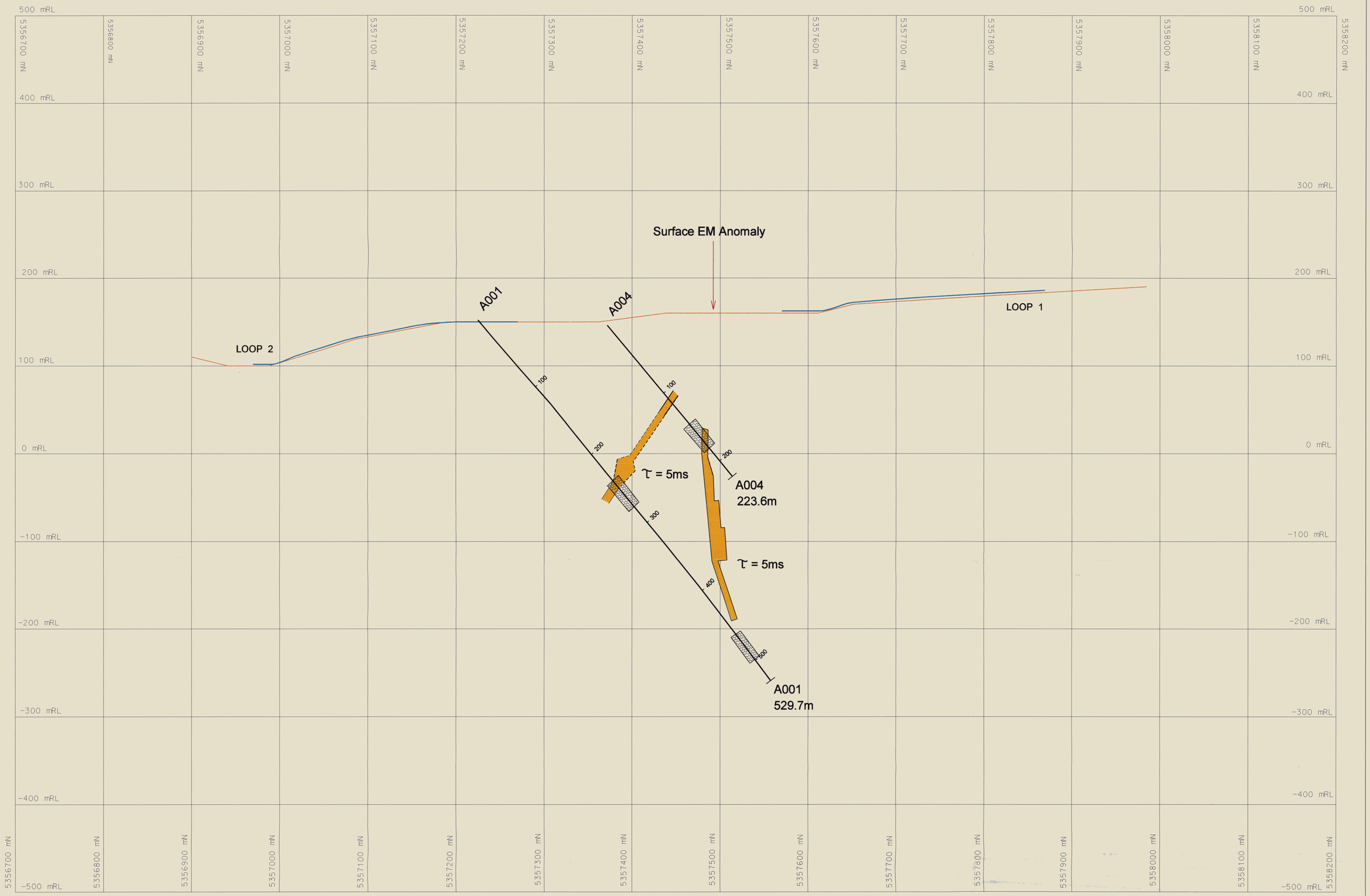

Alteration zone in hole

EM Transmitter loops

Conductor, intersected or off-hole

5 cm

615326

99_4386B

Report for Allegiance Mining NL - Avebury Prospect, Zeehan. - Results of Surface and Borehole EM Allegiance Mining NL"; Flagstaff Geo-Consultants
Asten, M. EL28/88

FIGURE 5.

FLAGSTAFF GEOCONSULTANTS

ALLEGIANCE MINING N.L.
AVEBURY PROJECT

DRILL SECTION
A001 AND A004
LOOKING WEST
WITH INTERPRETATION OF BOREHOLE TEM SURVEYS

COMPILED :	M & A
DATE :	9/06/99
UPDATED:	MAK
REVISIONS :	
	9/06/99
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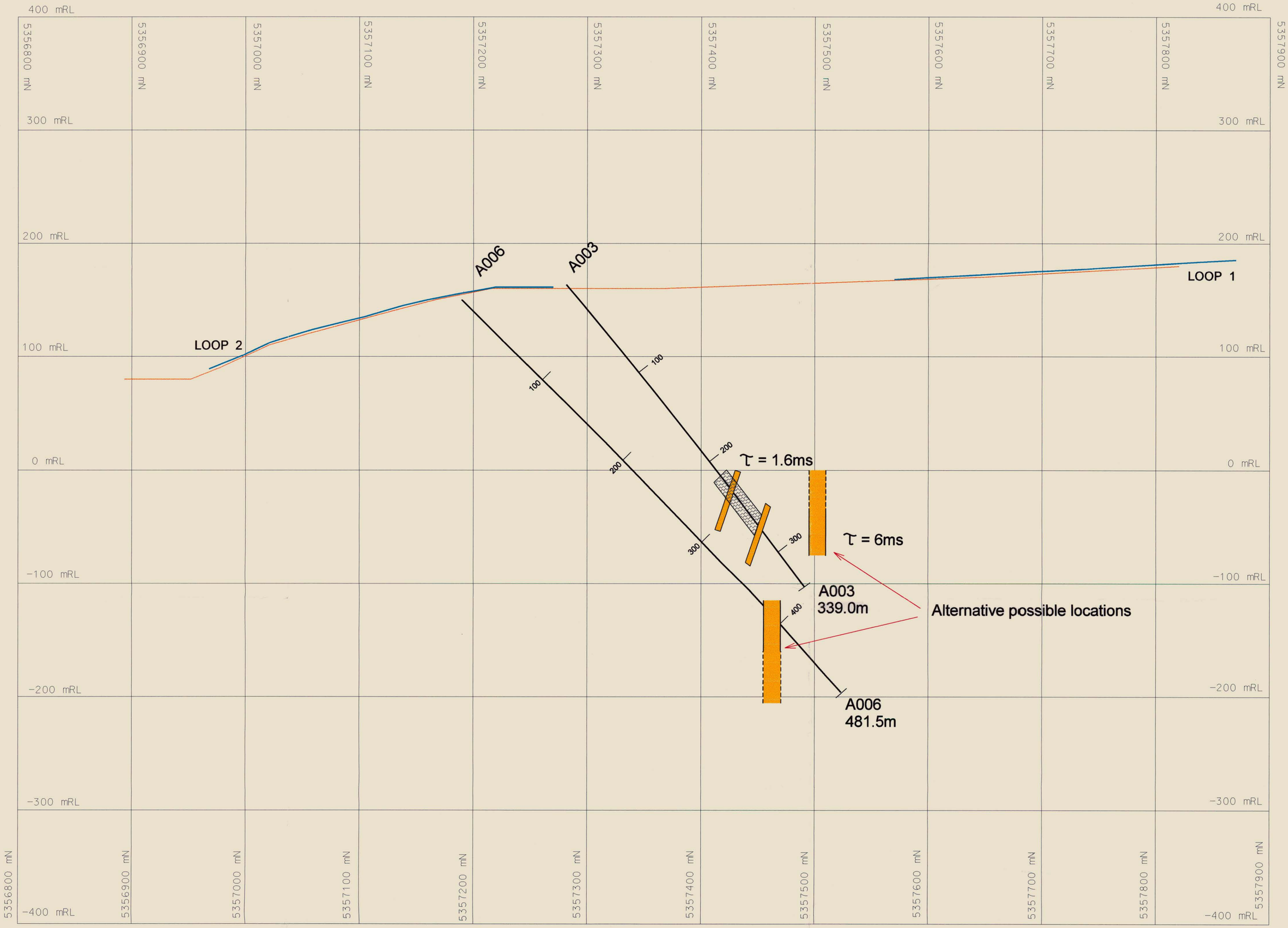

Alteration zone in hole

EM Transmitter loops

Conductor, intersected or off-hole

5 cm

99_4386B

Report for Allegiance Mining NL - Avebury Prospect, Zeehan. - Results of Surface and Borehole EM
Allegiance Mining NL*; Flagstaff Geo-Consultants
Asten, M. EL28/88

615327

FIGURE 6.

FLAGSTAFF GEOCONSULTANTS

ALLEGIANCE MINING N.L.
AVEBURY PROJECT

DRILL SECTION
A003 AND A006
LOOKING WEST
WITH INTERPRETATION OF BOREHOLE TEM SURVEYS

SCALE 1:2000 0 40 80 m

COMPILED :	M & A
DATE :	9/06/99
UPDATED:	MAK
REVISIONS :	
	9/06/99
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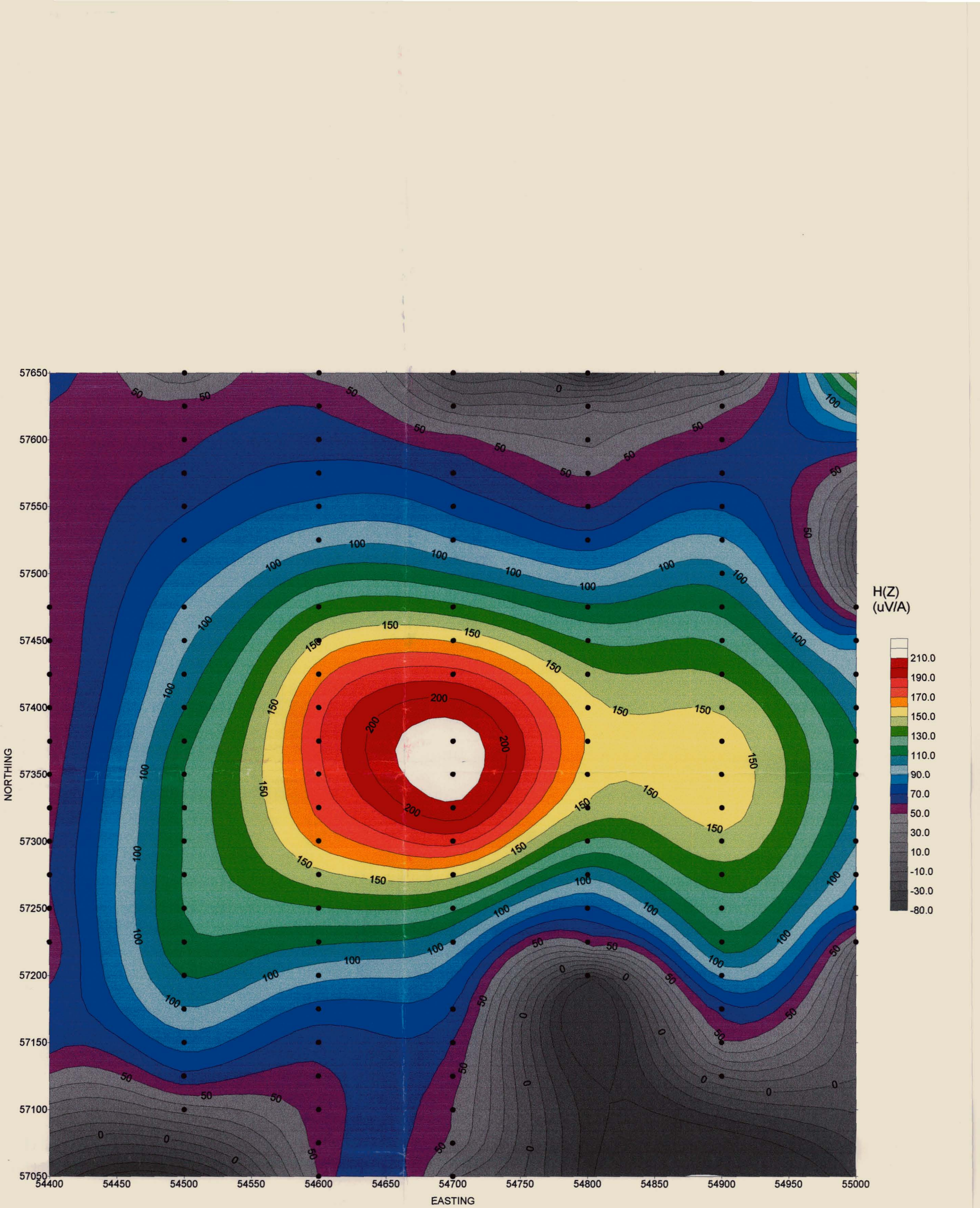

FIGURE 7

5 cm

99_4386B

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Allegiance Mining NL*; Flagstaff Geo-Consultants
Asten, M. EL28/88

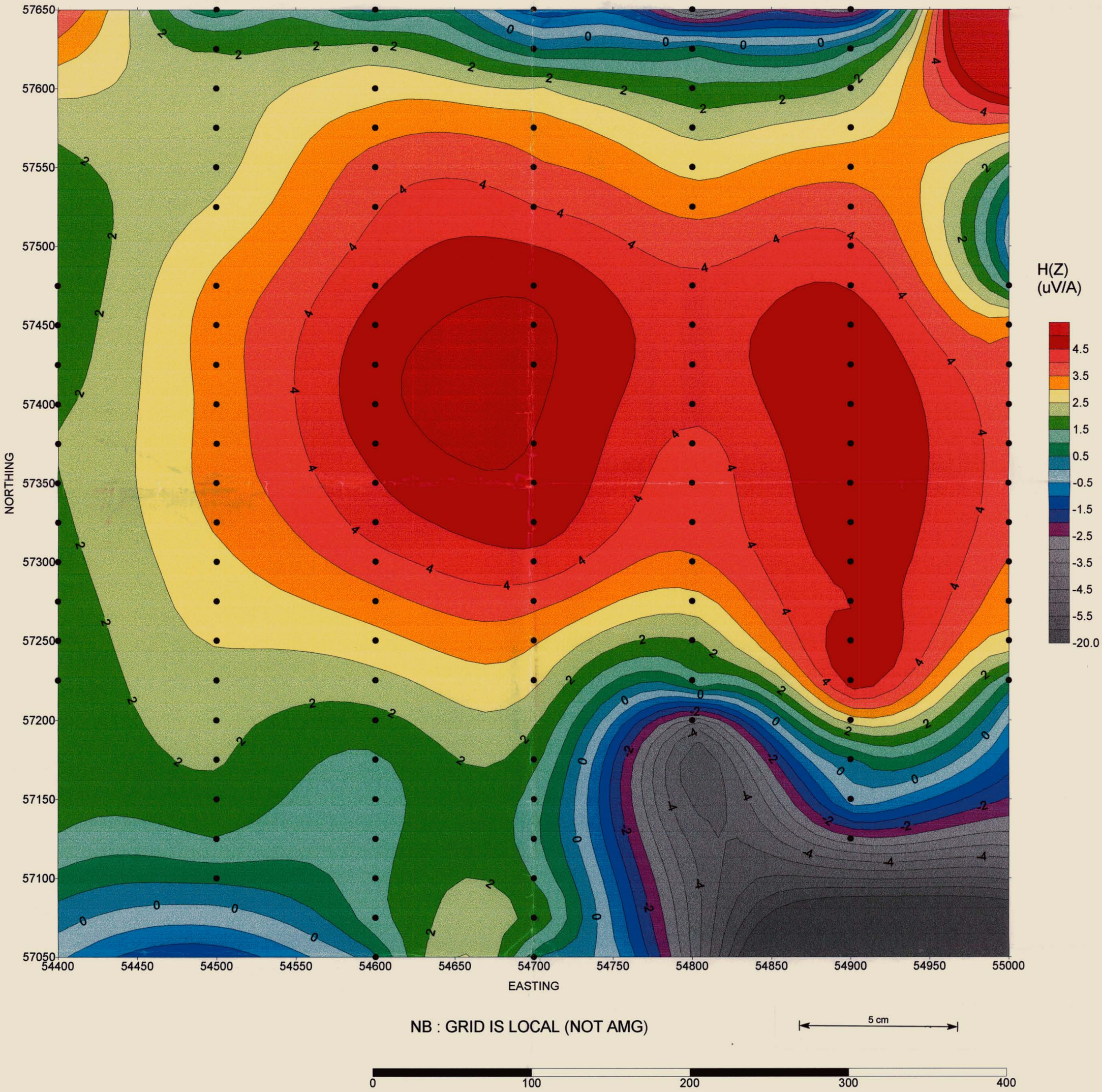
ALLEGIANCE MINING NL

AVEBURY PROSPECT
Hilbert Transform of Loop2 Ch.16 data
(emphasize shallower, conductors).

Drawn by: Flagstaff Geo-Consultants
10/6/99

Flagstaff Geo-consultants

615328



NB : GRID IS LOCAL (NOT AMG)

5 cm

0 100 200 300 400

FIGURE 8

ALLEGIANCE MINING NL

AVEBURY PROSPECT
Hilbert Transform of Loop2 Ch.24 data
(emphasize deep, best conductors).

Drawn by: Flagstaff Geo-Consultants
10/6/99

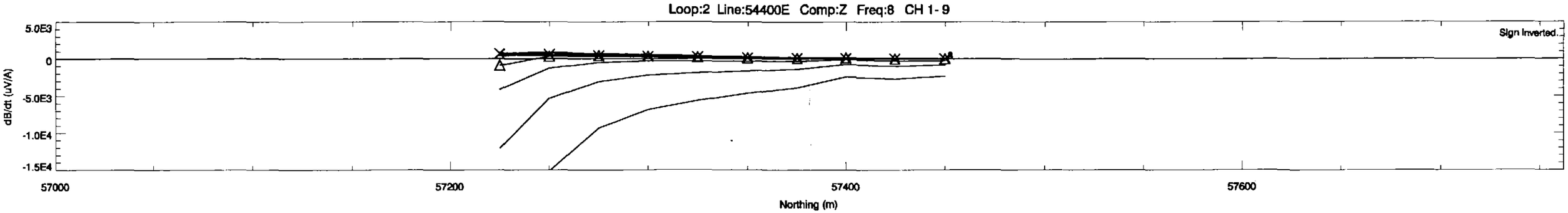
Flagstaff Geo-consultants

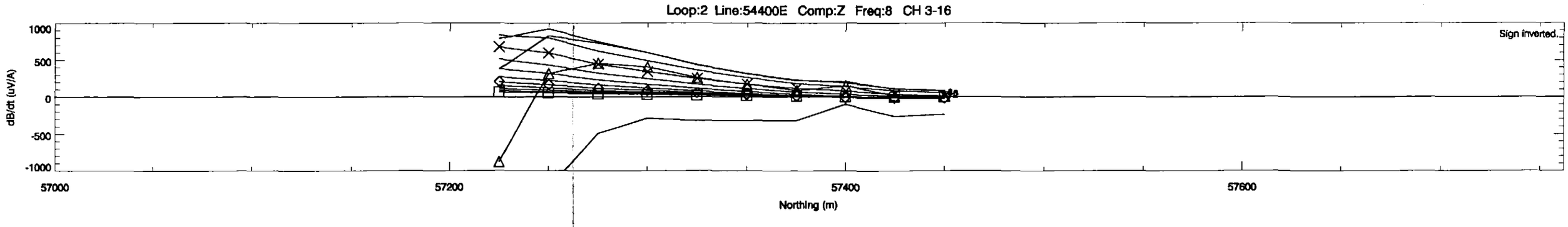
615329

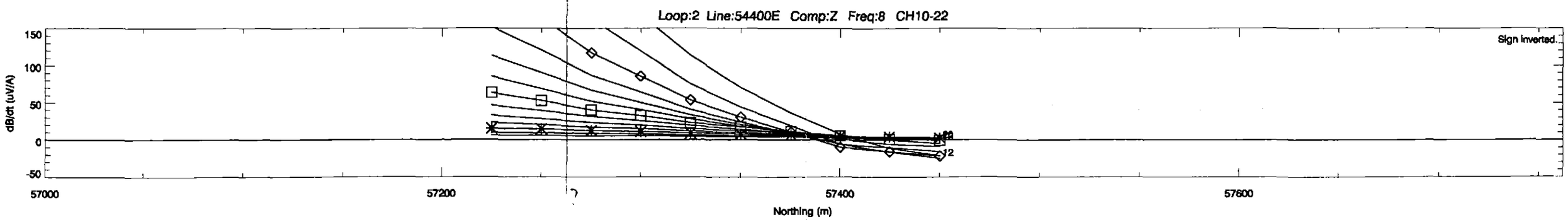
Report for Allegiance Mining NL
AVEBURY PROSPECT, ZEEHAN, TASMANIA
Result of Surface and Borehole EM survey, April 1999

ATTACHMENTS 2 of 2

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

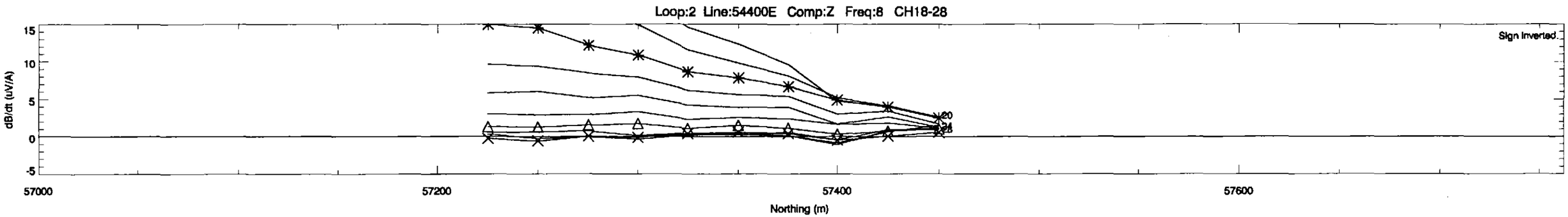


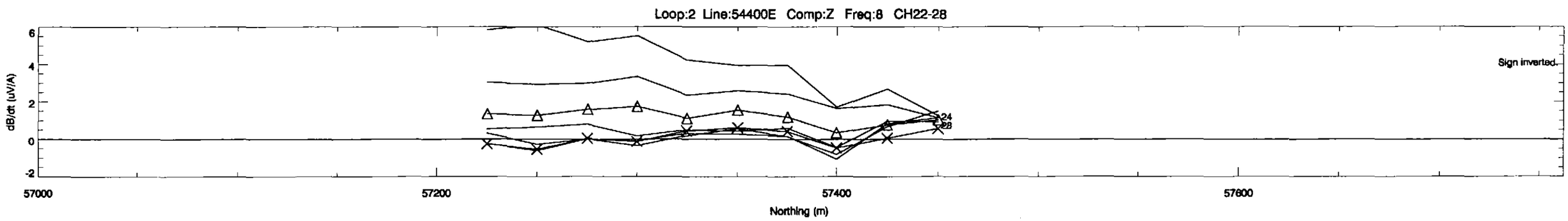


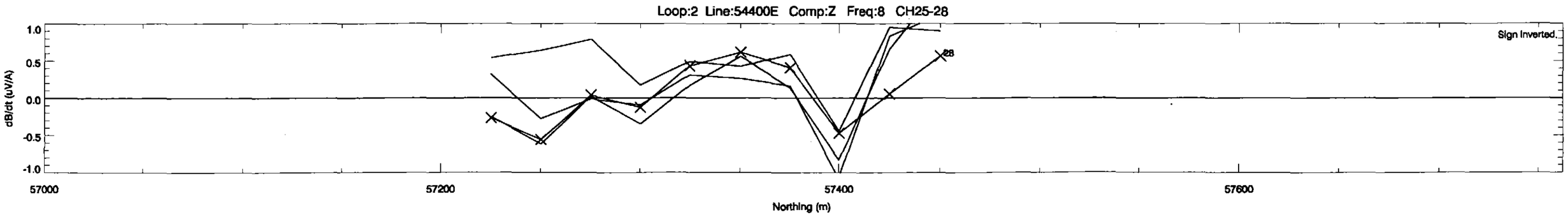


615331

Allegiance Mining NL	
Avebury - Zeehan Tasmania Fixed-loop TEM Survey : April 1999 Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	

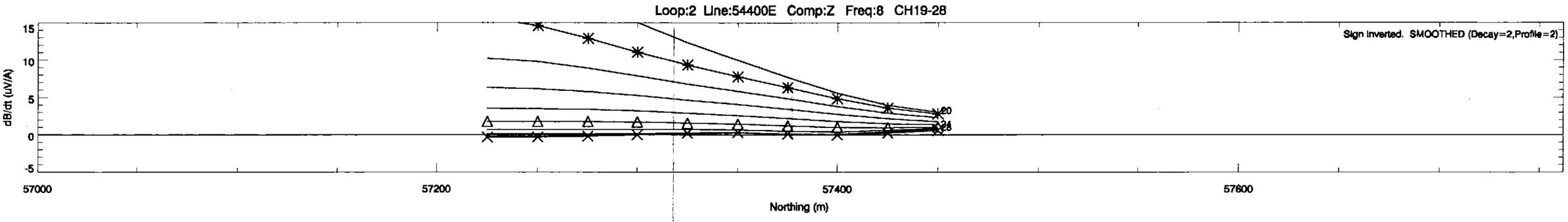


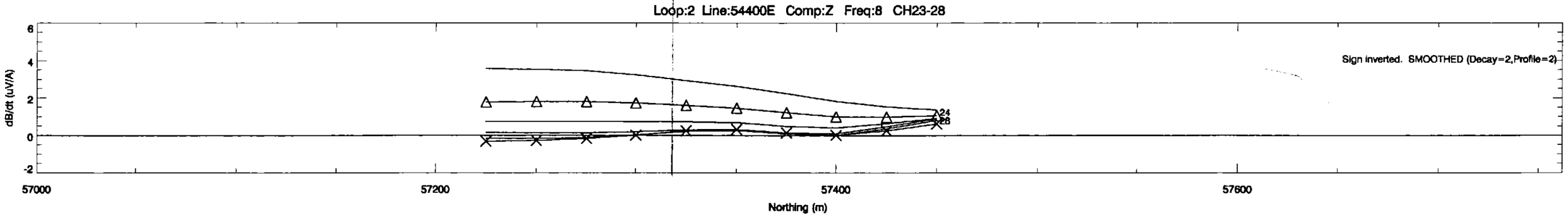


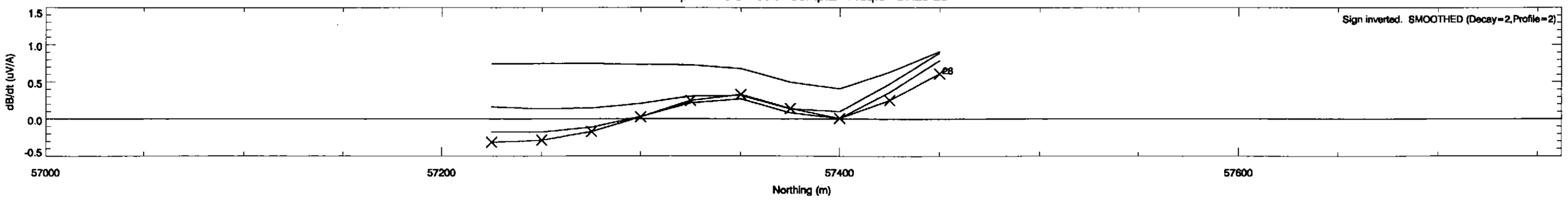


615332

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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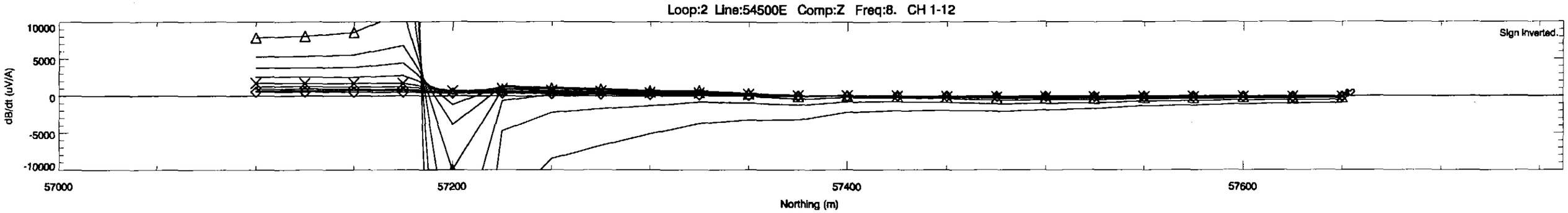
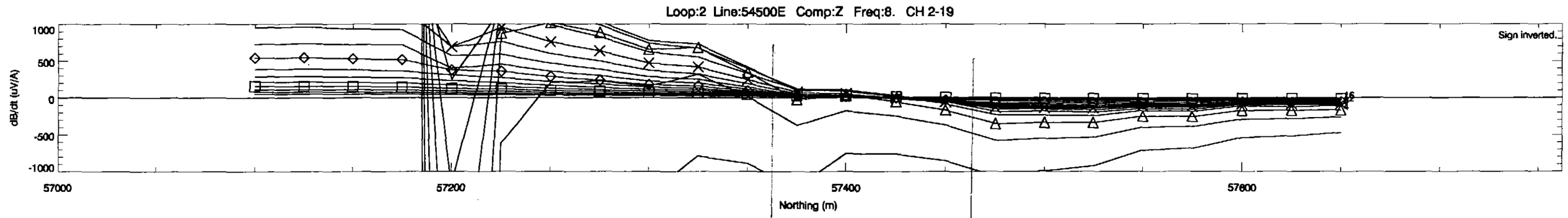
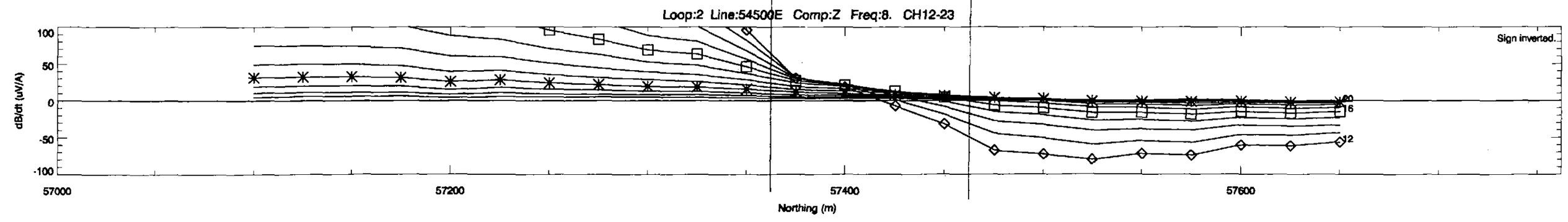
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

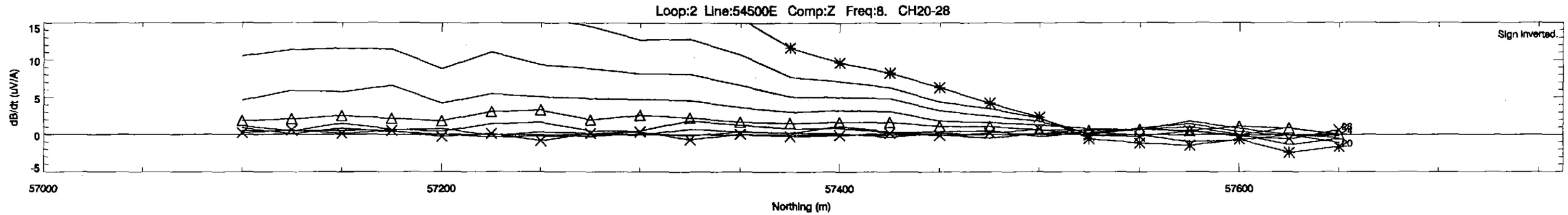


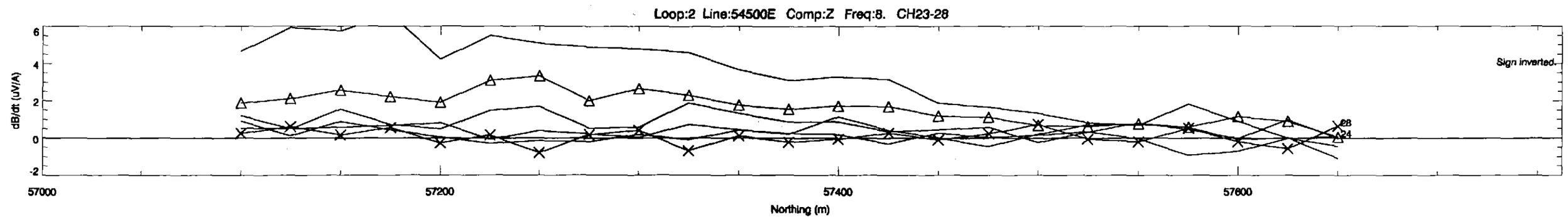


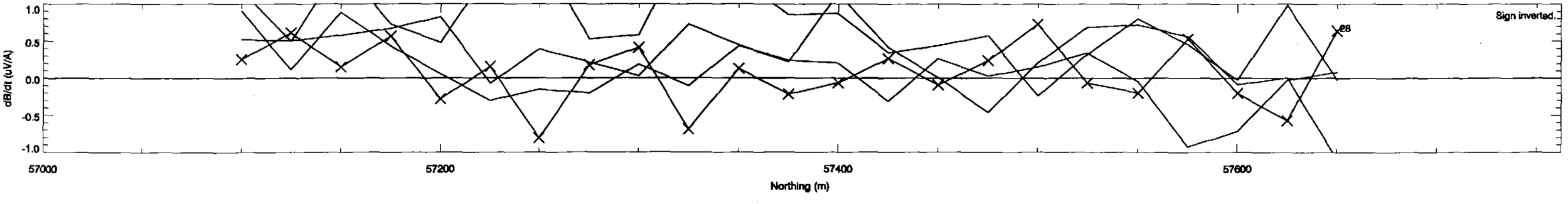


615334

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

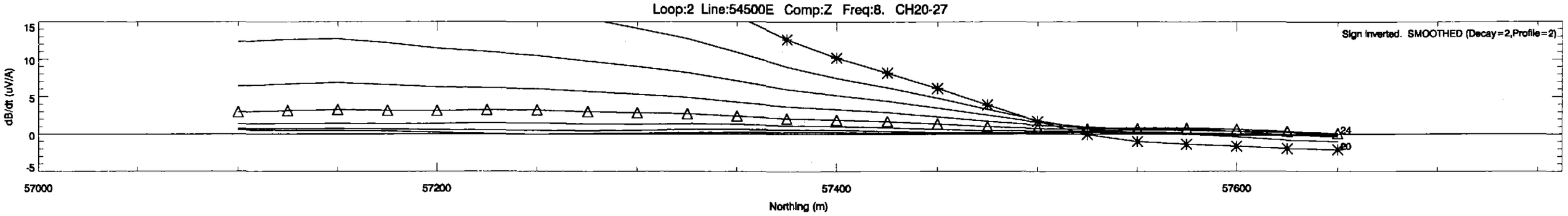


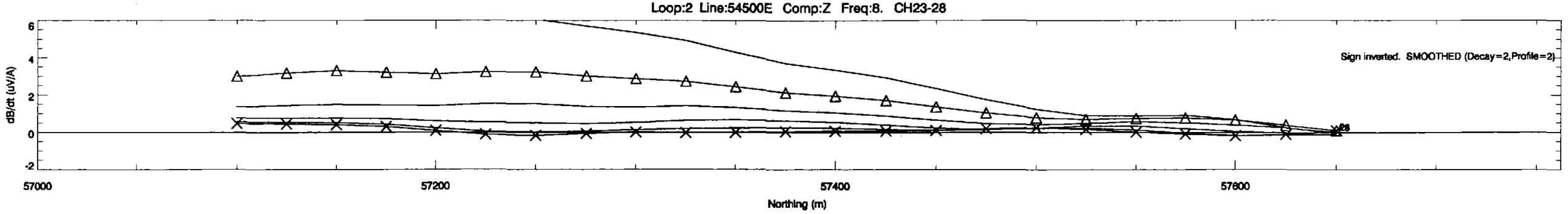


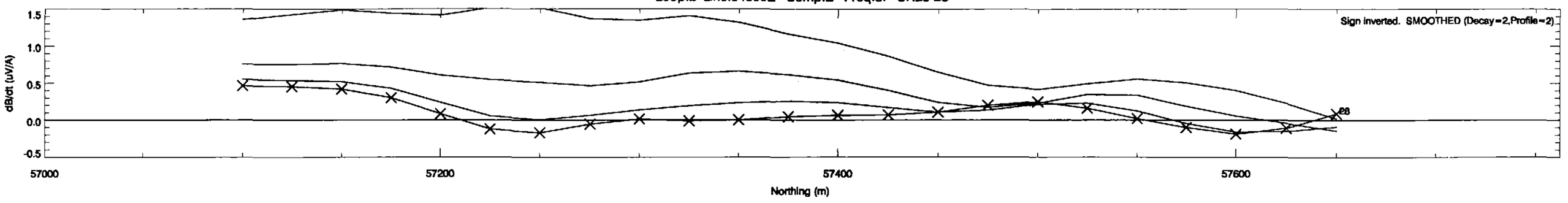


615335

Allegiance Mining NL	
Avebury - Zeehan Tasmania Fixed-loop TEM Survey : April 1999 Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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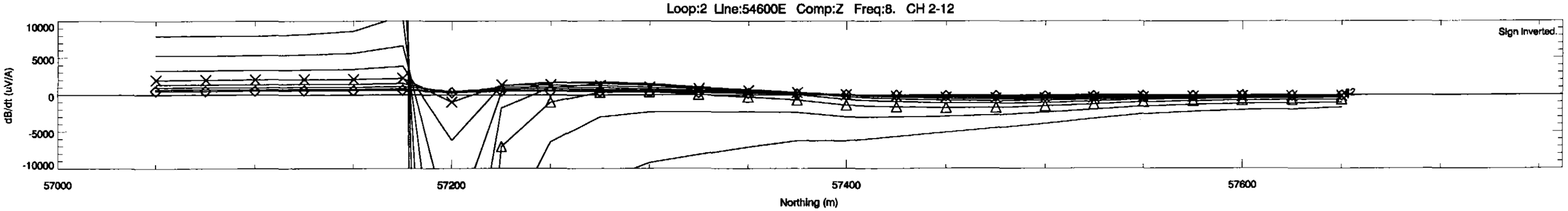
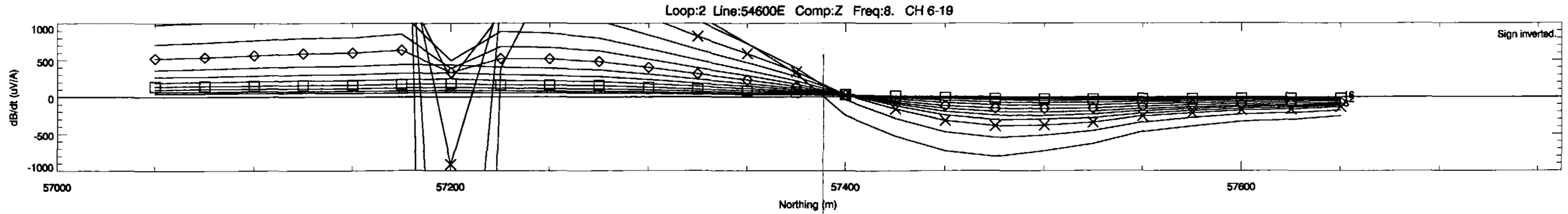
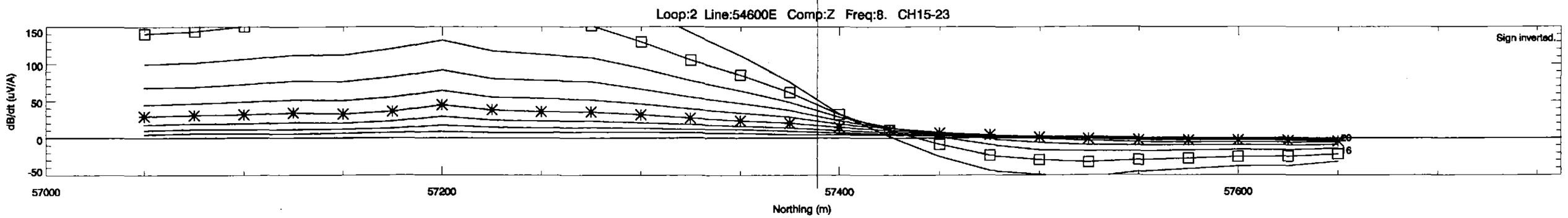
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 28/ 5/1999	

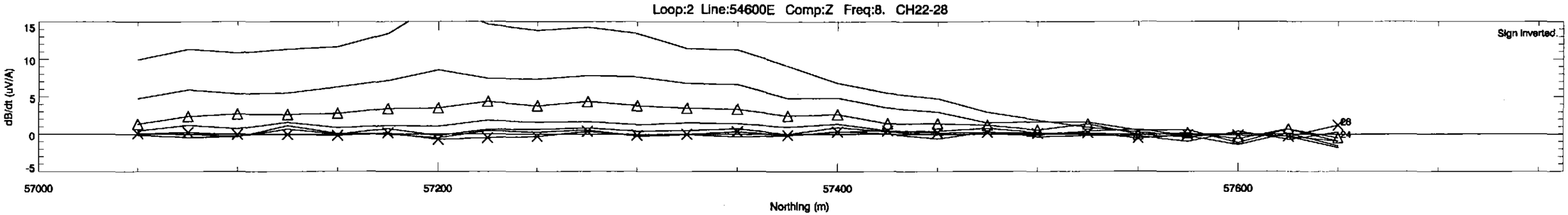


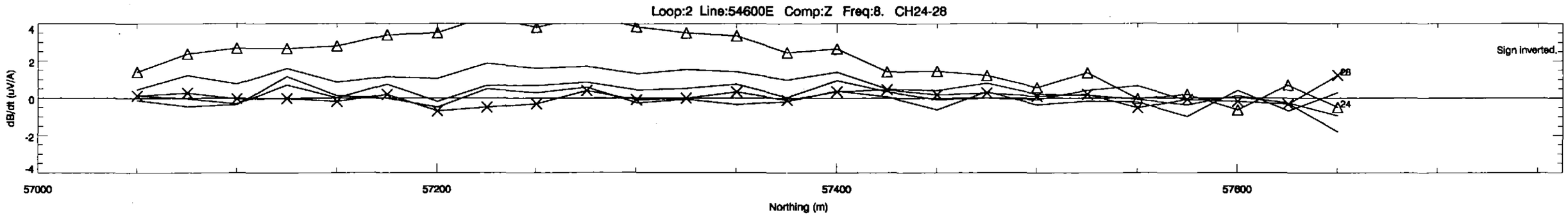


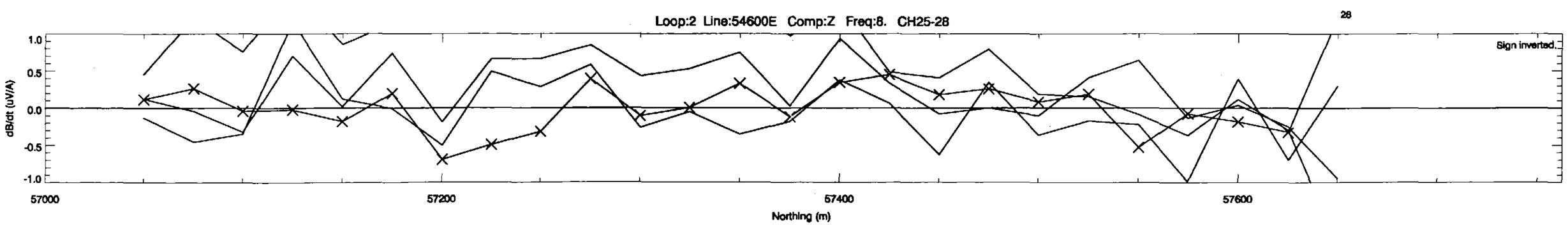


615337

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

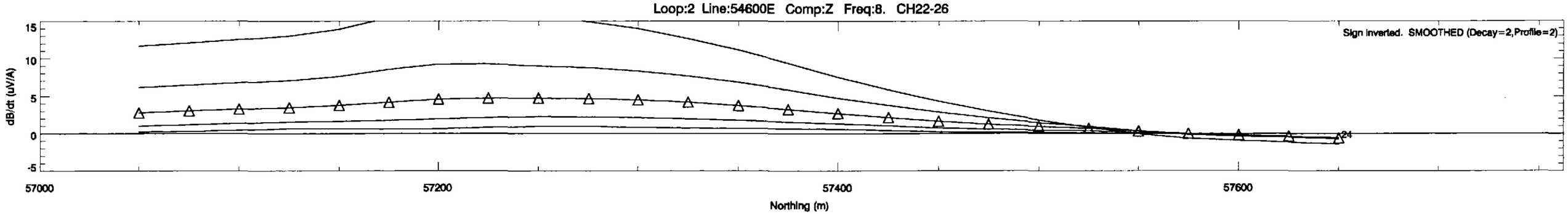


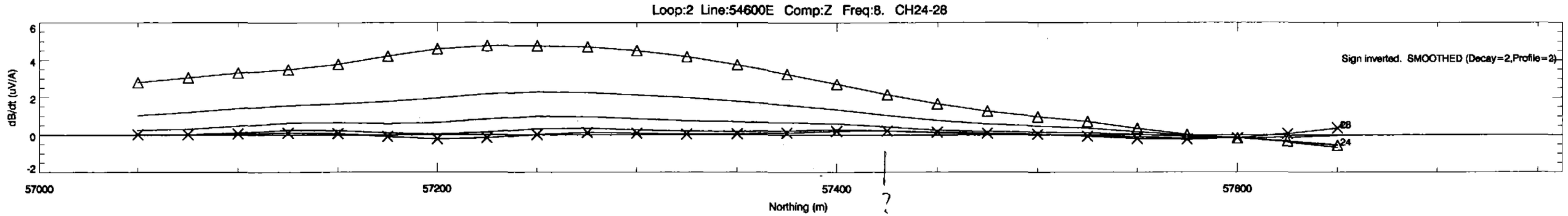


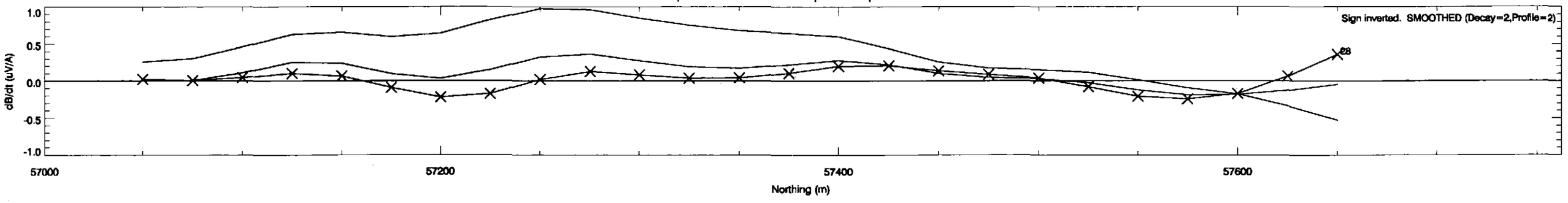


615338

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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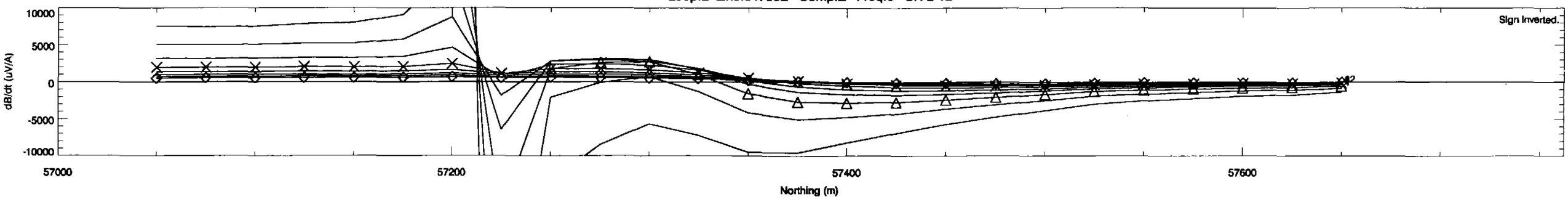
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

Loop:2 Line:54700E Comp:Z Freq:8 CH 2-12



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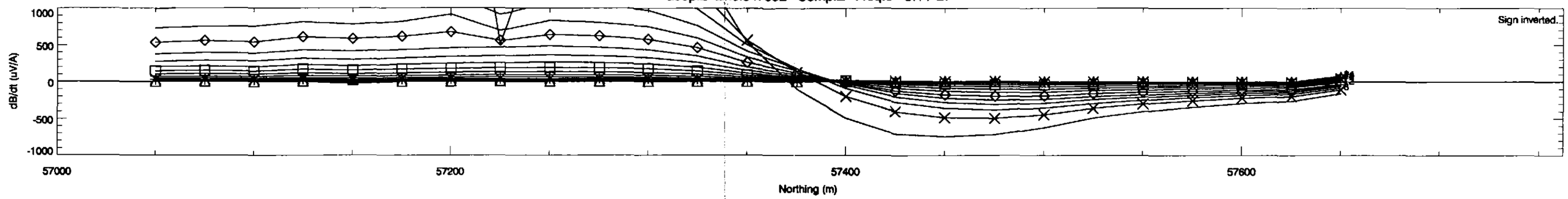

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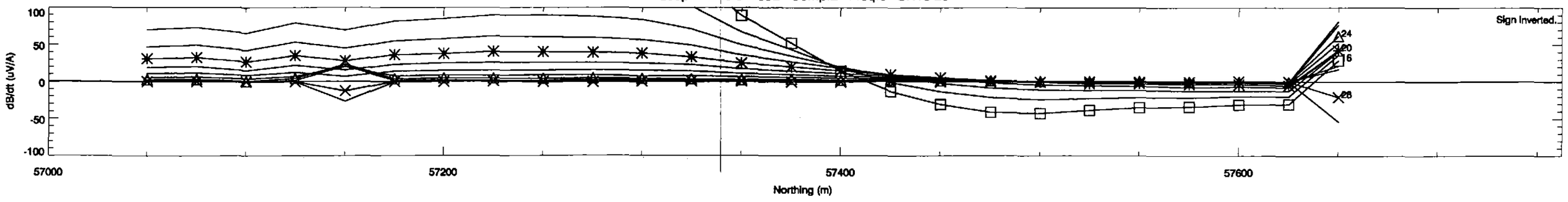

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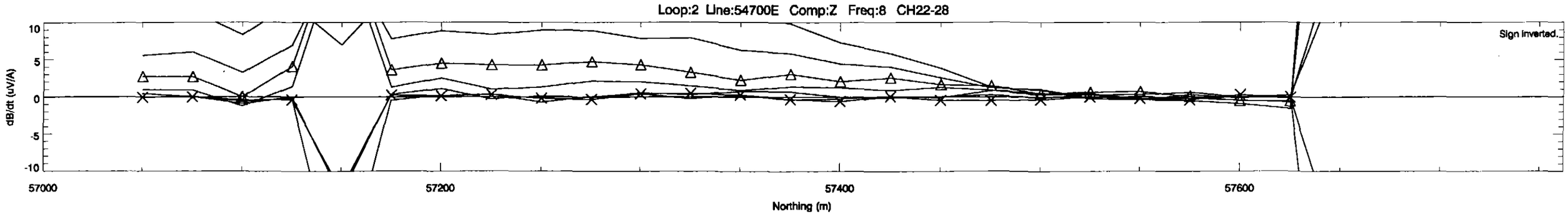
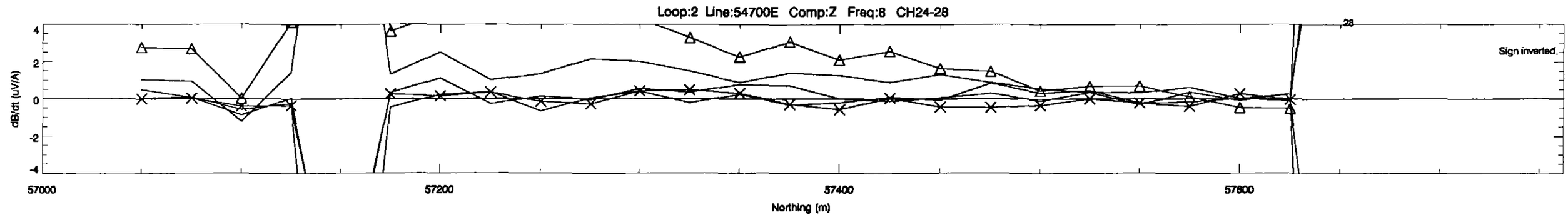
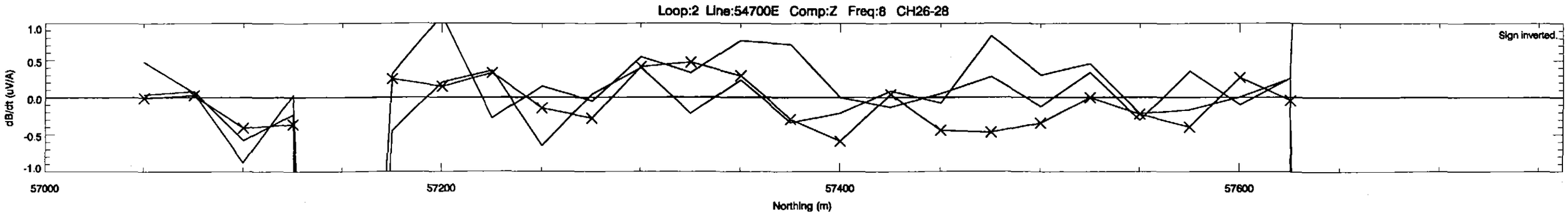
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 28/ 5/1999	



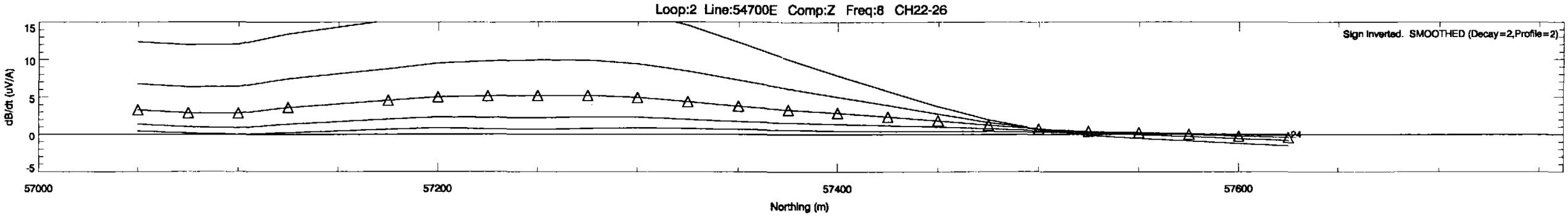


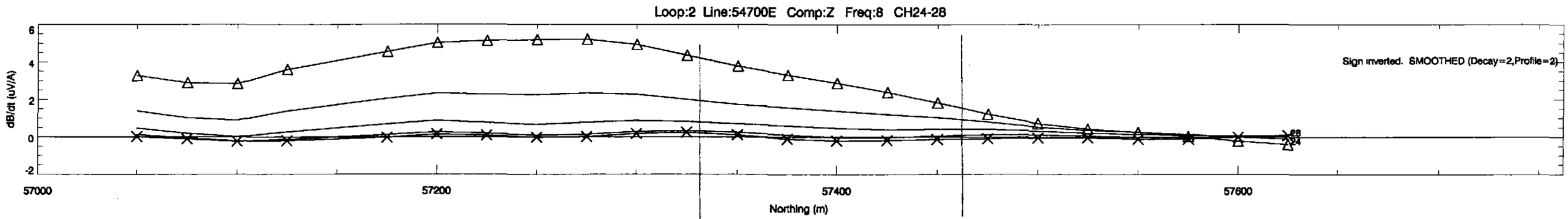


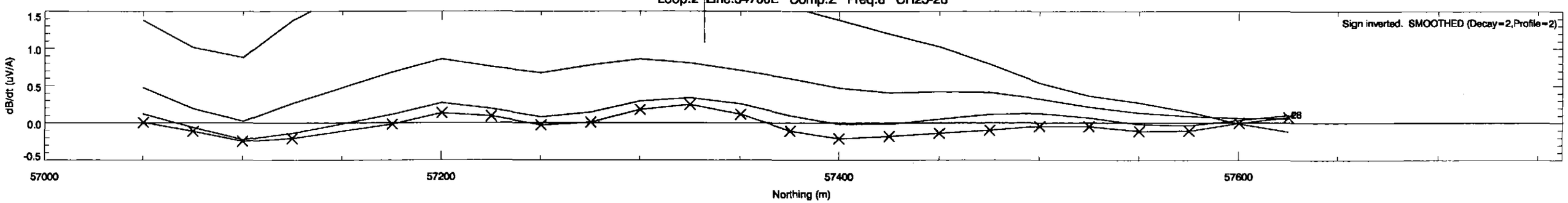
615341 28

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	

Drawn 26/ 5/1999







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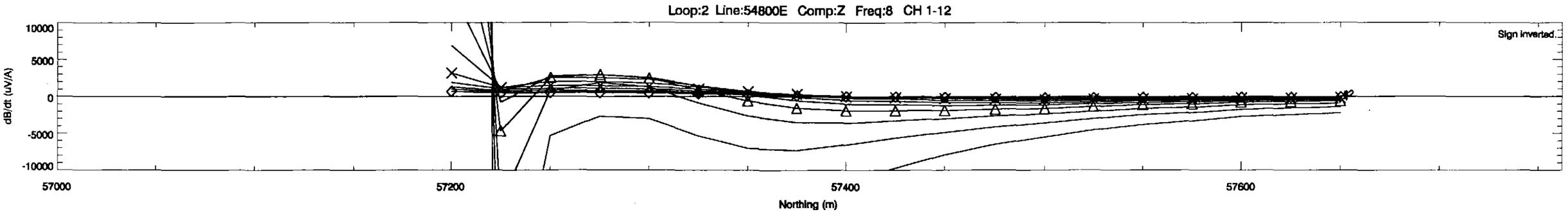
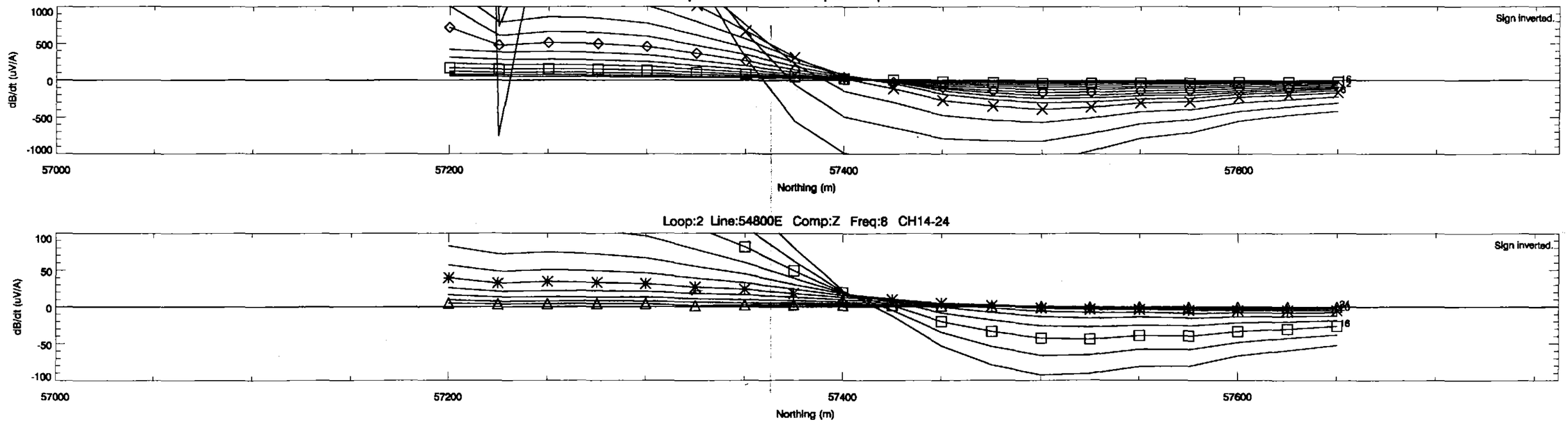
Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS

Drawn 26/ 5/1999





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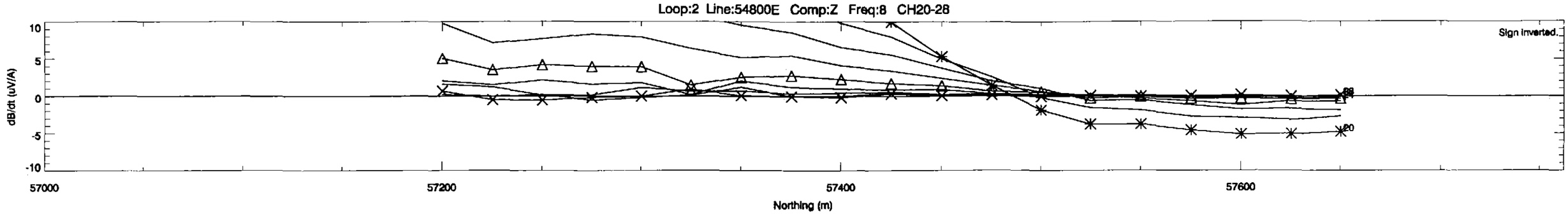
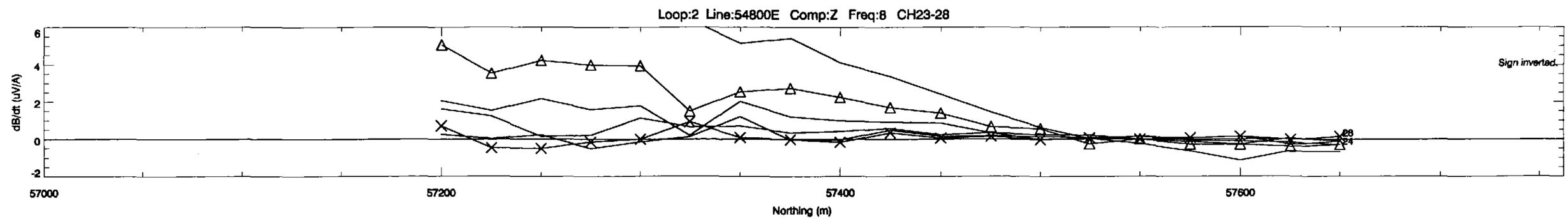
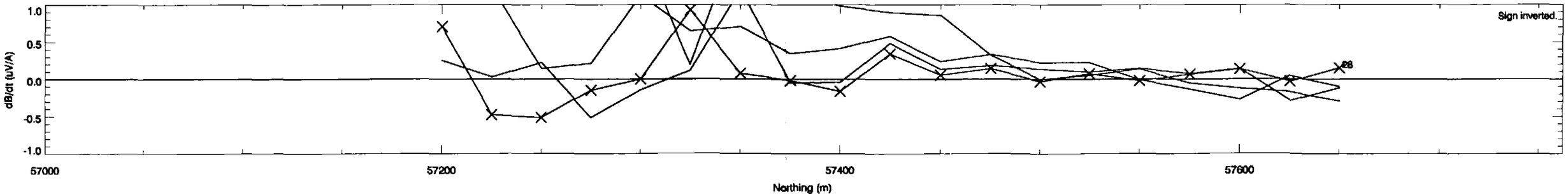
Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS
Drawn 26/ 5/1999







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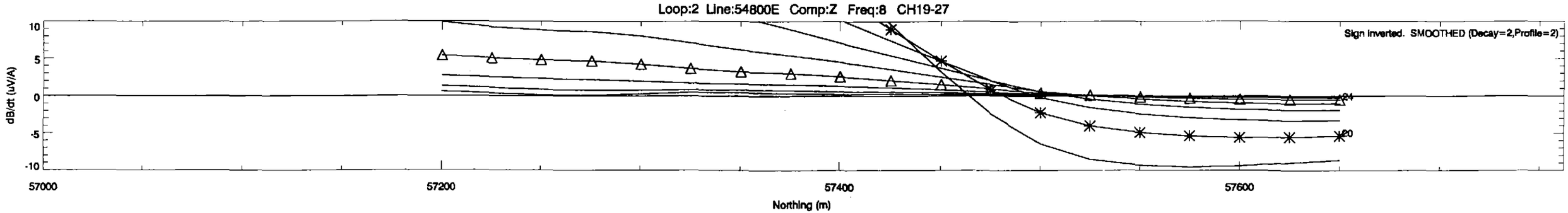
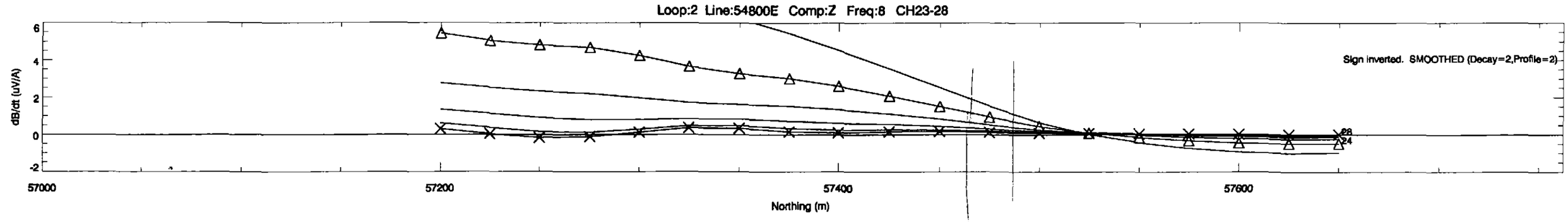
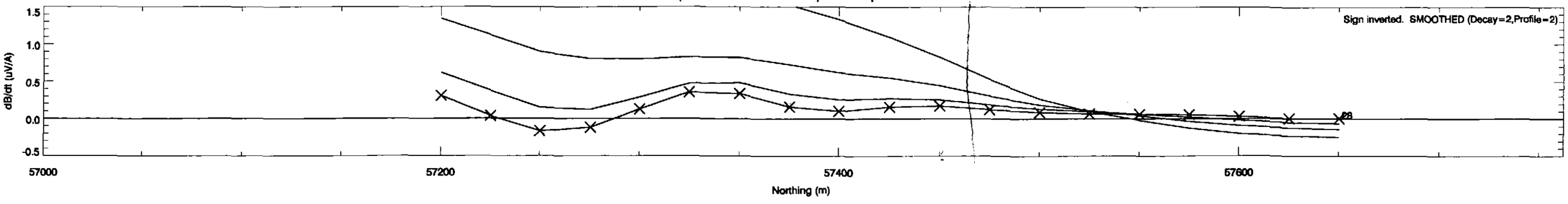
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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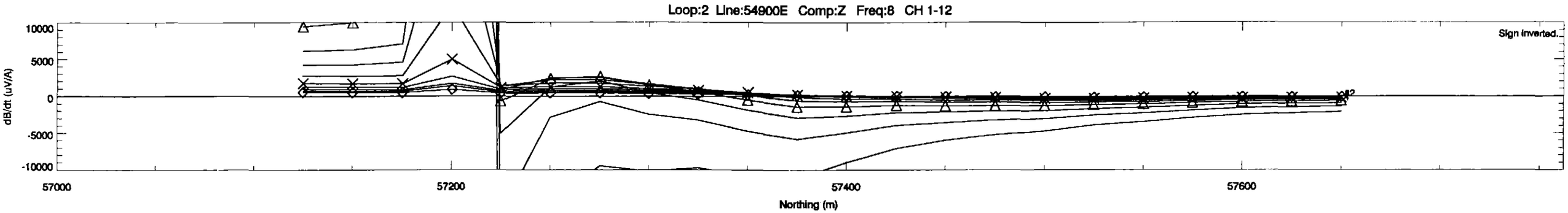
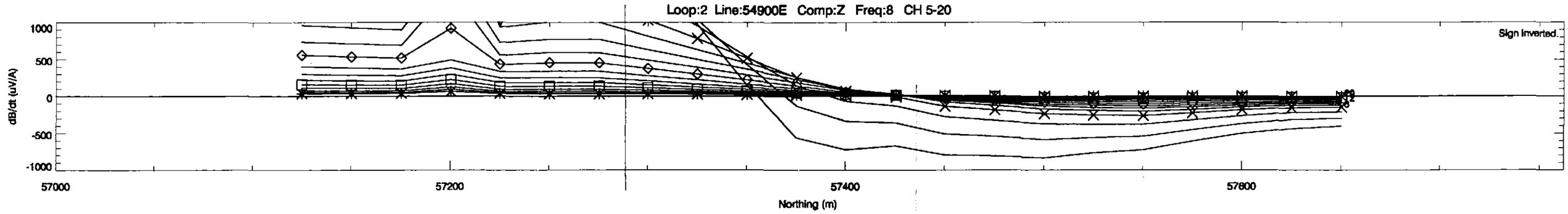
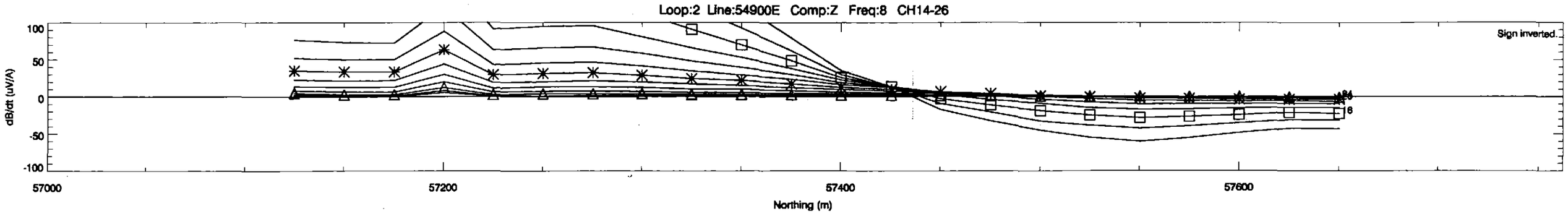
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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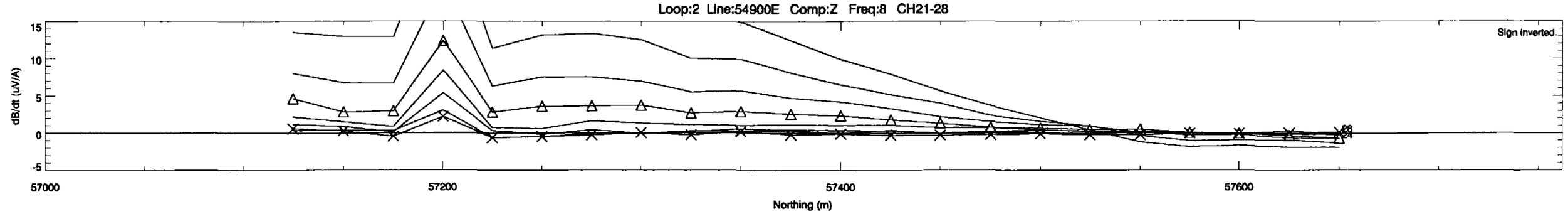
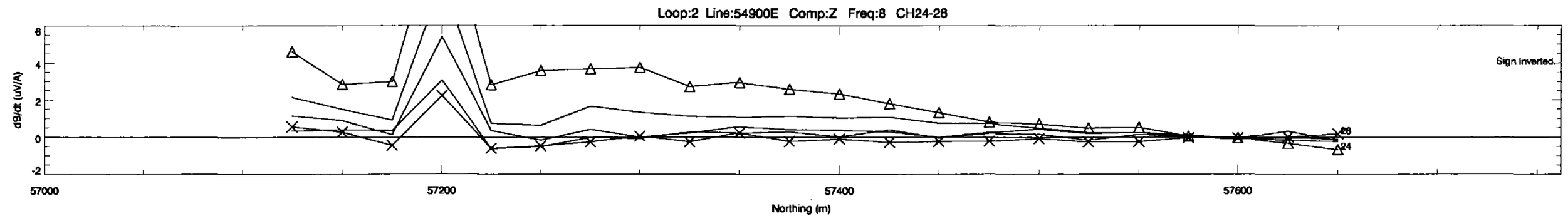
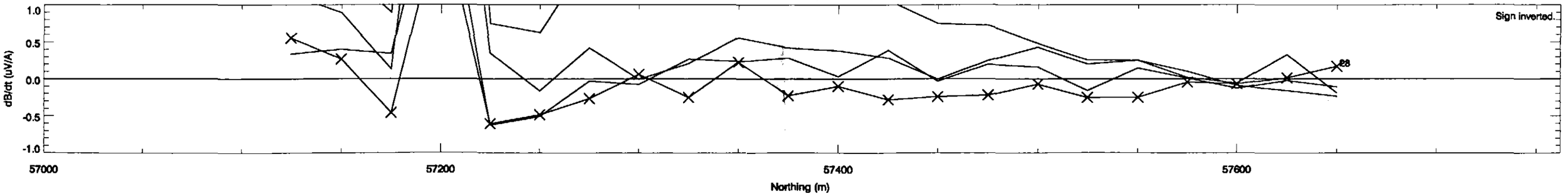
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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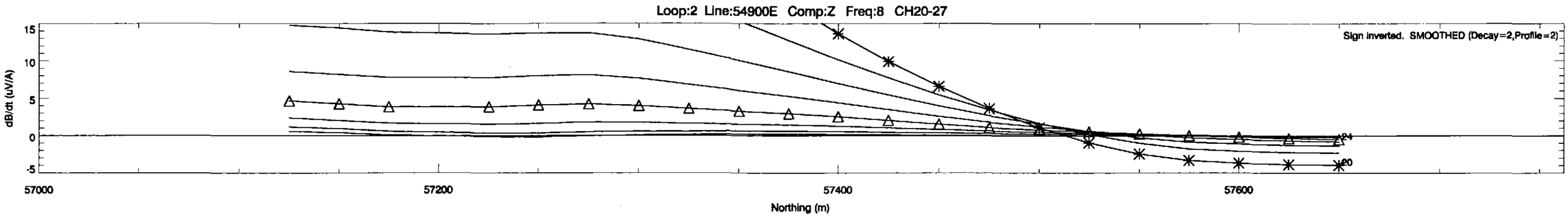
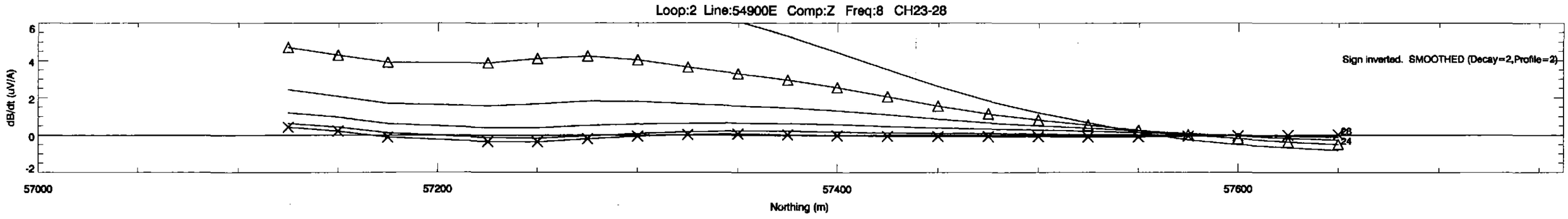
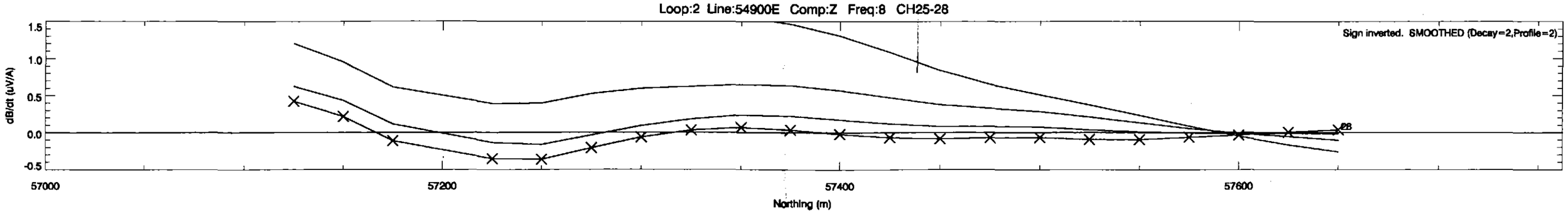
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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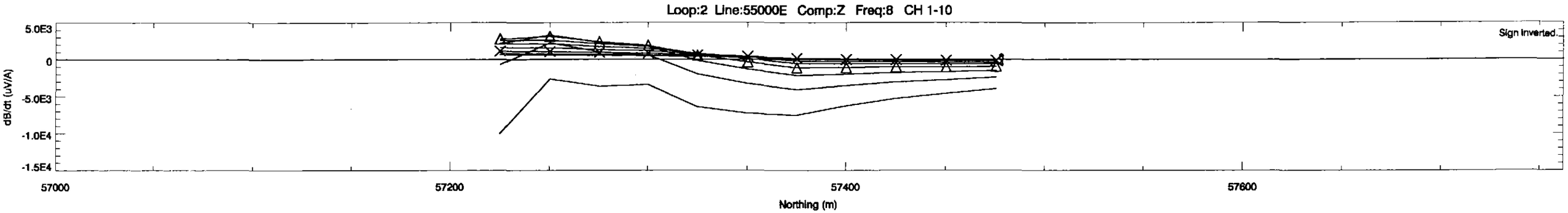
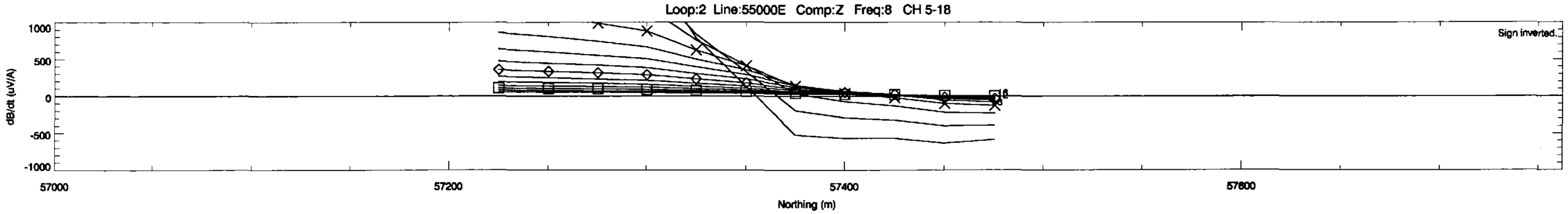
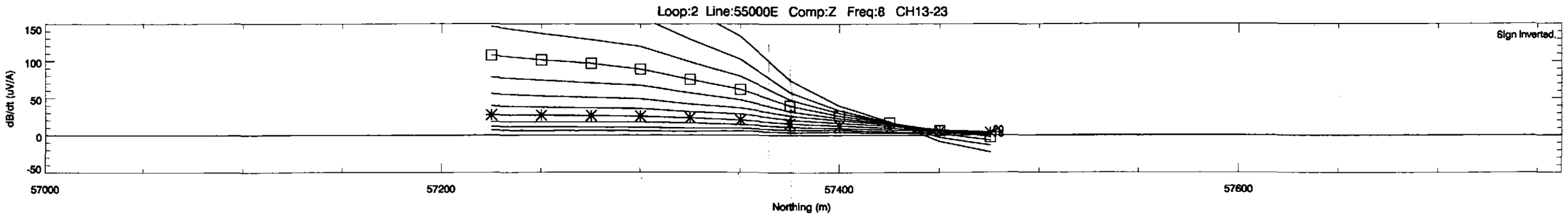
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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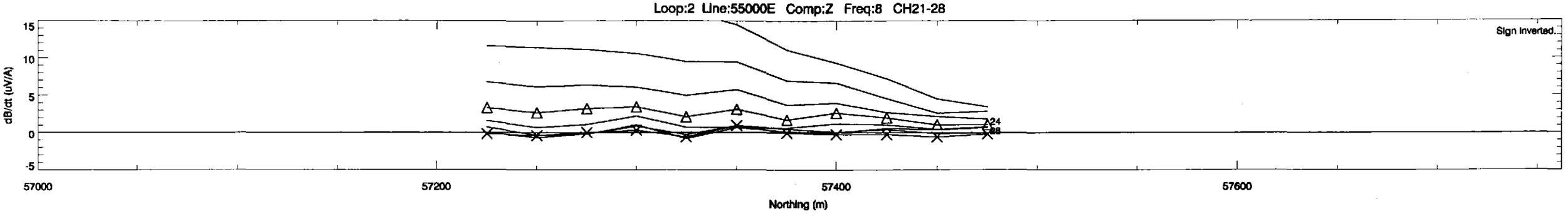
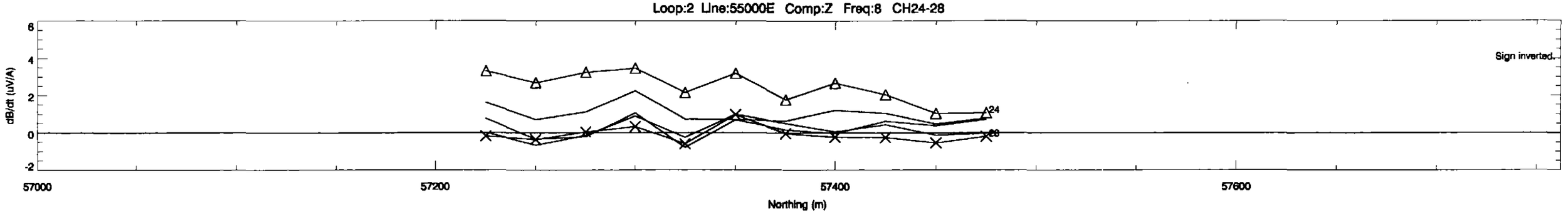
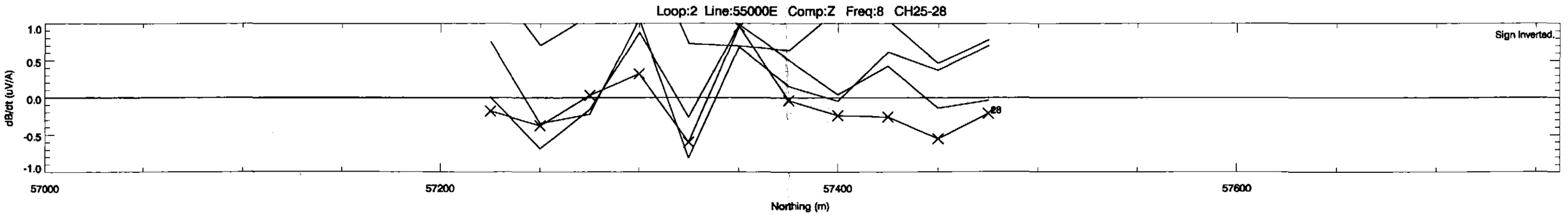
Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999

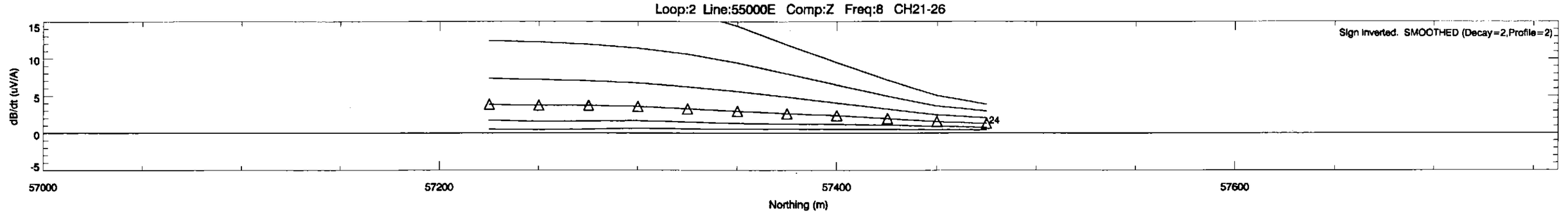


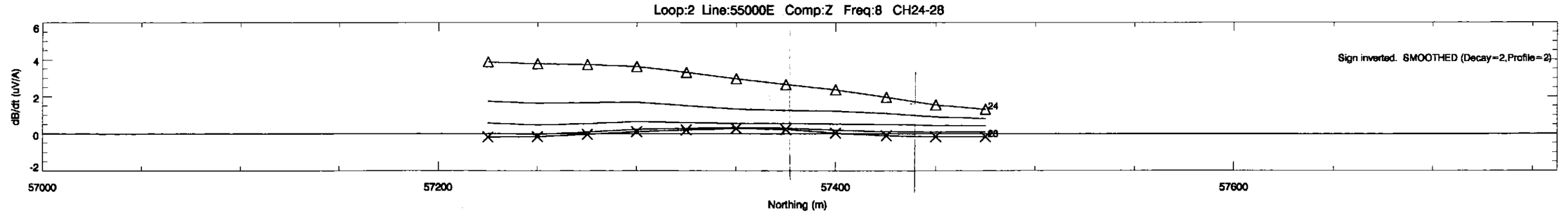


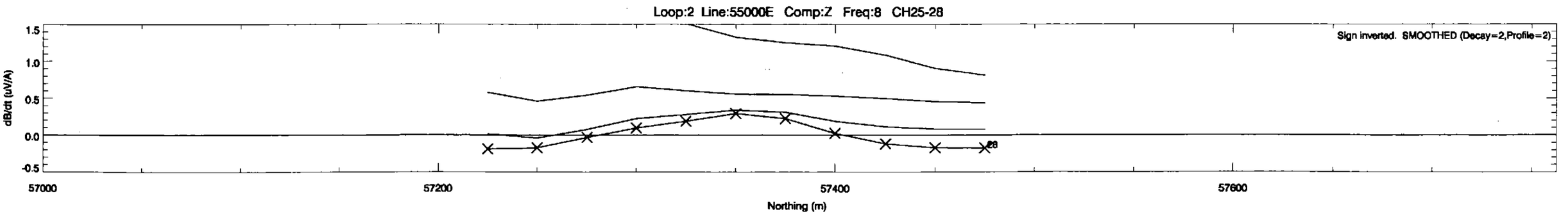


615350

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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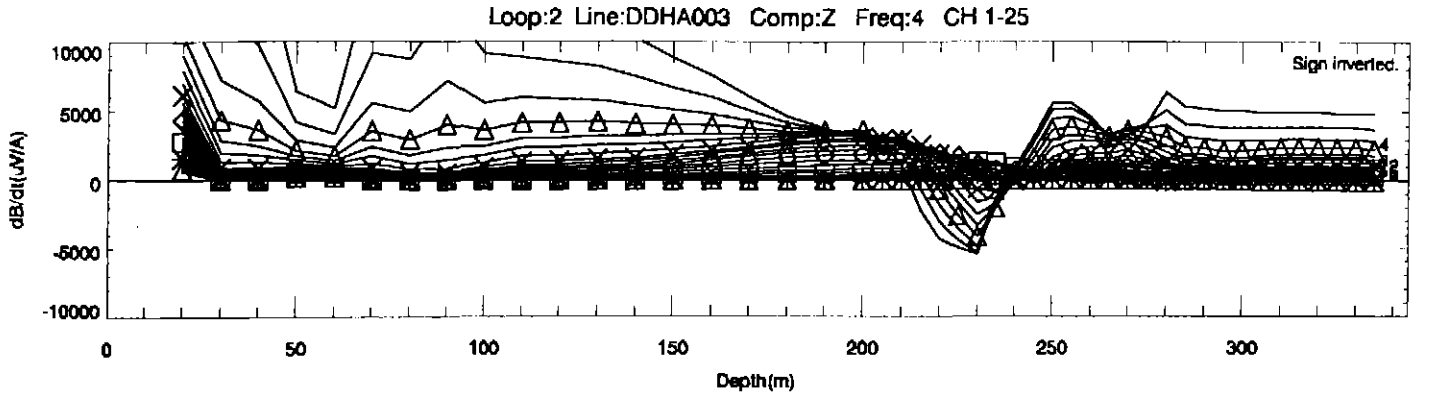
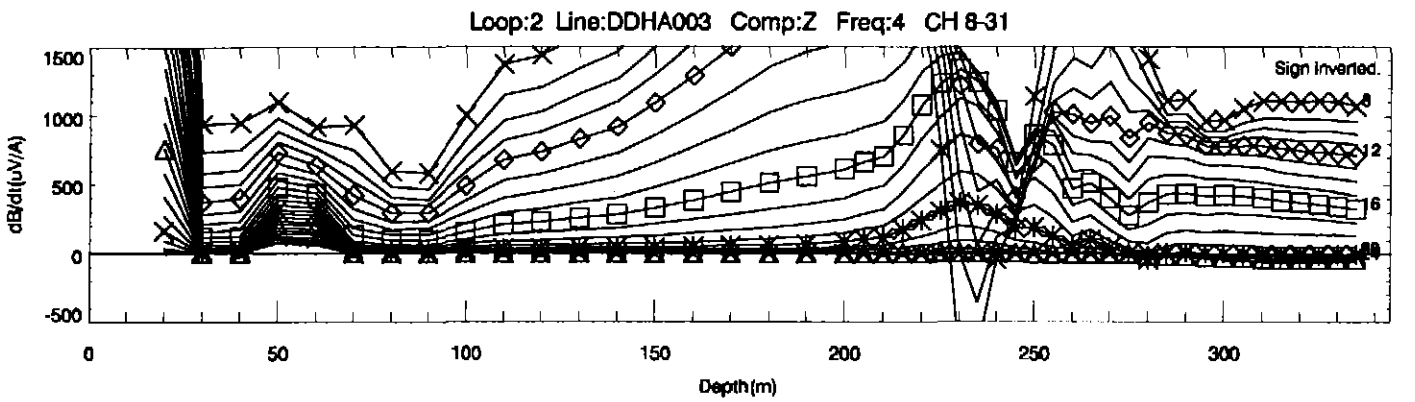
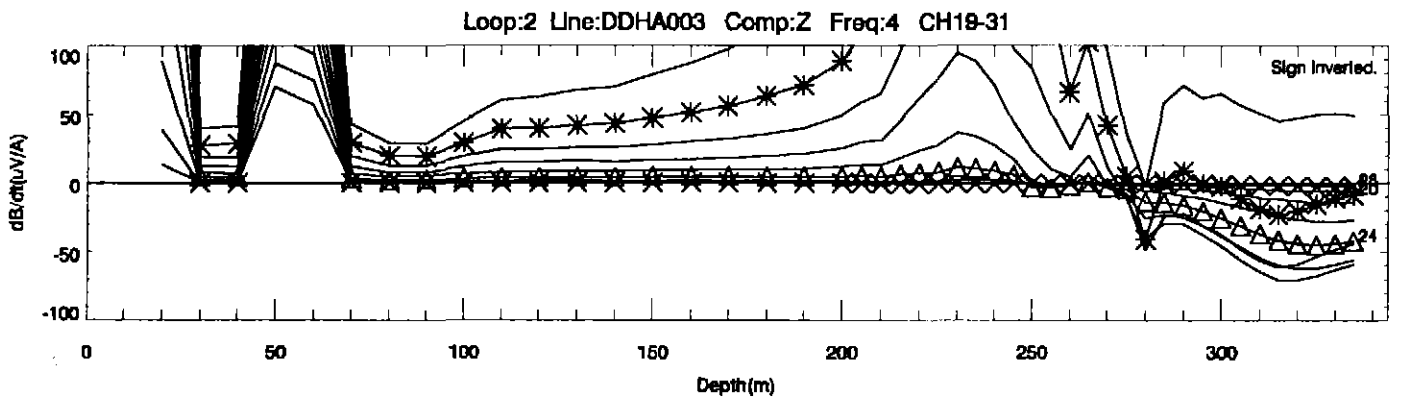
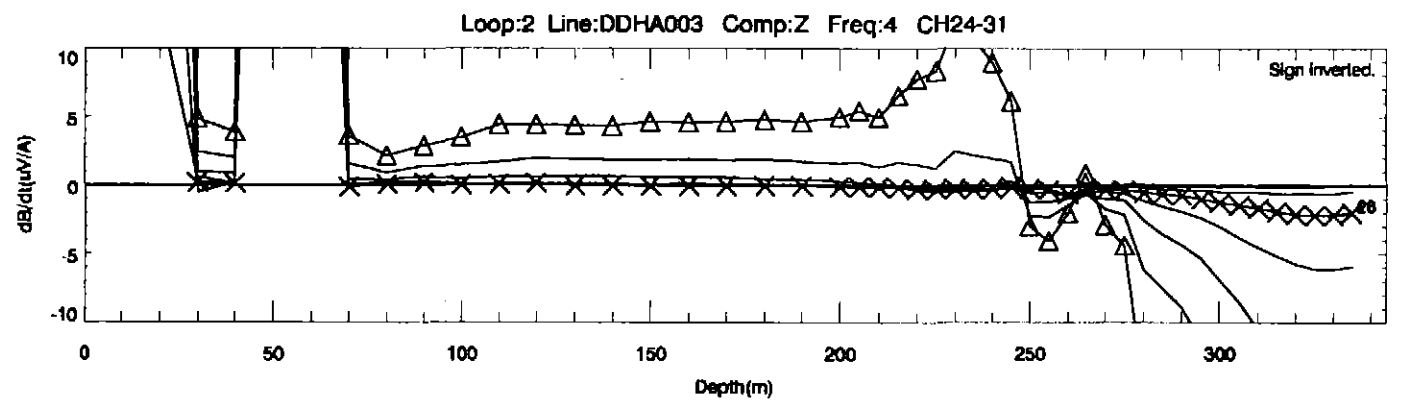
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	









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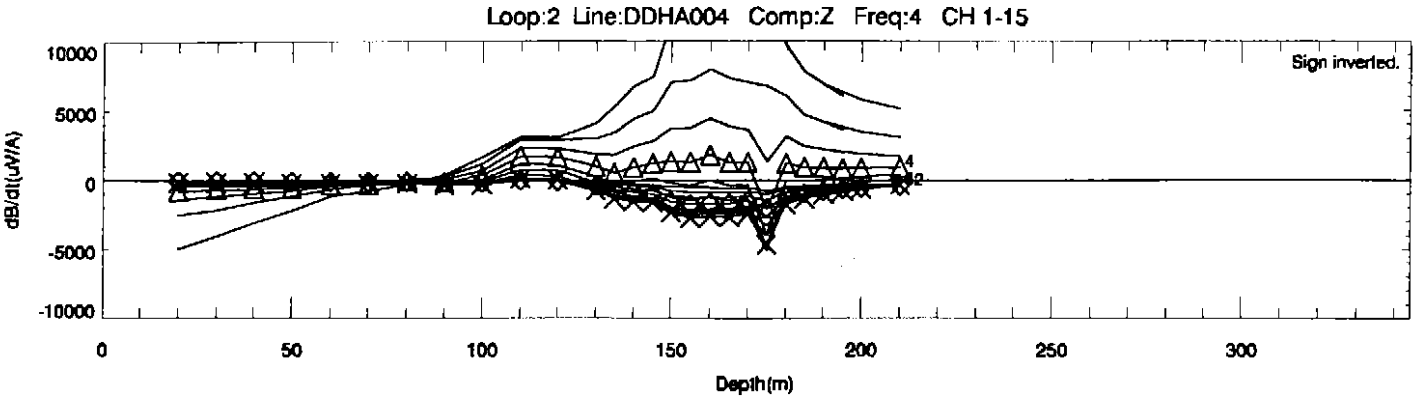
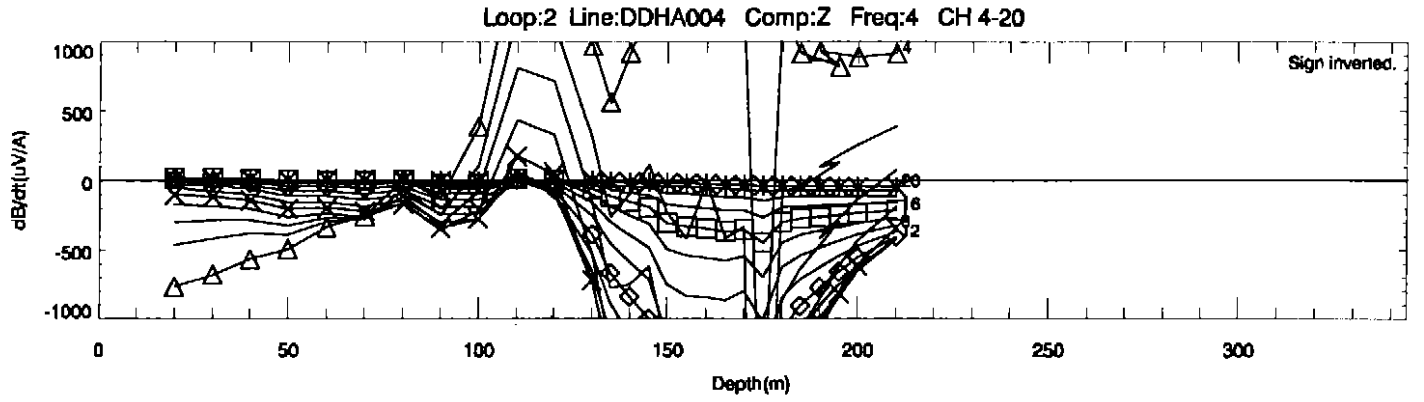
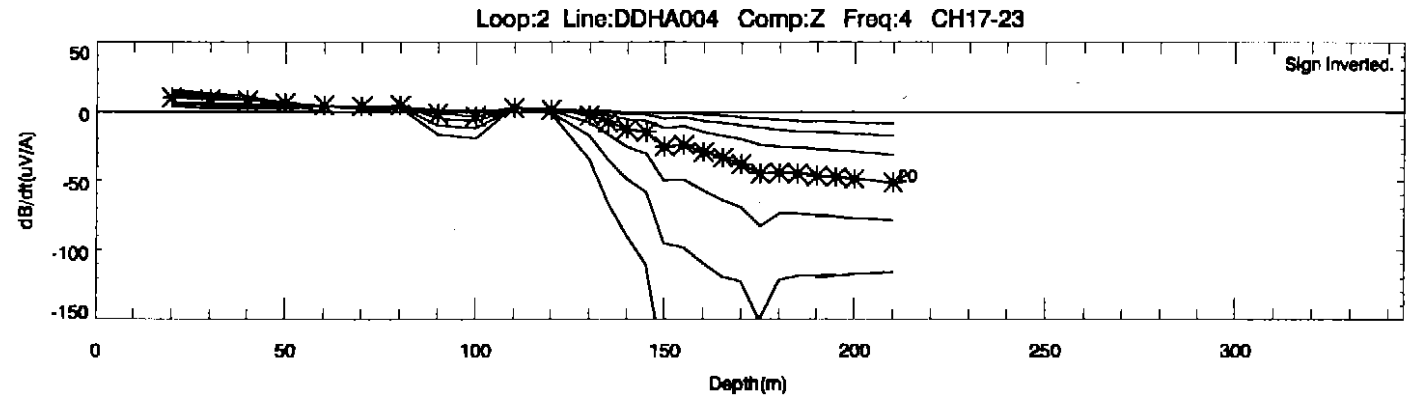
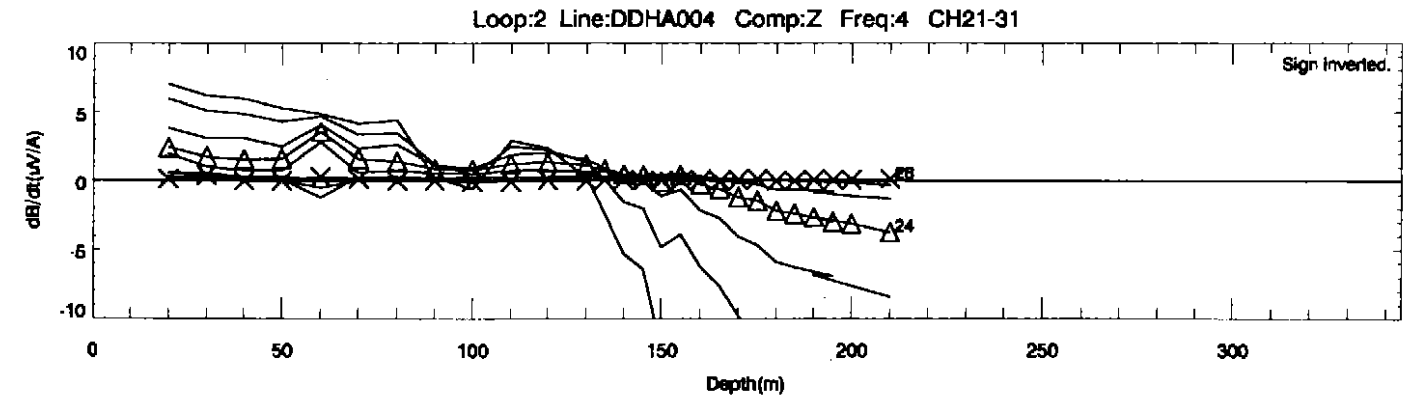
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Borehole EM Survey. Frequency 4 Hz	
Zonge GDP16. Window Set Ch 1-31.	24
FLAGSTAFF GEOCONSULTANTS	
Drawn 7/ 8/1999	









615353

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Borehole EM Survey. Frequency 4 Hz	
Zonge GDP16. Window Set Ch 1-31.	
FLAGSTAFF GEOCONSULTANTS	
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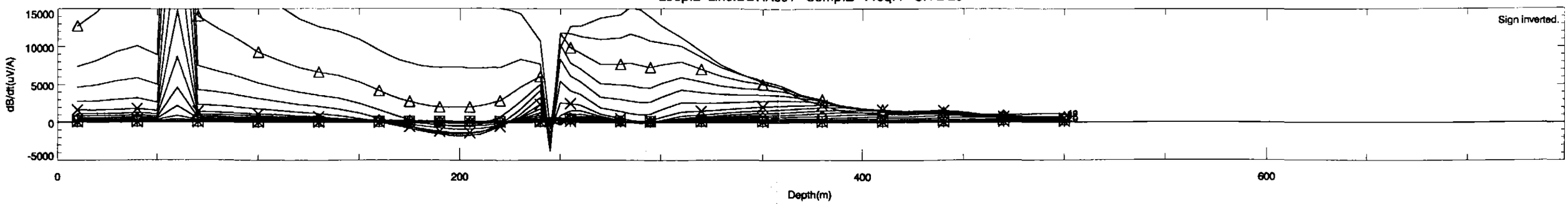

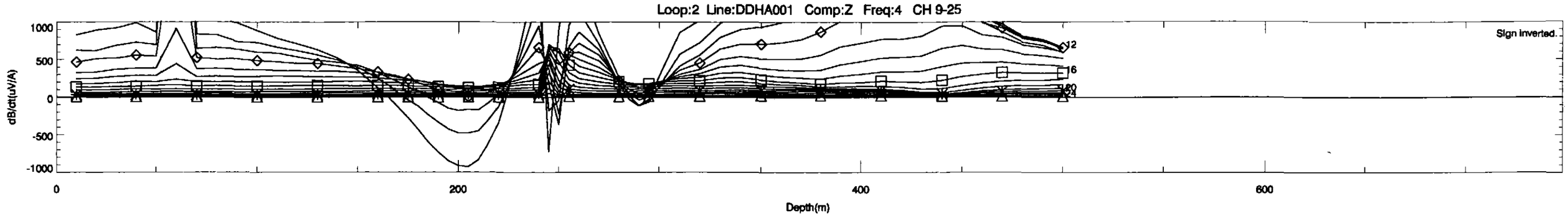

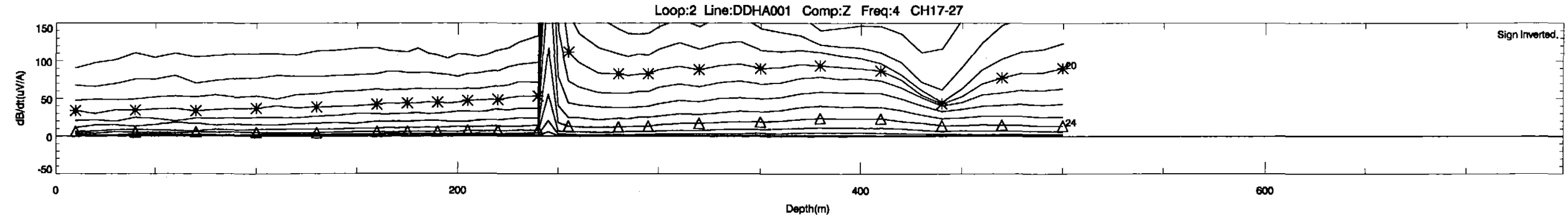

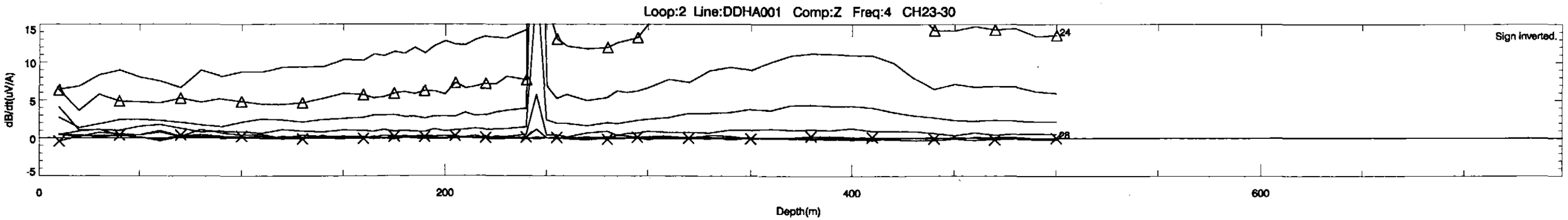

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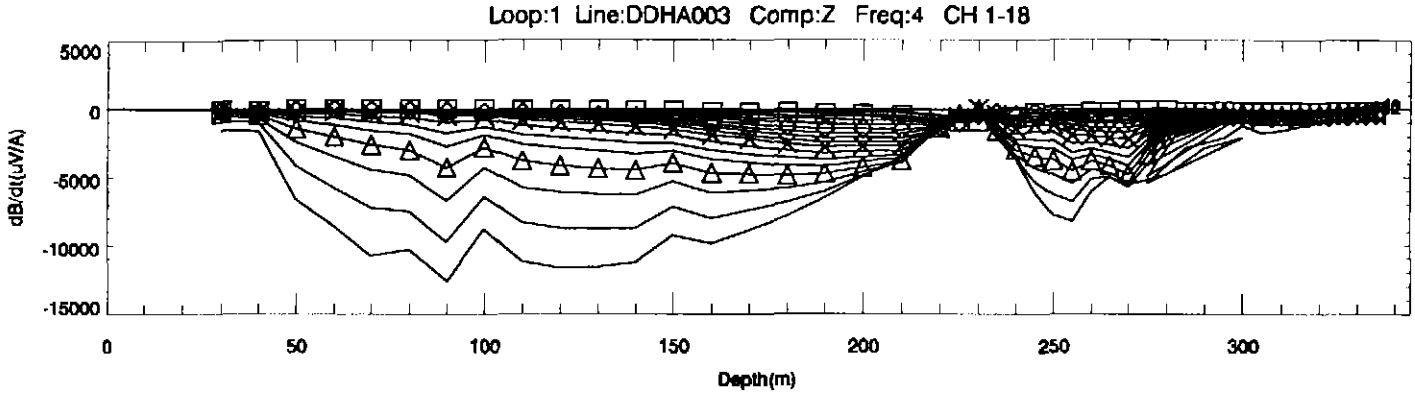
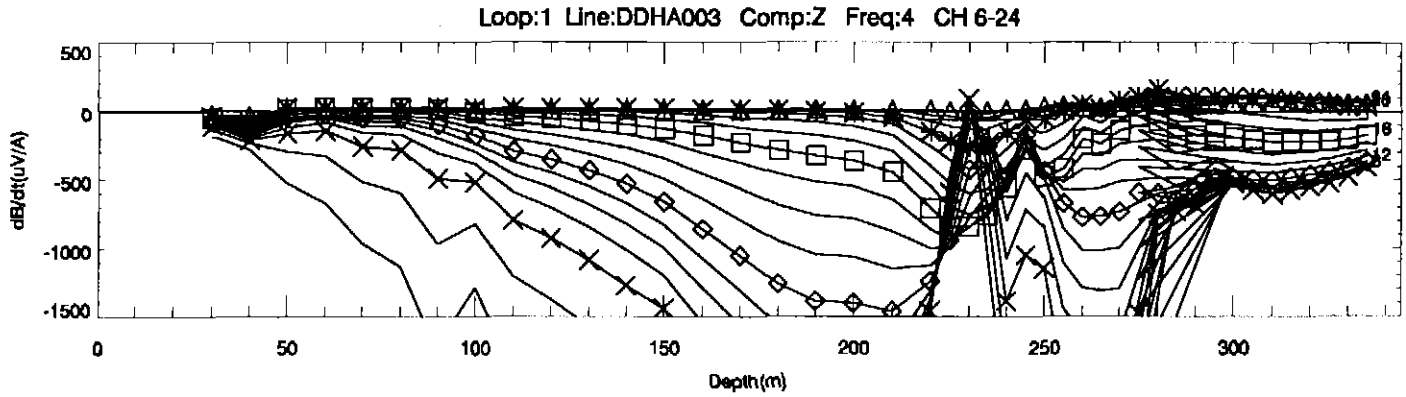
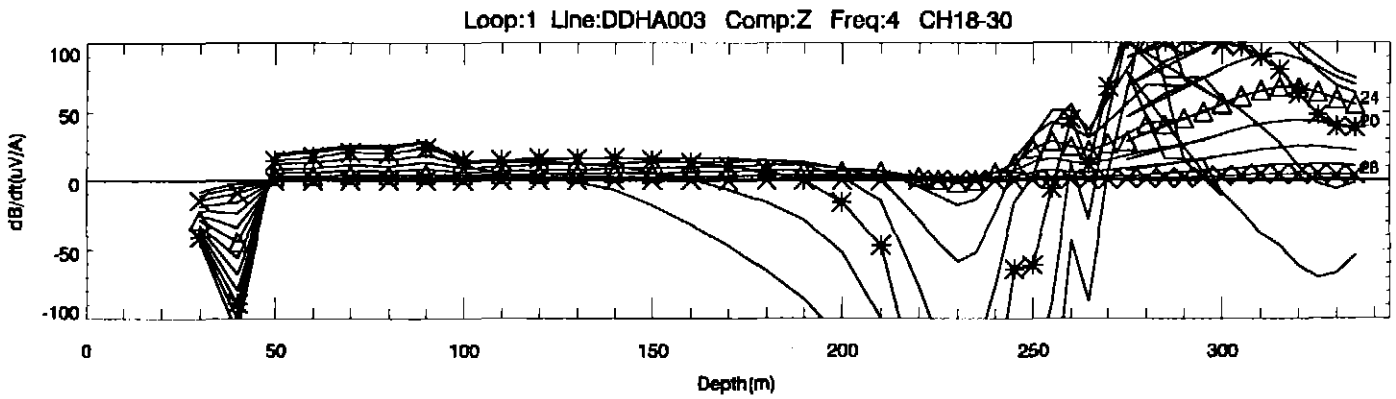
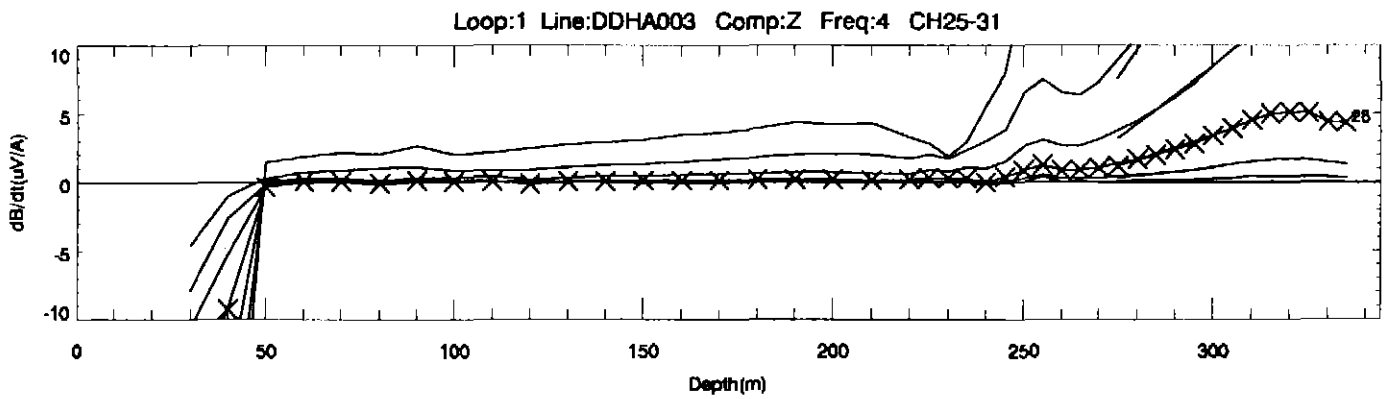
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Borehole EM Survey. Frequency 4 Hz	
Zonge GDP16. Window Set Ch 1-31.	
FLAGSTAFF GEOCONSULTANTS	
Drawn 7/6/1999	









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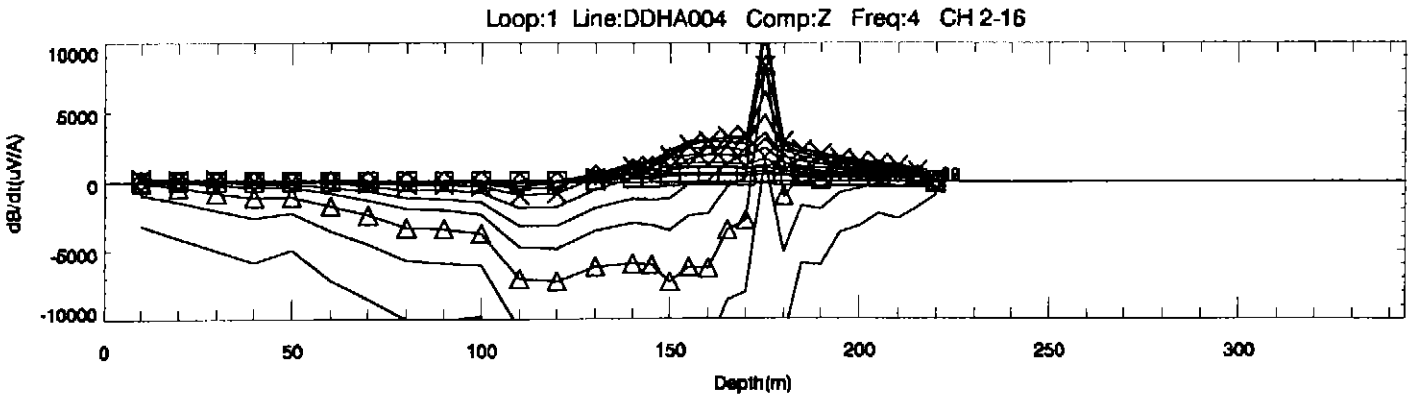
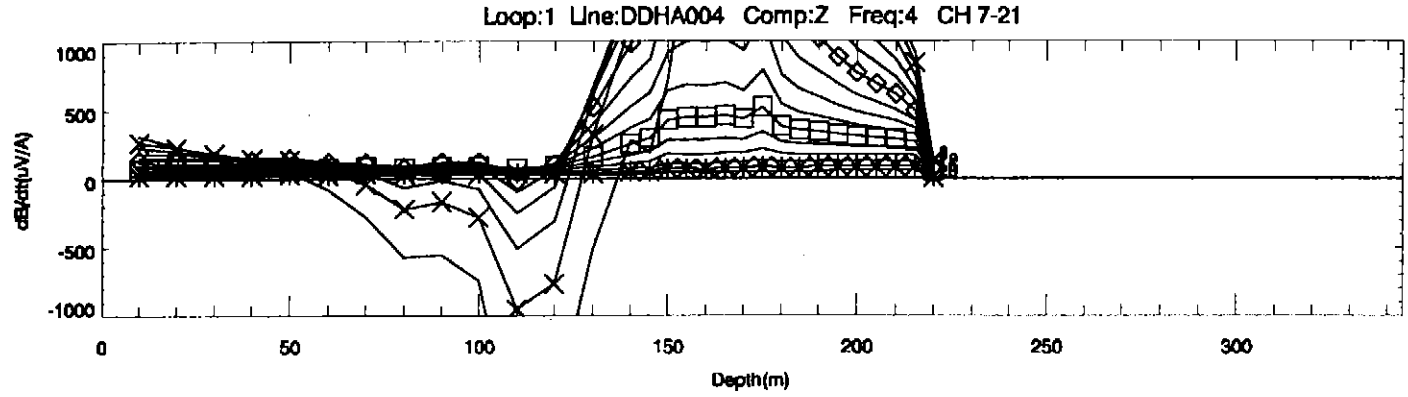
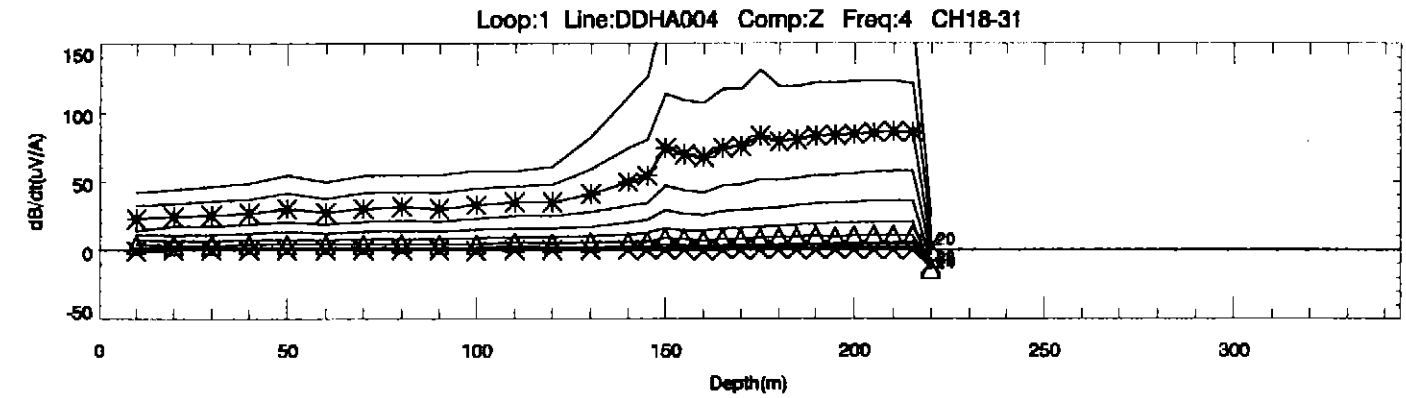
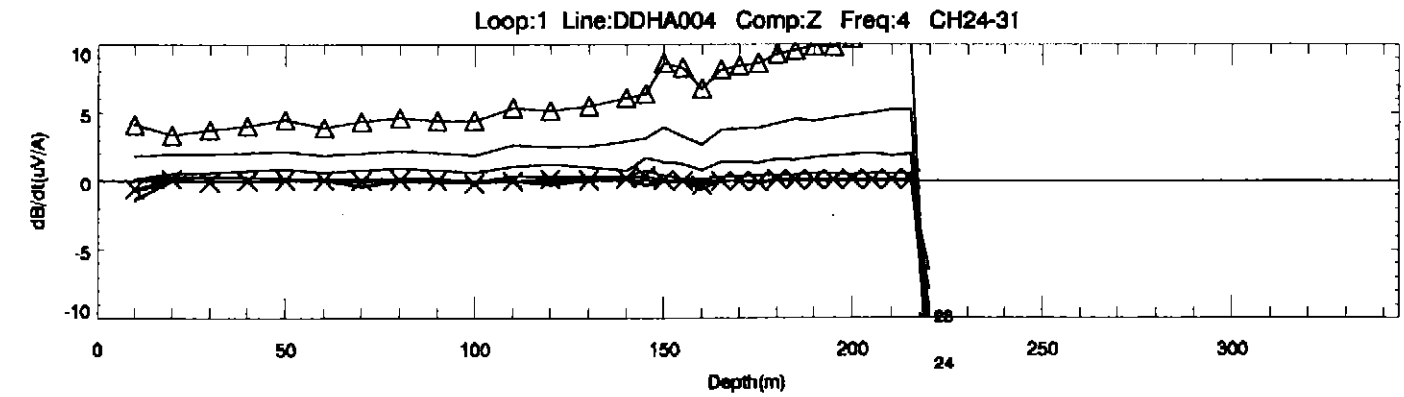
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Borehole EM Survey. Frequency 4 Hz	
Zonge GDP16. Window Set Ch 1-31.	
FLAGSTAFF GEOCONSULTANTS	
Drawn 7/ 6/1999	









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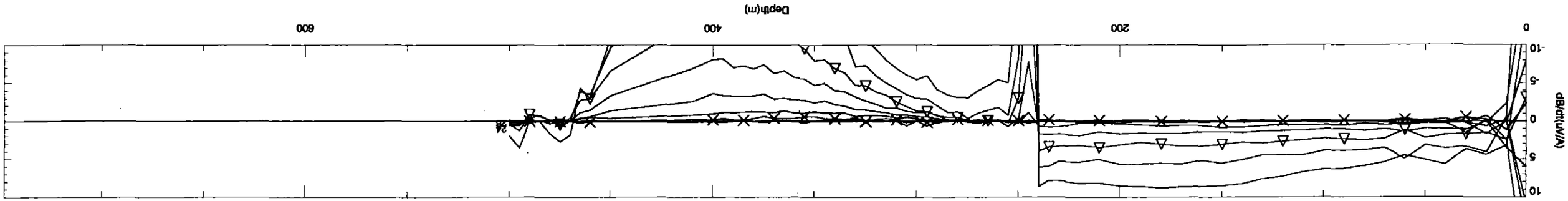
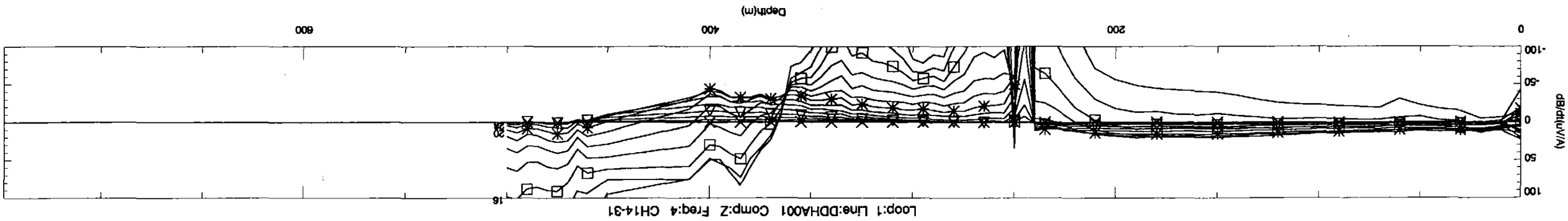
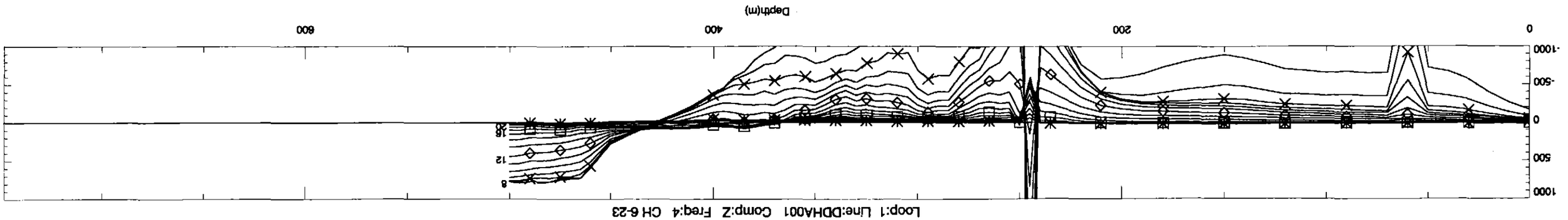
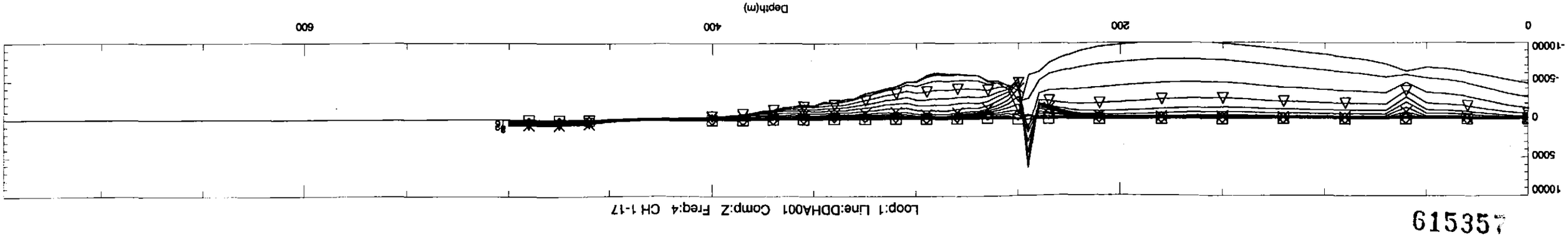
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Borehole EM Survey. Frequency 4 Hz	
Zonge GDP16. Window Set Ch 1-31.	
FLAGSTAFF GEOCONSULTANTS	
Drawn 7/6/1999	

Allegiance Mining NL	
Avebury - Zeehan Tasmania Borehole EM Survey. Frequency 4 Hz Zonge GDP16. Window Set Ch 1-31.	
FLAGSTAFF GEOCONSULTANTS Drawn 7/ 6/1999	









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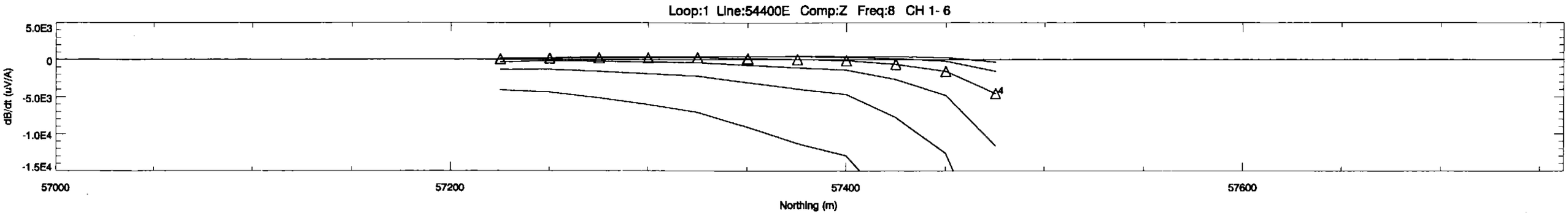

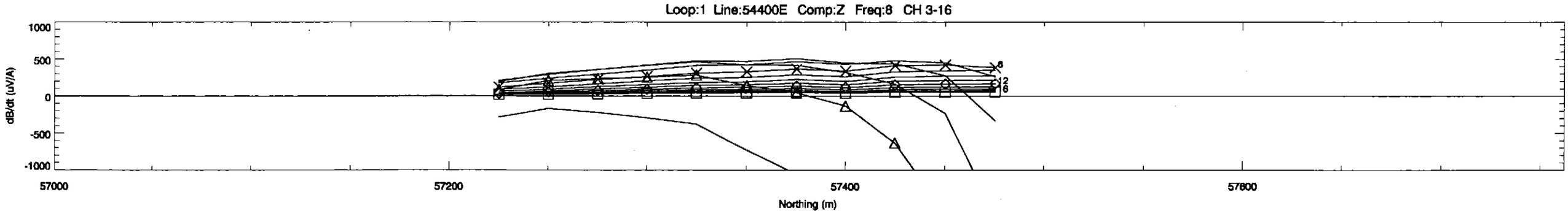

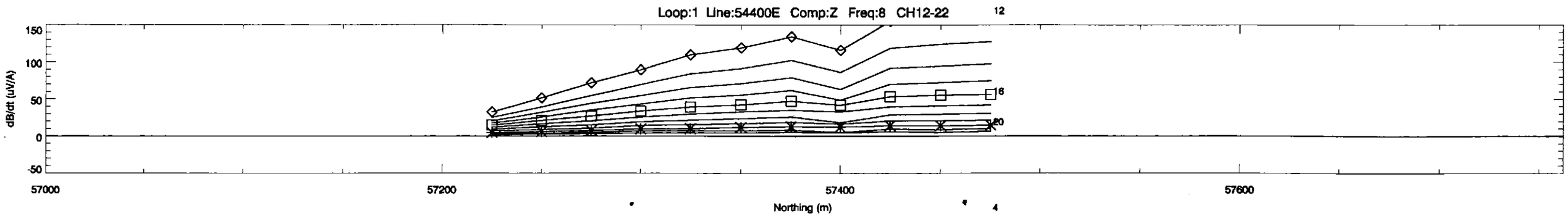

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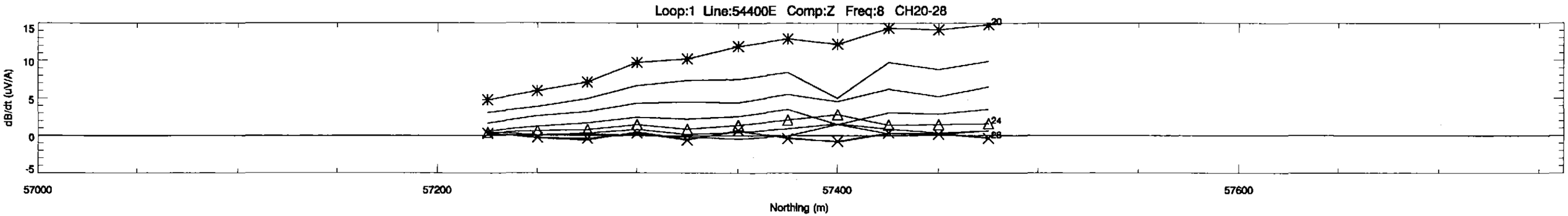
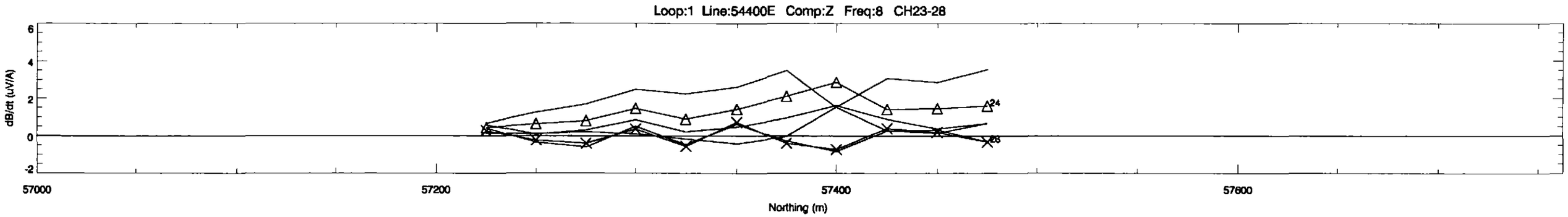
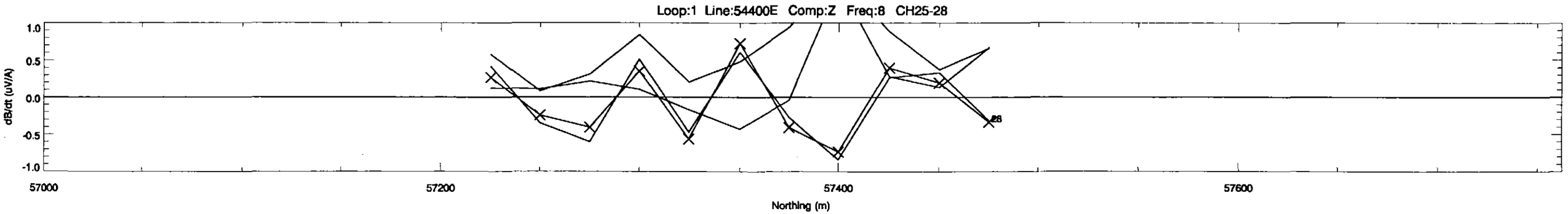
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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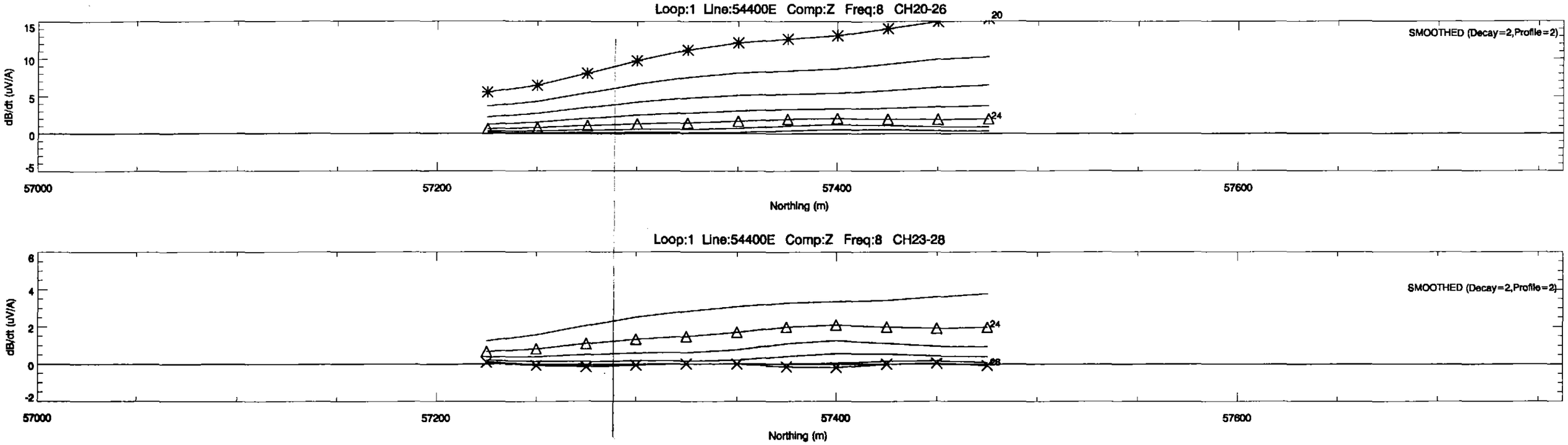
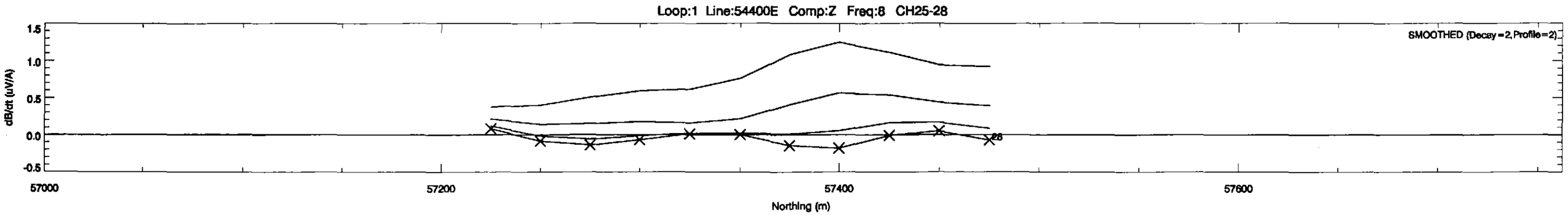
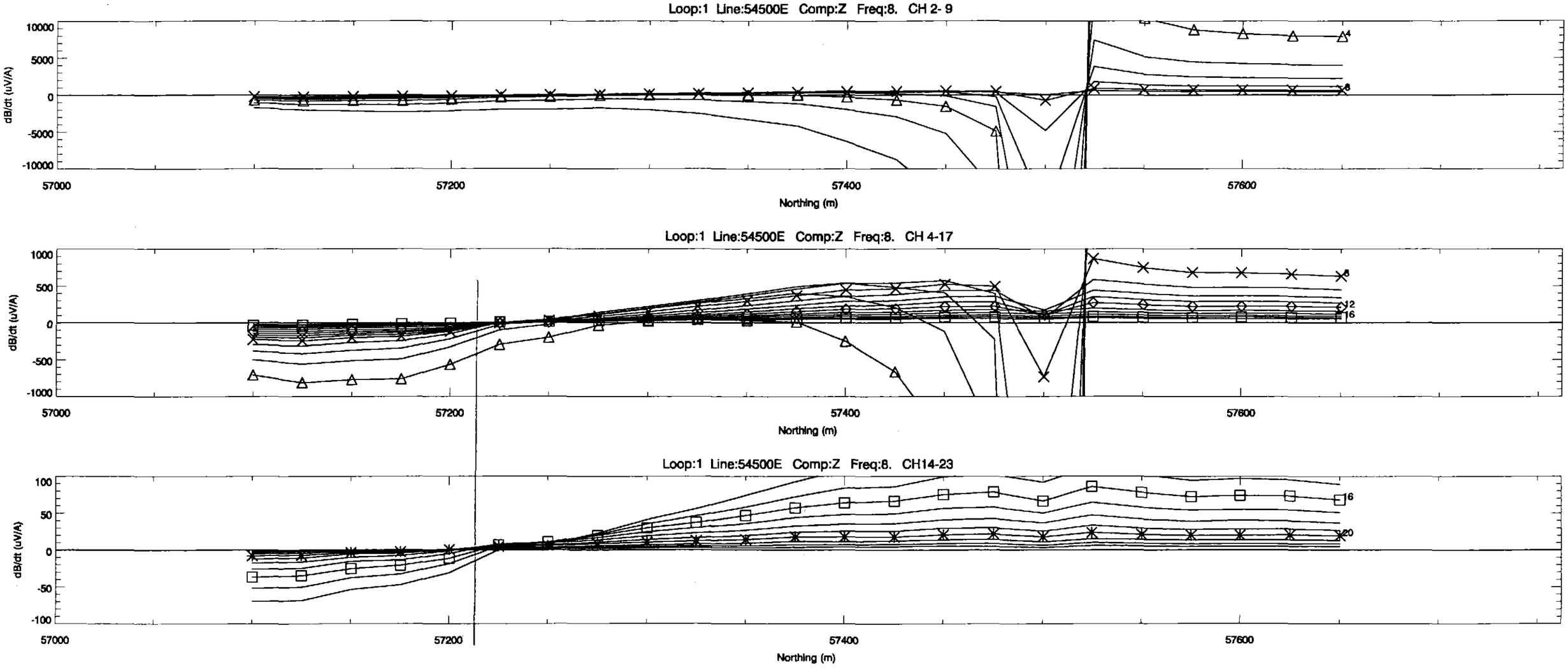
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	





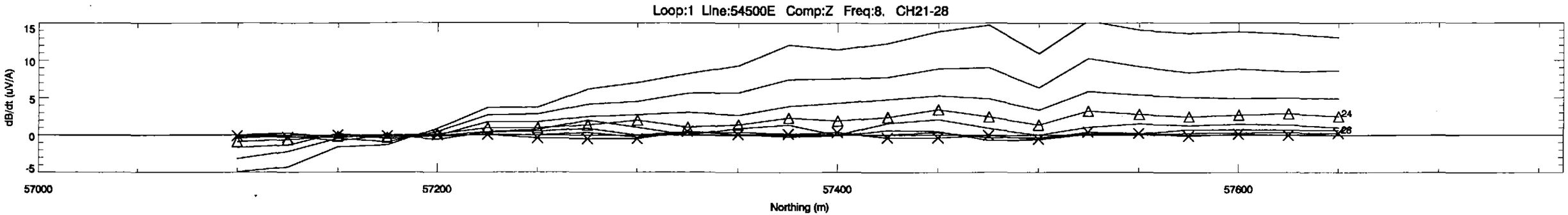
615360

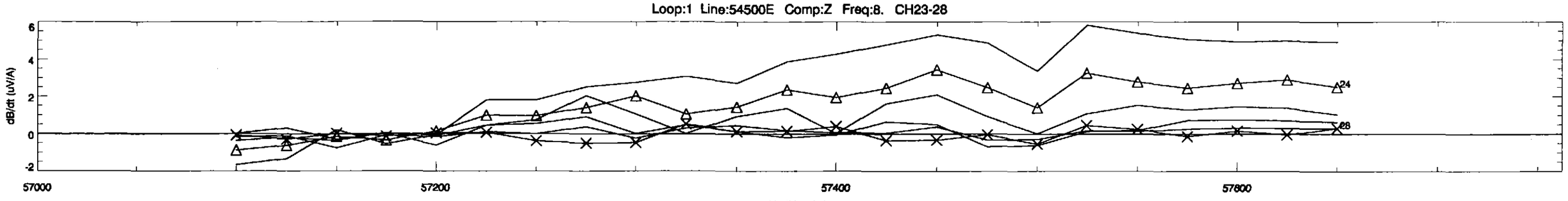
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

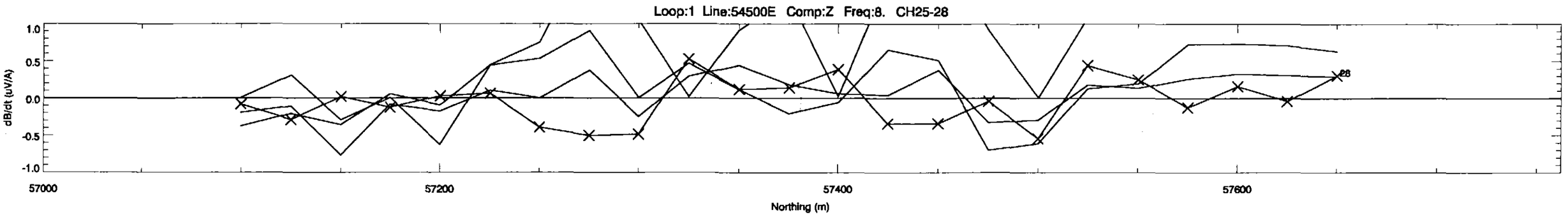


615361

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

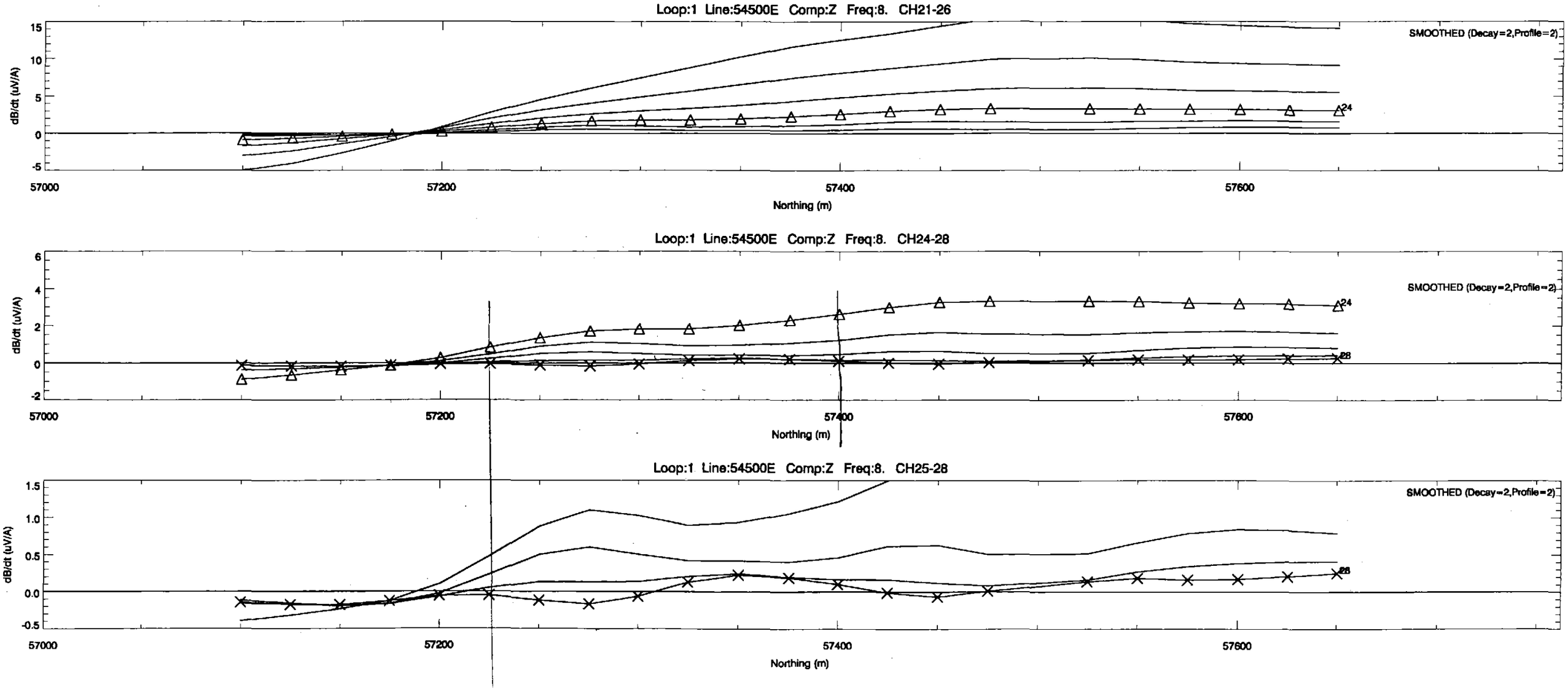






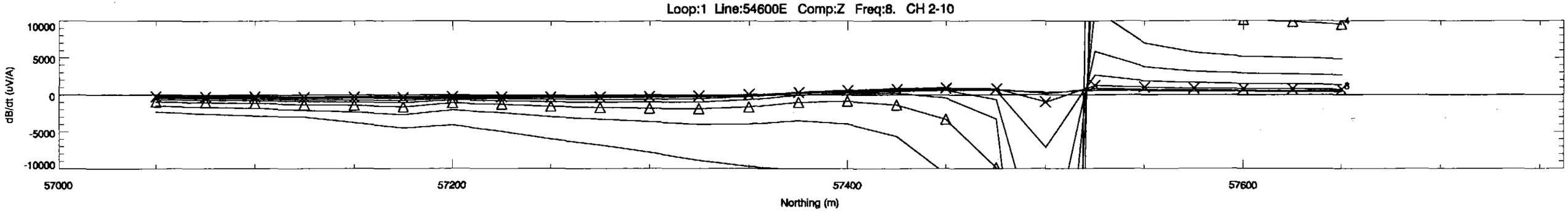
615362

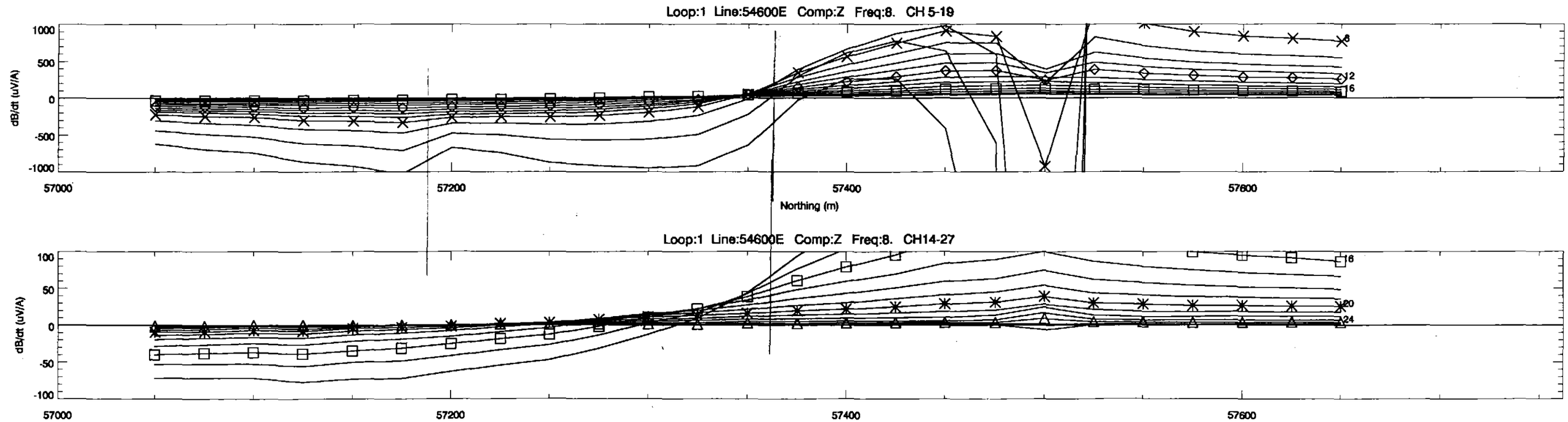
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	



615363

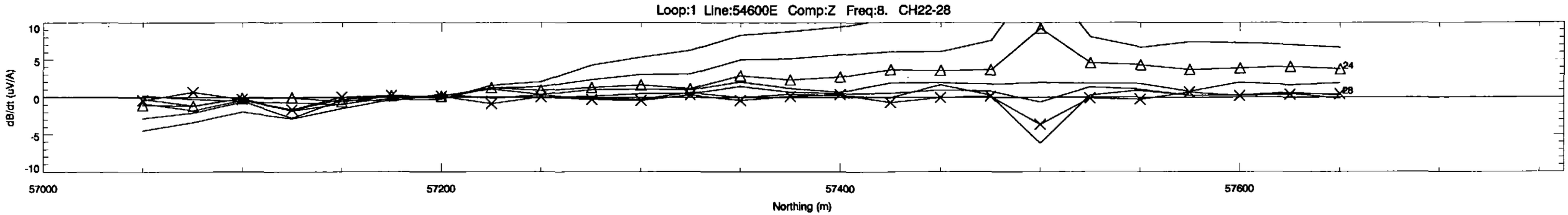
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

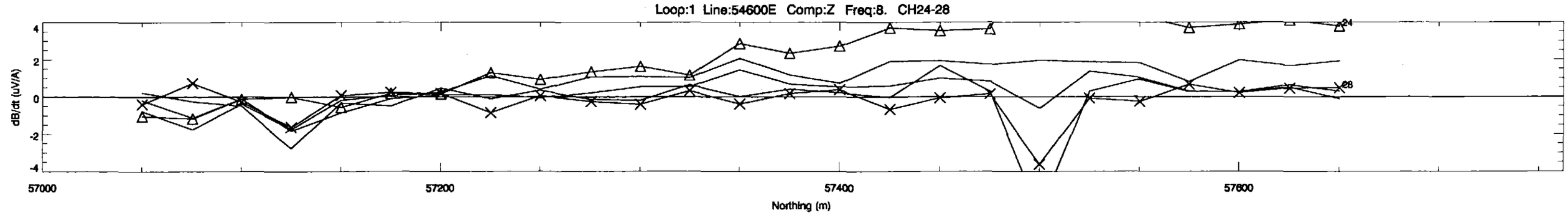


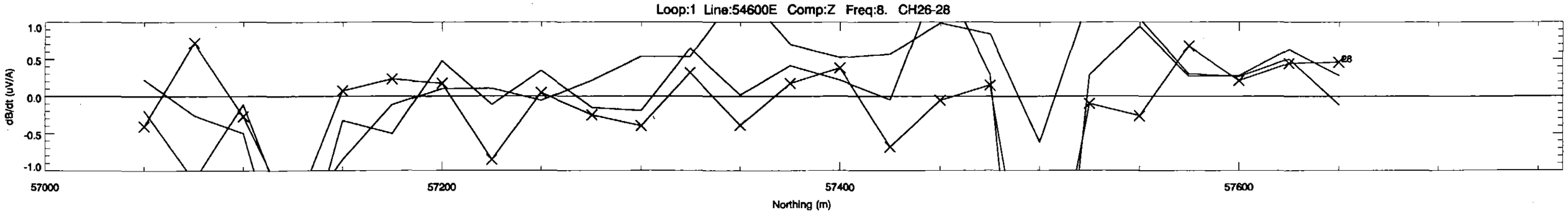


615364

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	



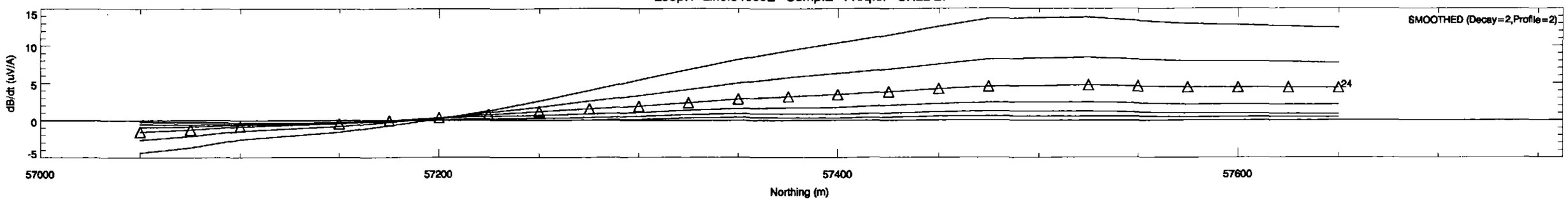




615365

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	

Loop:1 Line:54600E Comp:Z Freq:8. CH22-27



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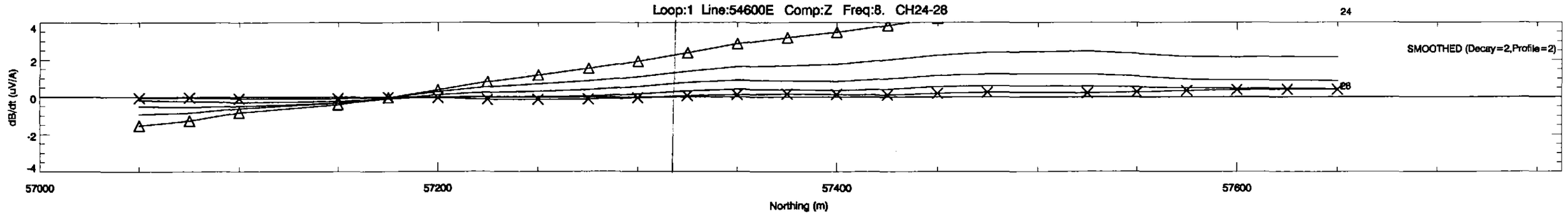

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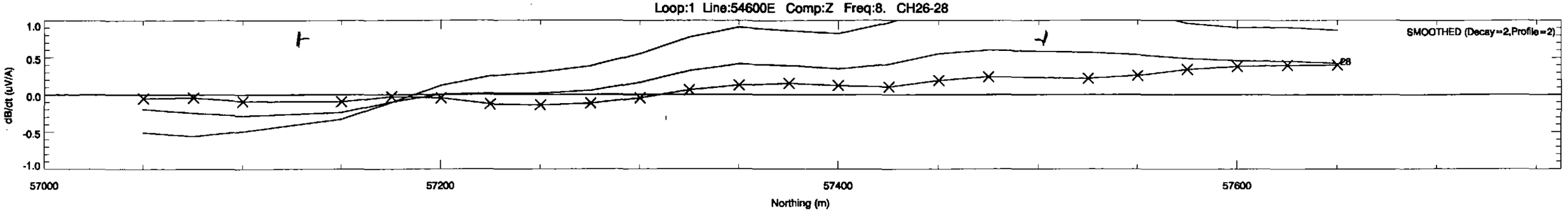
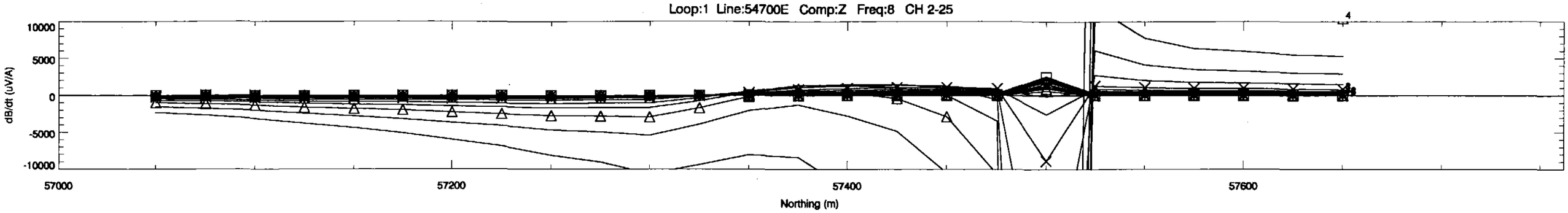
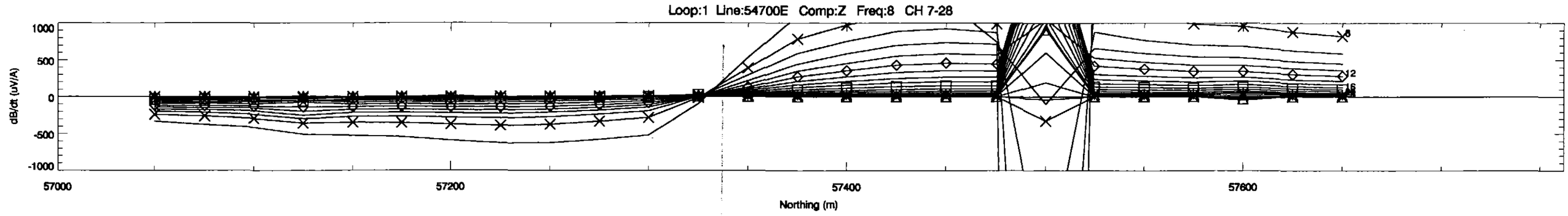
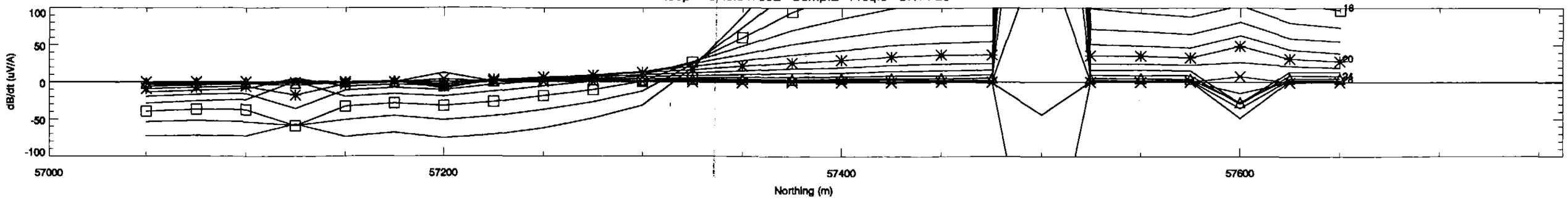


615366

Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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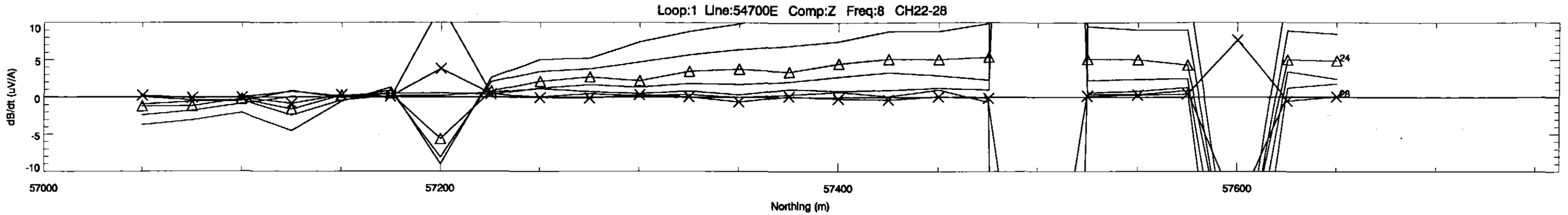
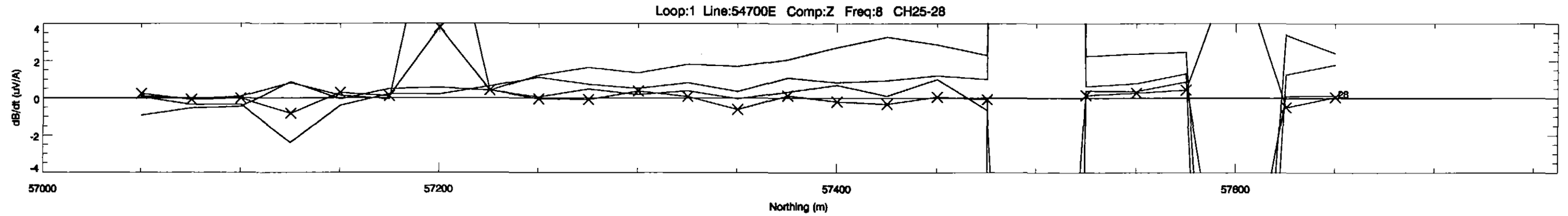
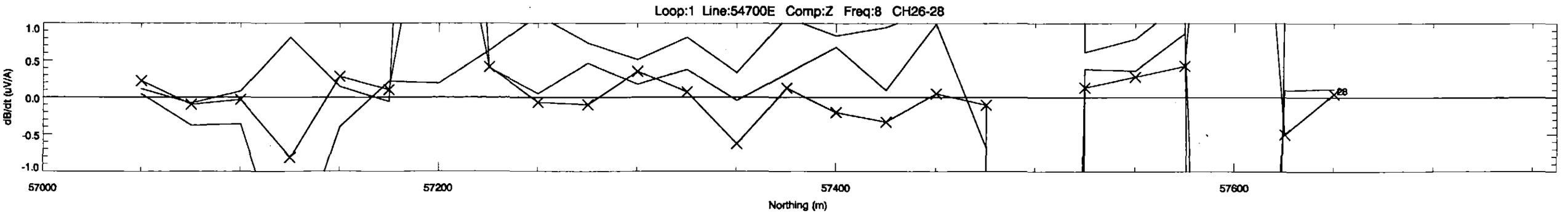
Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS

Drawn 26/ 5/1999







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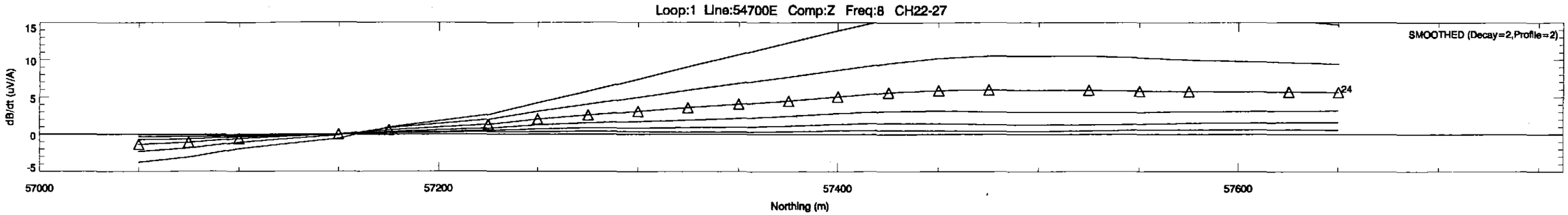
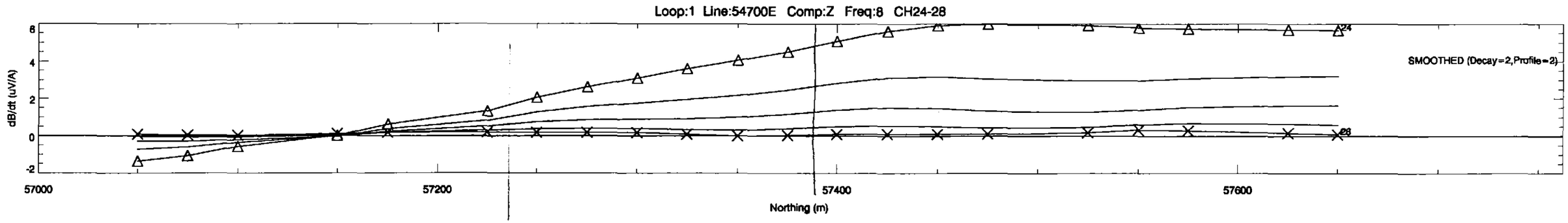
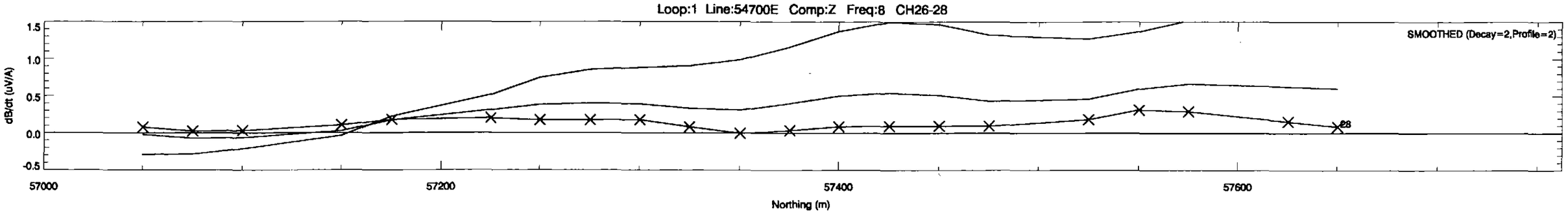
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
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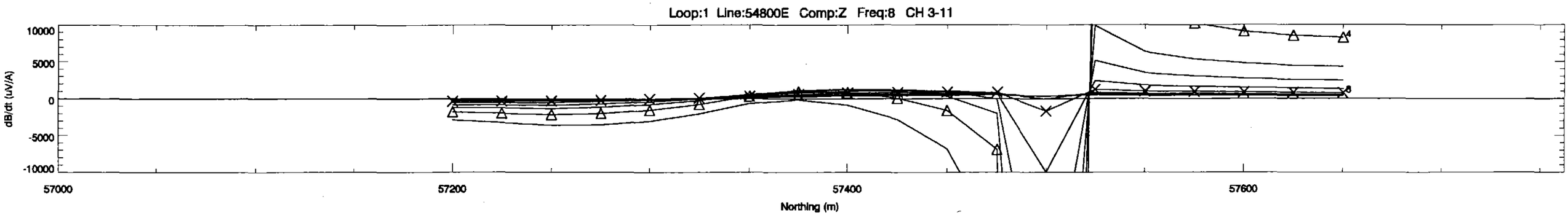

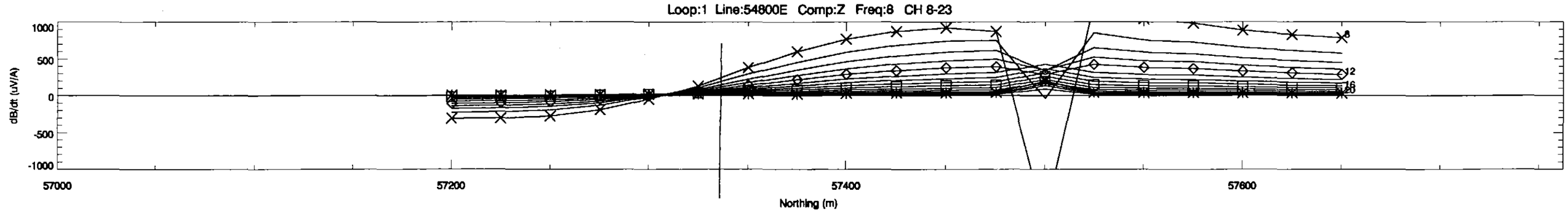

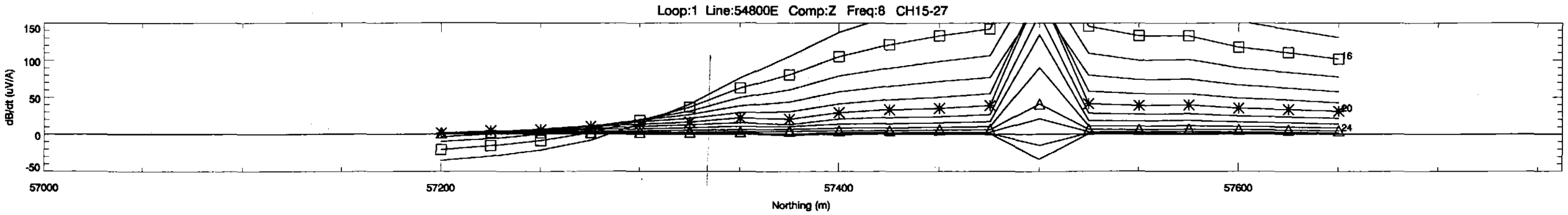

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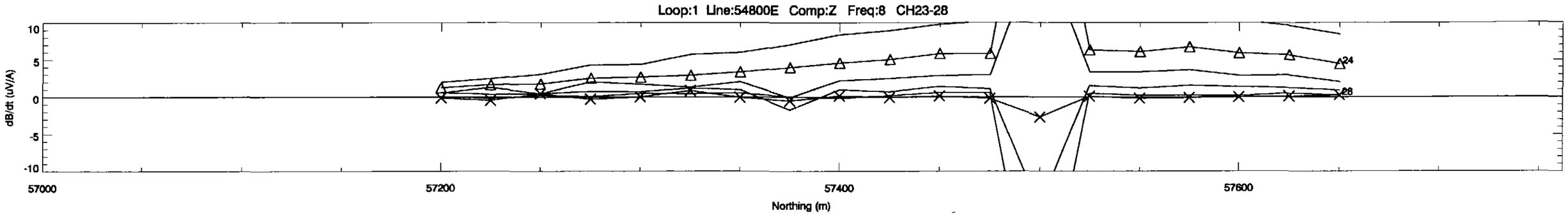
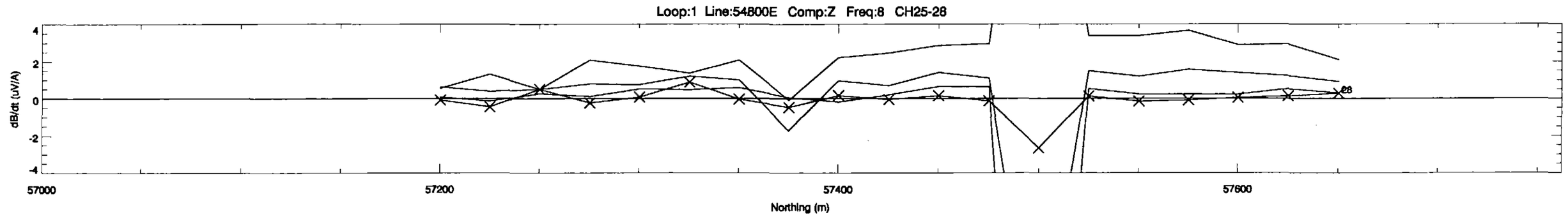
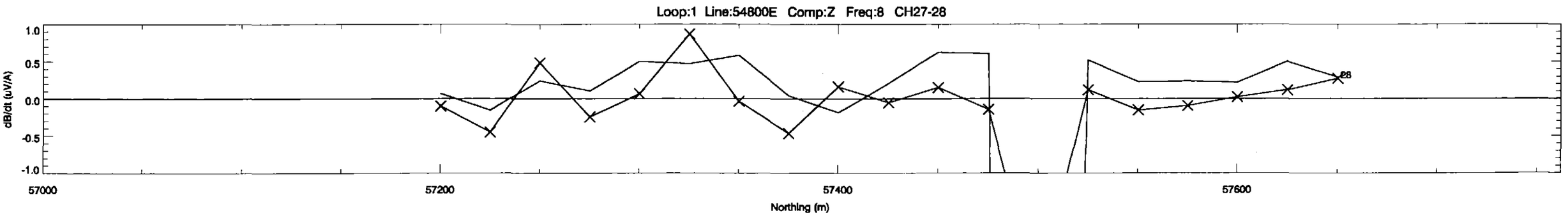
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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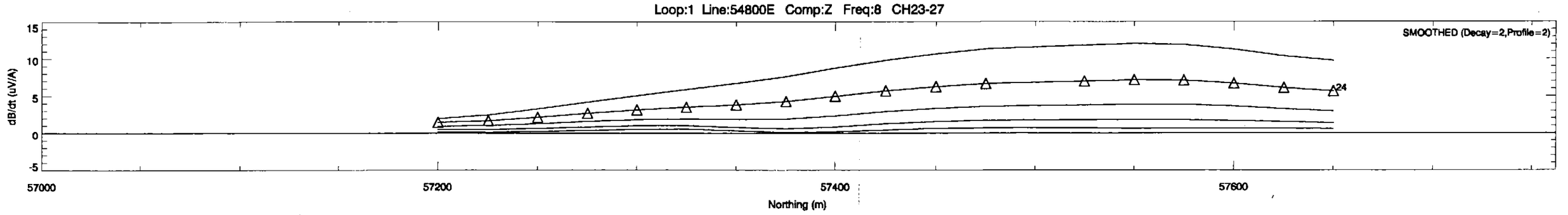
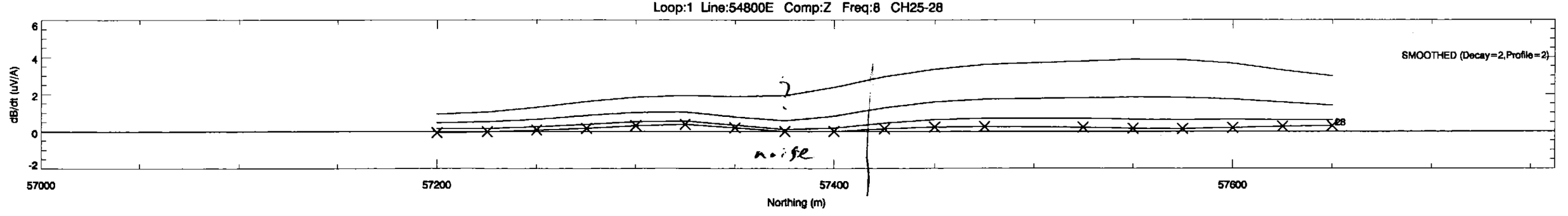
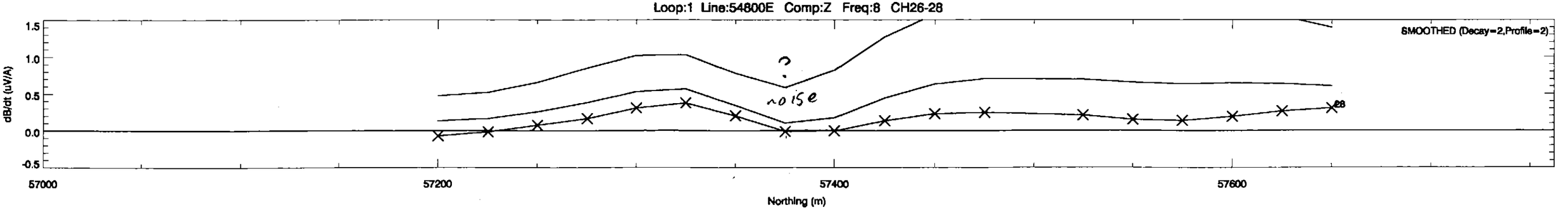
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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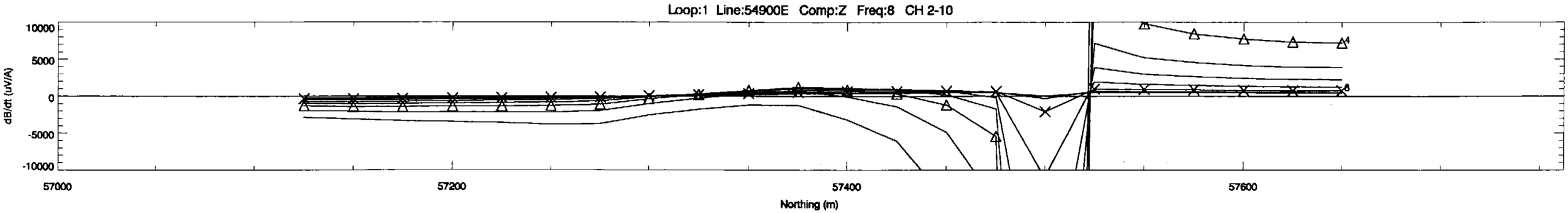
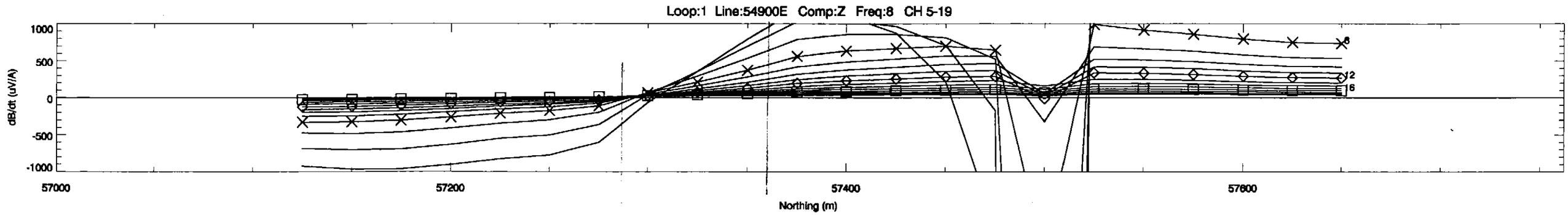
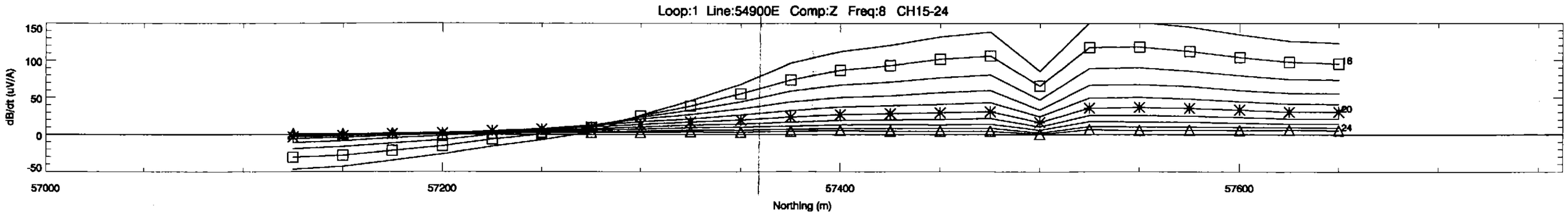
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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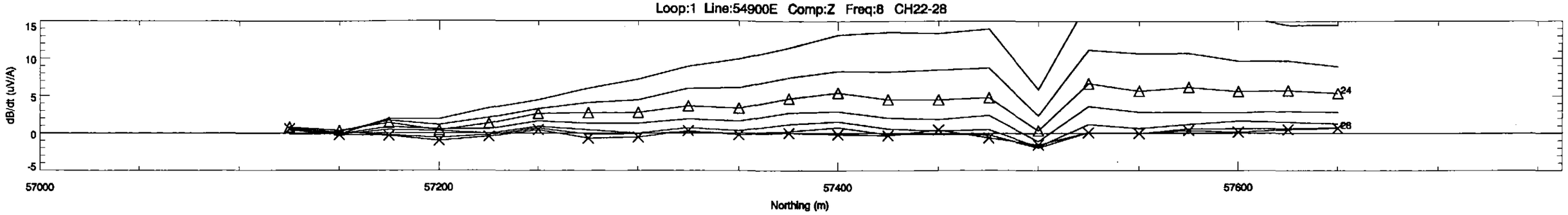
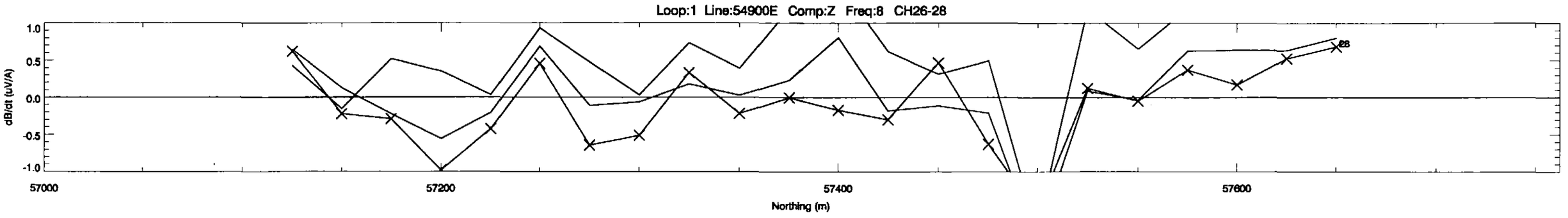
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	





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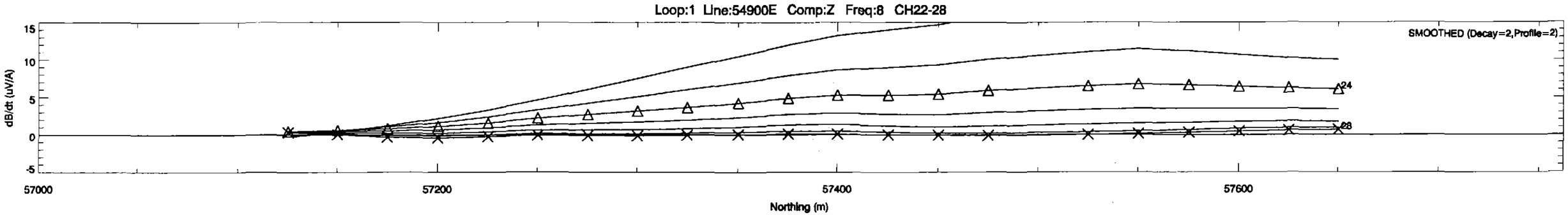
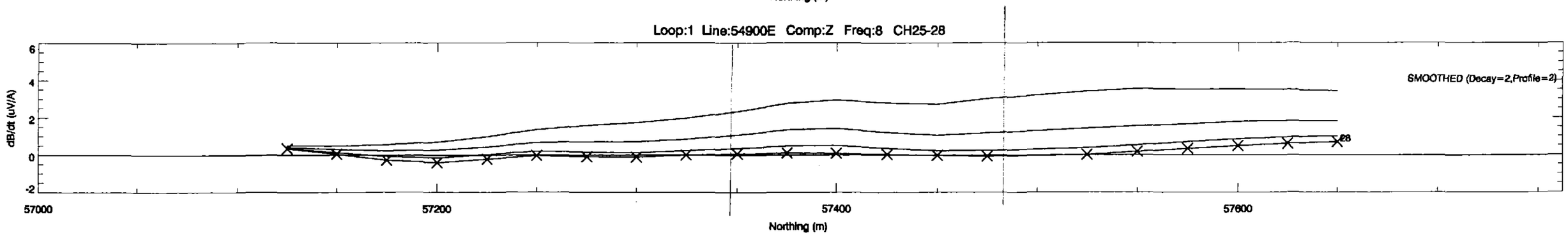
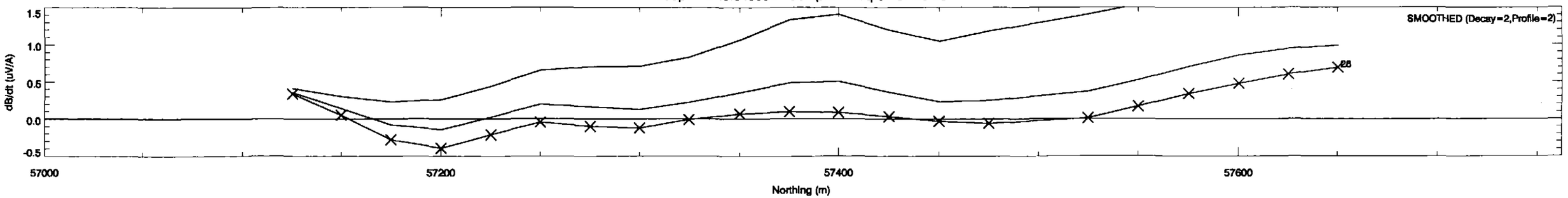
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	







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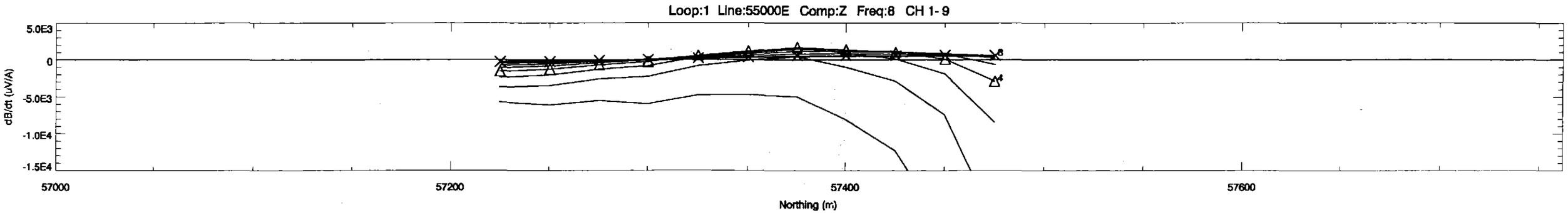
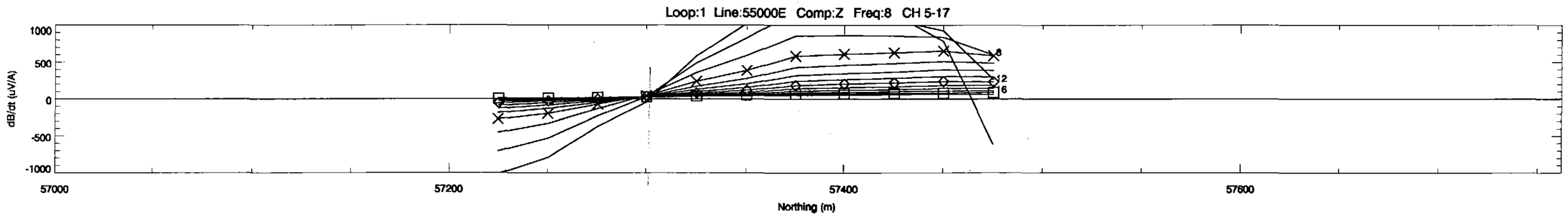
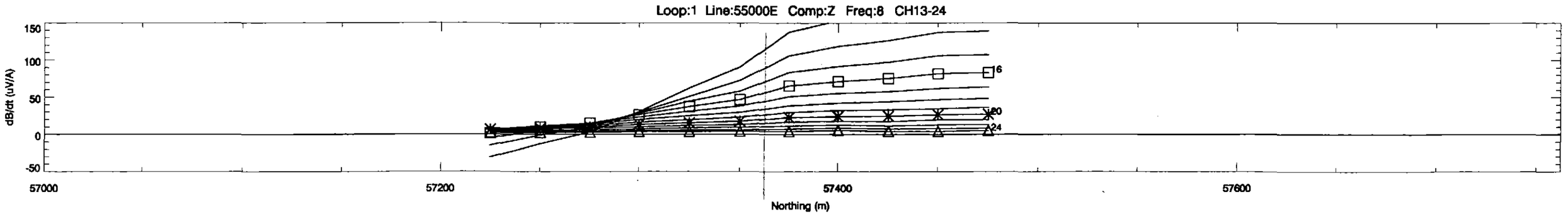
Allegiance Mining NL
Avebury - Zeehan Tasmania
Fixed-loop TEM Survey : April 1999
Zonge GDP16 : Frequency 8 Hz
FLAGSTAFF GEOCONSULTANTS
Drawn Jan 5/1999







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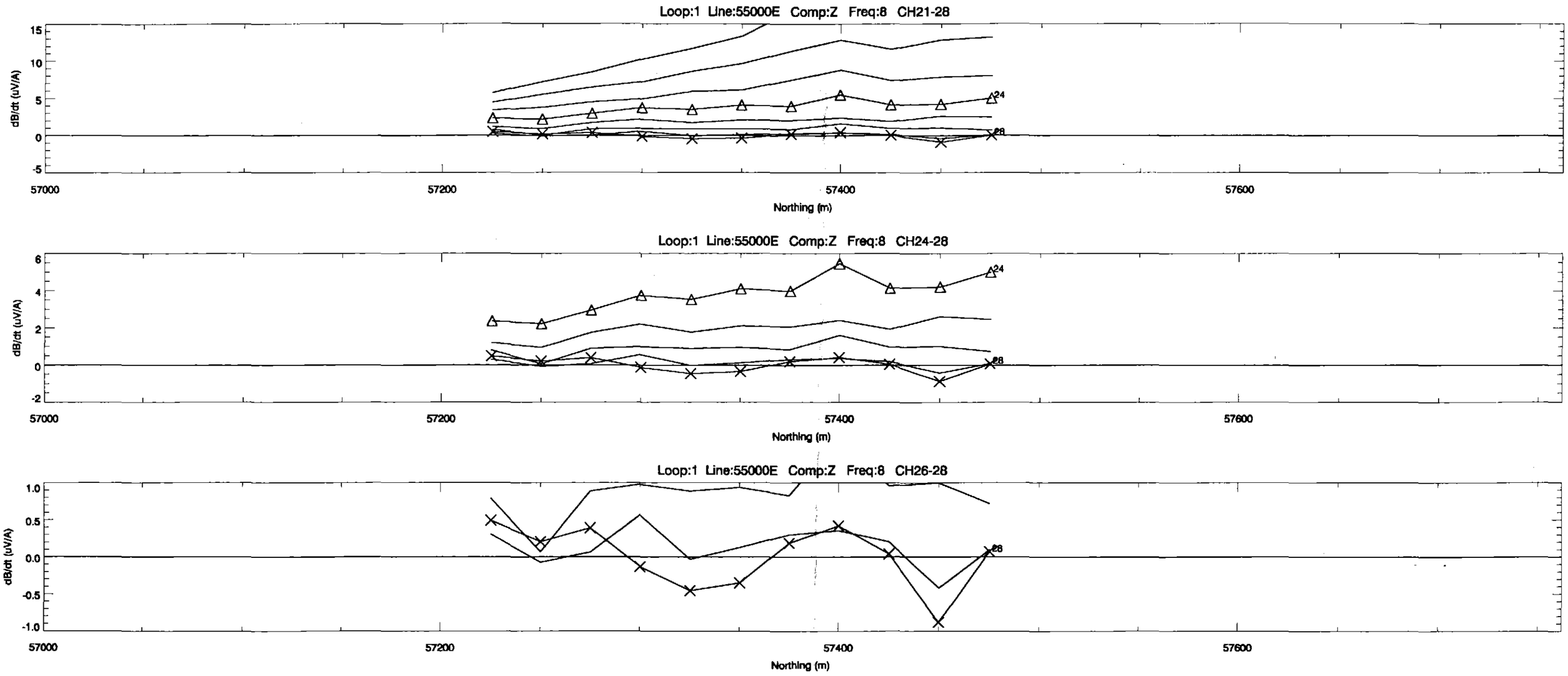
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 5/1999	



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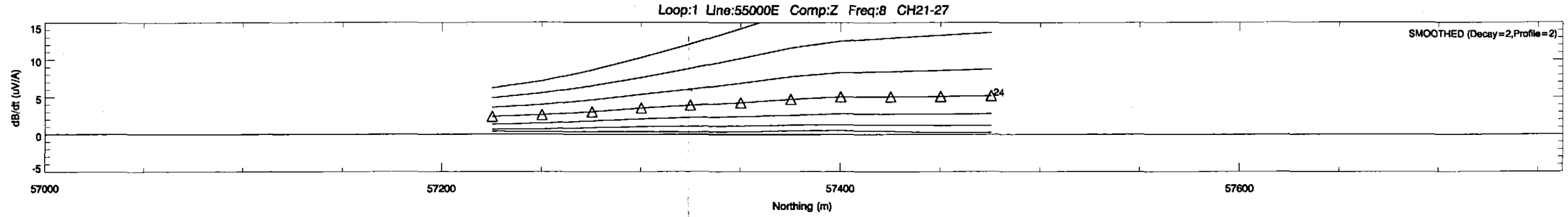
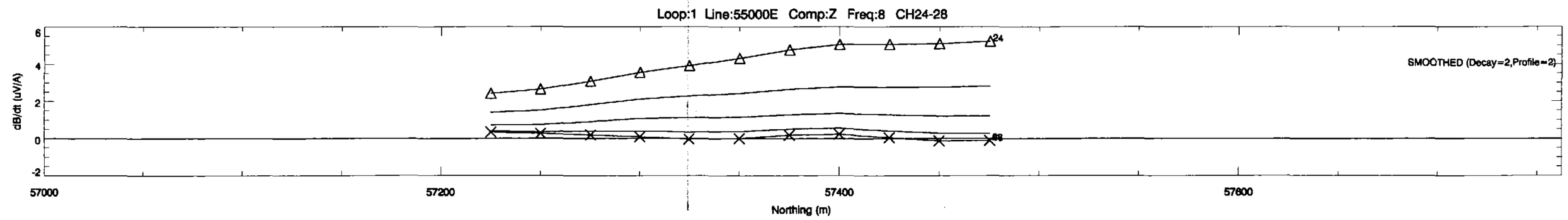
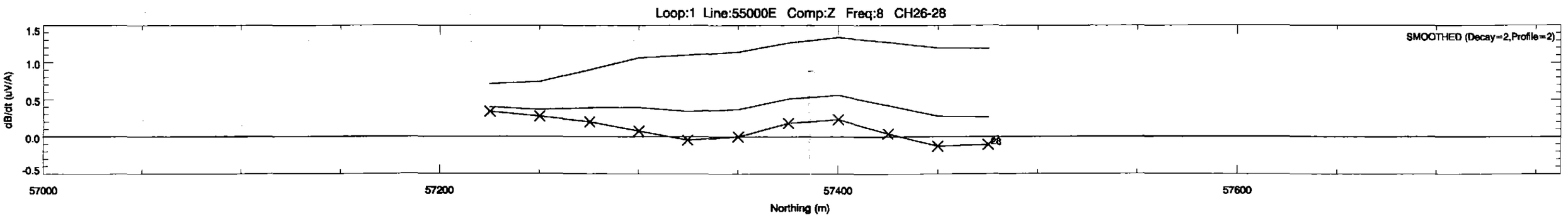
Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	







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Allegiance Mining NL	
Avebury - Zeehan Tasmania	
Fixed-loop TEM Survey : April 1999	
Zonge GDP16 : Frequency 8 Hz	
FLAGSTAFF GEOCONSULTANTS Drawn 26/ 5/1999	