

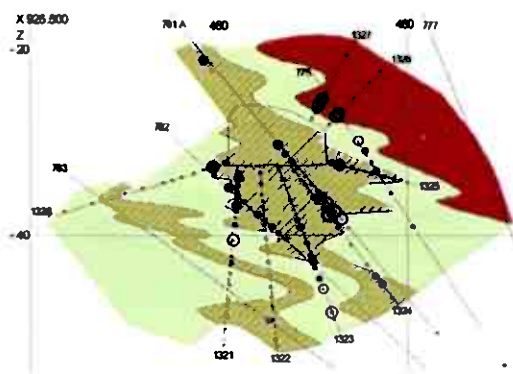
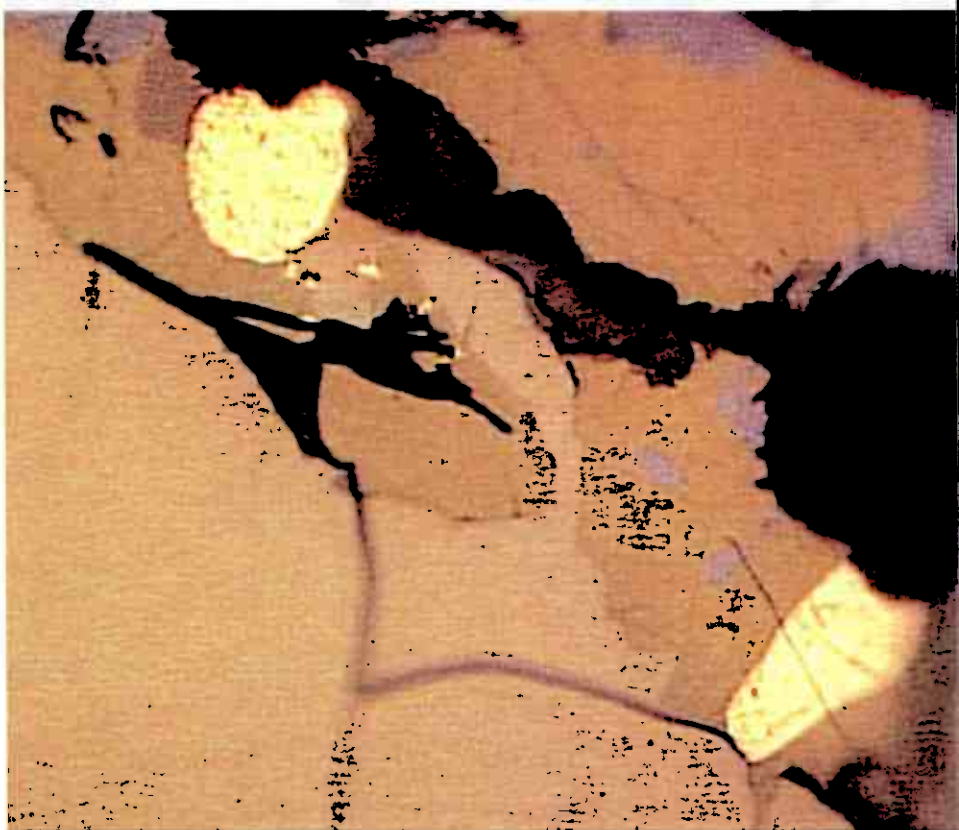


Bergvesenet rapport nr 4791	Intern Journal nr 0103/02	Internt arkiv nr	Rapport lokalisering	Gradering Fortrolig
Kommer fra arkiv	Ekstern rapport nr NGU 2001.051	Oversendt fra MoMin AS	Fortrolig pga Leieavtale 2001	Fortrolig fra dato:
Tittel Ore potential with emphasis on gold in the Mofjellet deposit, Rana, Nordland, Norway.				
Forfatter Bjerkegaard, T Sandstad N.J. Marker, M Cook, N. J.		Dato År 01.07 2001	Bedrift (Oppdragsgiver og/eller oppdragstaker) MoMin AS NGU Norges geologiske undersøkelse	
Kommune Rana	Fylke Nordland	Bergdistrikt	1: 50 000 kartblad 19271	1: 250 000 kartblad Mo i Rana
Fagområde Geologi	Dokument type		Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Mofjellet	
Råstoffgruppe Malm/metall	Råstofftype Au Ag			
Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse The present study has shown that: 1) Gold and silver are enriched in sulfide disseminated wallrock along the entire approx. 4 km long orebody, concentrated in mainly two fold structures 2) Gold is present in native form and as an alloy with silver in grains that can be separated. 3) In addition to gold and silver, there are elevated grades of copper, zinc and lead that should be taken into account. 4) The presence of a major fold structure in the south opens up the possibility for large hidden Zn-PB ore bodies at the depth				

NGUNorges geologiske undersøkelse
Geological Survey of Norway

GEOLOGY FOR SOCIETY

Ore Potential with emphasis on Gold in the Mofjellet deposit, Rana, Nordland, Norway



Contract investigation for MoMin AS

NGU Report 2001.050

Ore potential with emphasis on gold in the
Mofjellet deposit, Rana, Nordland, Norway

Report no.: 2001.050		ISSN 0800-3416	Grading: Confidential until 2008
Title: Ore potential with emphasis on gold in the Mofjellet deposit, Rana, Nordland, Norway			
Authors: T. Bjerkgård, M. Marker, J.S. Sandstad, N.J. Cook, T. Sør Dahl		Client: MoMin AS	
County: Nordland		Commune: Rana	
Map-sheet name (M=1:250.000) Mo i Rana		Map-sheet no. and -name (M=1:50.000) 1927- I Mo i Rana	
Deposit name and grid-reference: Mofjellet Deposit - UTM 462200 7354100		Number of pages: 24 Price (NOK): - Map enclosures: 3 Geological profiles	
Fieldwork carried out: None	Date of report: June 1st, 2001	Project no.: 291800	Person responsible: <i>[Signature]</i>
Summary: Before the Mofjellet mine was closed in 1987, high gold grades were found in the immediate wallrock of the orebodies. These findings were never followed up. The intention with this report is both to make these results more available and to confirm these by further investigation of the distribution of gold in the Mofjellet deposit. Thus, the present data set incorporates about 400 former and 418 new analyses of gold, mainly from wallrock with weak sulphide impregnations. Taking into account the total length of the orebody of more than 4 km, it is clear that much more data are needed to assess the gold potential. The present study shows that: 1) Gold and silver are enriched in sulphide disseminated wallrock along the entire approx. 4 km long ore body, concentrated mainly in two fold structures; 2) Gold is present in native form and as an alloy with silver in grains that can be separated; 3) In addition to gold and silver, there are elevated grades of copper, zinc and lead that should be taken into account; 4) The presence of a major fold structure in the south opens up the possibility for large hidden Zn-Pb ore bodies at depth. High gold grades are found along the entire length of the previously defined ore body, but so far only a limited number of intersections of the promising AKP and Nasa structures have been analysed for precious metals. The presence of high gold grades in the immediate wall rock of the previously defined ore body therefore deserves further investigations. Furthermore, the ore potential in the south-facing fold structure is proposed explored in a drilling program assisted by geophysical investigations from the Lens III level of the mine. By doing this the length of each drill hole will be minimized to c. 400 meters. Valuable geological information is present in the material left from the former mining company and should be investigated in detail. This is very important to fill the gaps left after the investigations carried out to date.			
Keywords: Gold	Silver	Sulphide	
Ore deposit	Geochemistry	Structure	
	Scientific Report		

CONTENTS

1. INTRODUCTION.....	4
2. GEOLOGY	4
2.1 Geological framework and accessibility.....	4
2.2 Lithologies	5
2.3 Structural geology	6
2.4 Geological Profiles	7
2.5 Ore descriptions	7
3. INVESTIGATIONS	8
4. RESULTS	9
4.1 Spatial distribution of gold, silver and base metals in the mineralisations	9
4.2 Gold contents in the different lithologies	12
4.3 Gold and silver versus other elements	13
5. ORE MINERALOGY	16
6. DEEPER ORE BODIES IN THE SOUTH?	21
7. SUMMARY AND CONCLUSIONS	23
8. RECOMMENDATIONS	24
9. REFERENCES	25

1. INTRODUCTION

The Mofjellet Zn-Pb (Cu) deposit produced 4.35 mill.metric tons of ore with average grades of 3.61 % Zn, 0.71 % Pb and 0.31 % Cu in the period 1928-1987. The average silver and gold contents in the mainly semi-massive ore were around 10 and 0.3 ppm, respectively. However, in the last years before the mine was closed down, high gold grades were found during diamond drilling (up to 7 ppm in a 1.4 m interval). These high-grade zones were found to be mainly associated with weak mineralisations beside the main ore zone (Kruse and Burman, 1987). The very interesting findings were, however, never followed up because the decision to close the mine had already been made.

Later, during work with the NGU national ore database, high gold grades were also found in several of the minor deposits in the Mofjellet district (up to 27 ppm, see Fig. 2), in addition to high grades of base metals and silver (Larsen et al., 1995, 1997). From this, it seems that the Mofjellet district on a regional basis is anomalous with respect to gold, but also has a potential for high base metal and silver grades.

On the basis of the above-mentioned interesting findings, the company MoMin AS decided to investigate the gold potential in the Mofjellet deposit. The results of the first stage of these investigations are presented in this report.

2. GEOLOGY

2.1 Geological framework and accessibility

The Mofjellet deposit is located 1 km to the south of the city Mo i Rana in the county of Nordland at latitude 66° 17' N (Fig. 1).



Figure 1: Bedrock map of the Mofjellet mining area. The railway tunnel is marked with a white stippled line. The frame of Fig. A1 (yellow line), shows the extent of the mined ore body. Orange, yellow and green colours are various gneisses, and brown is amphibolites. For detailed legend of the bedrock, see Sovegarto et al. (1988). Note the favourable location of the mining area close to harbour and the city of Mo i Rana. The grid is 1 x 1 km.

It is hosted by assumed Late Precambrian gneissic rocks of the Mofjellet Group in the Rödingsfjellet Nappe Complex of the Uppermost Allochthon in the Scandinavian Caledonides. The Mofjellet deposit is accessible through the former tunnel and drifts from the mining period, which to our knowledge is mainly intact. Some of these are used today for storage purposes of e.g. drill cores from the mine. An abandoned, but still intact, two kilometres long railway tunnel cuts the ore zone along strike and forms an excellent starting point for further investigations (Fig. 1).

2.2 Lithologies

The Mofjellet Group (Søvegjarto et al., 1988) in general, is dominated by quite massive grey gneisses with persistent layers of amphibolite and aluminous biotite and muscovite gneisses (Fig. 2). The group is mapped in great detail in 1:5000 and 1:10000 scale by M. Marker in 1974-1981 and 1999. For detailed descriptions of the lithologies are referred to Marker (1983). The grey gneisses consist of quartz and plagioclase with varying proportions of subordinate biotite and muscovite. They are likely to represent greywacke type metasediments, though an igneous origin for at least some of the grey gneisses cannot be excluded. Parts of the commonly garnet-bearing amphibolites contain pods and stripes of calc-silicate rock (interpreted to have been pillow lavas). In attenuated parts in fold limbs they contain significant amount of biotite replacing hornblende. The biotite and muscovite gneisses are generally rich in quartz and aluminosilicates in addition to mica. They may form separate, generally persistent layers, but grade into each other with changing proportions of biotite and muscovite. Biotite-dominated types may also contain amphibole and grade into hornblende-biotite gneisses. The biotite gneisses contain excessive kyanite (Al-mineral) in addition to garnet and staurolite, while the muscovite gneisses are mostly poor in these minerals. The biotite (-hornblende) and muscovite gneisses invariably contain disseminated pyrite and are important by hosting all the stratabound Zn-Pb-Cu sulphide mineralisations recorded in the Mofjellet Group, including those of the Mofjellet mine. Several stratigraphic levels with zones of exhalites and pyrite mineralisation can be traced for several kilometers along strike. They contain many small massive sulfide mineralisations which are generally rich in zinc and lead but locally also copper. They all represent levels of pelitic sediments in the grey gneisses.

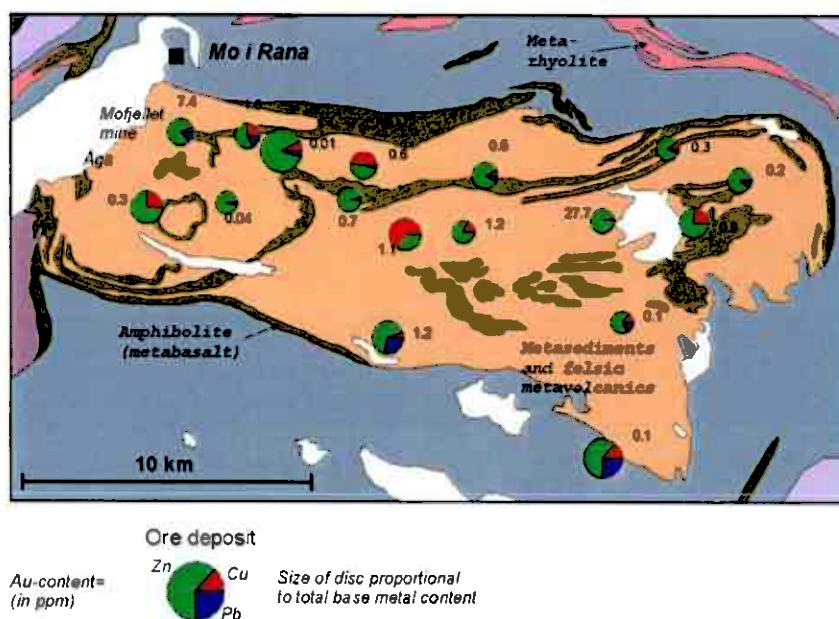


Figure 2: Overview of geology in the Mofjellet district with the major sulphide deposits displayed by discs with proportions of Zn, Pb, Cu. Numbers show highest gold values recorded in each deposit.

Based on limited litho-geochemical studies of the amphibolites, it has been suggested that the Mofjellet Group formed in a volcanic arc or back-arc environment. (Bjerkgård et al., 1997). More comprehensive studies, and also including the metasediments, are necessary to confirm this. All rocks are deformed under medium grade metamorphic conditions. The presence of kyanite and staurolite indicates metamorphic temperatures and pressures around 550°C and 7 kbars. Locally, the rocks show evidence of incipient partial melting.

The rocks of the mining area are the same as those in the rest of the group with one exception. Hornblende gneisses, grading into biotite gneisses, are specific for the ore-bearing horizon though they usually do not actually host the ore. The hornblende and hornblende-biotite gneisses, containing subordinate garnet, staurolite and kyanite, have been suggested to represent tuffitic or mixed sedimentary and tuffitic material. There is also a possibility that they represent lithological levels affected by fluid activity. Muscovite or muscovite-biotite gneisses adjacent to the hornblende-bearing gneisses often host the more massive ores. In addition, the ore-bearing horizon contains several layers of amphibolite (see geological profiles 1-3 in back cover of report).

2.3 Structural geology

The Mofjellet deposit has a lateral extent of nearly 4 kilometres in the east-west direction, outcropping in the far west where the ore was discovered as early as in 1688 (see Fig. 1).

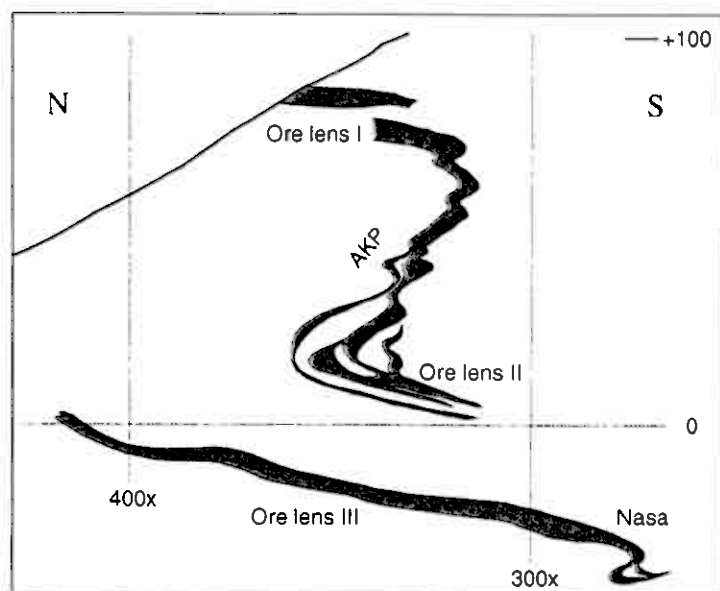


Figure 3: Schematic N-S profile from the westernmost part of the deposit, showing the general structure and division of the deposit into different ore lenses. The grid is 100 x 100 m.

The deposit consists of three ruler-shaped ore lenses situated more or less on top of each other (Fig. 3 and geological profiles 1-3 in back cover). The ore lenses have a maximum width of about 100 meters. The two upper lenses (lenses I and II) are connected through tight folding in a generally north-facing fold structure, the so-called AKP structure. This very important structure can be followed along the entire length of the ore body. Lens III forms a separate ore lens on the lower limb of this major north-facing fold structure. Based on the lithological succession the ore lenses occur in, it is likely that the separation of Lens III from lenses I and II in the ore zone is a primary feature, though it has been proposed that it was disrupted from the other lenses by faulting. A slightly deeper ore lens structure at the southern continuation of Lens III, known as the Nasa structure, was mined in the central 500 meters of the ore body

in the last years before the mine was closed. The lateral extent and shape of the ore-rich Nasa structure is unknown, but it seems to be basically a tight fold structure on the southernmost known part of Lens III. On the basis of surface mapping, a complementary south-facing major fold closure exists at depth, and since the ore body has not been delimited in the south, it could be that important concentrations of ore are present in this major closure. This is further discussed in Chapter 6 in this report.

2.4 Geological profiles

As part of this study, three geological profiles have been prepared from west to east in sections Y41500, Y44130 and Y45270 (Profiles 1-3 in back cover). Nearby drill cores to each profile, with important analytical data, have been projected into each profile according to local F_2 -fold axes, such that their position in the fold structure is as correct as possible.

The profiles show that the ore forming fold structure is most open in the west, with a clear separation of Lens I, AKP-Lens II and Lens III in profile 1 (at Y41500) with ore in all levels. In the central profile 2, at Y 44130, Lens II and Lens III are still separated, but are very close. Their closeness may be a primary feature of the ore distribution, but several quite extensive movement zones, expressed as biotite-rich rocks (biotitites) with secondary ore mineralisations occur at the top of Lens III. These movement zones are best interpreted as adjustments during folding, but more extensive shear movements cannot be excluded. In this profile the ore seems to disappear in the upper part of the structure. The Nasa structure is shown in the southernmost part of Lens III in this profile. In the eastern profile 3, at Y45270 (which includes profile Y44880), Lens II and III have coalesced and cannot really be distinguished from each other. Ore is concentrated in Lens II/III and the AKP structure, while the upper part of the structure is poor in ore.

There is thus a clear trend as to structure and ore distribution from west to east: The lower part of the ore-bearing structure gets tighter towards the east and Lens II and Lens III approach each other and coalesce at about Y44500 with development of movement zones in the area between them. At the same time the sulphide content is strongly decreasing towards the east in the upper part of the structure.

2.5 Ore descriptions

The ore deposit consists of alternating semi-massive ore layers, layers of sulphide disseminations and layers of wall rock at a meter-scale or less. The ore layers rarely contain as much as 50 % sulphides. The most important ore minerals are pyrite and sphalerite, while galena, chalcopyrite and pyrrhotite occur in subordinate amounts. Various sulphosalts, arsenopyrite, native antimony and gold-silver alloys are found in variable, but generally accessory amounts. Important gangue minerals include quartz, biotite, muscovite, calc-silicates (epidote, amphibole, diopside, garnet), calcite, plagioclase, and magnetite.

In many cases, coarse sulphides form disseminations and semi-massive veins, overprinting the more fine-grained sulphide layers or injected into layers of wall rock. These coarse sulphides have much higher contents of galena, chalcopyrite and sulphosalts, and commonly lower contents of sphalerite and pyrite, than the ordinary ore layers and were apparently formed by remobilisation of sulphides from the original layers.

Based on the character of the ore deposit, including structure, mineralogy and associated lithologies, the Mofjellet deposit most probably represents a syngenetic, exhalative hydrothermal mineralisation, formed at or near the seafloor in the late Precambrian.

It is not within the scope of this study to give a final answer regarding the genesis of the gold enrichments associated with the Mofjellet deposit, but sampling, core logging and microscope work were carried out to give indications whether gold 1) is associated with the Zn-Pb-(Cu) ore, 2) is concentrated in shear/fault zones or 3) was remobilised during deformation and metamorphism.

3. INVESTIGATIONS

For the present investigation, it was important to find out: (i) the distribution of gold; ii) association of gold with other metals; iii) some indications regarding the genesis of gold. The investigations have been divided into three main parts:

- 1: *Examination of the extensive archive of reports, maps, analyses etc. available at the Directorate of Mining, Trondheim, followed by systematisation of the old data.*

It turned out that the archive is in very good shape. In the short time we had for this project only a small part of the archive could be examined. The old core logs were complete and include many thousand analyses of base metals and about 400 analyses of gold and silver. Only base metal data related to the profiles investigated for gold and silver were used in this study.

- 2: *Re-logging, sampling, chemical and mineralogical analyses of a number of drill cores in the national core storage at Løkken Verk:*

Cores of 59 holes from the Mofjellet deposit are stored at Løkken. Unfortunately, about half of these cores are not complete. In addition, during earlier analyses, 100% of the cores from some of the mineralised intervals were removed. From this, only about 4500 meters of core were available for investigations. It should be mentioned that additional cores are still stored in the Mofjellet mine.

As mentioned above, the deposit has a total length of nearly 4 kilometres. From this it is clear that the holes at Løkken cannot be used to give more than a rather rough idea about the gold distribution in the Mofjellet deposit as a whole. On this basis, it was clear that we had to restrict ourselves to a limited number of cores, representing two parts of the deposit in which already a number of analyses of precious metals already had been carried out.

412 samples were split from the cores and sent to ACME Analytical Laboratories (Vancouver, Canada) for analysis of 32 elements by ICP-ES and by Fire Assay (Au, Pt, Pd). Samples were also chosen from some of the intervals for preparation of polished slabs for microscopic investigations and electron microprobe analyses (see also Cook, 2001).

Intervals chosen for analysis were from relatively homogeneous parts of core and are assumed to be representative of practically all the lithologies within the mine sequence. Lithologies analysed included, hornblende-biotite gneiss, biotite $\pm$ muscovite gneiss, muscovite $\pm$ biotite gneiss, grey gneiss, quartz veins, late intrusive pegmatite dykes, calc-silicate rock, and amphibolite. These had variable amounts of sulphides, from none visible to semi-massive ore. Also sampled were intervals with indications of shearing/movement, represented by biotitites.

3: *Coordination, data analysis and composition of report.*

The data collected were analysed and are presented in various ways in this report. A companion report was made on the mineralogy and microprobe analyses (Cook, 2001). The local grid from the mine was kept in the profiles.

4. RESULTS

4.1 Spatial distribution of gold, silver and base metals in the mineralisations

The locations of the drill holes with chemical data used in this report are shown in east-west projections, both vertically (YZ) and horizontally (YX) along the ore axes (Fig. A1, Table A1, appendix, see also Fig. 1 for geographical location). The results of the chemical analyses are graphically shown in eight north-south (XZ) profiles (Figs. A2-A9 a-d). The XZ profiles are approximately perpendicular to the plunge of the ore body (fold axis). They give representative illustrations of the distribution of the precious and base metals over most of the length of the ore body. Each XZ profile is accompanied by a vertical YZ profile to show the lateral location of the drill holes incorporated in the XZ profile. Note that projections of the drill holes along the ore axis have not been performed. Due to the gently dipping fold axes, just minor corrections would have been necessary.

The Au content is plotted together with Ag, Zn, Cu and (Cu+Pb)/total base metal in each of these profiles. Profiles 1-3 and 5-8 represent the western and eastern part of the ore body, respectively, whereas the central part is represented by profile 4. The approximate positions of the previously defined ore lenses are marked, and illustrate the change in the relative locations between them along the ore deposit.

Profiles 1-3 (Figs. A2-A4) show the gold enrichment associated the AKP structure, mainly in the wall rocks of the former mined ore body, and demonstrate the positive correlation between gold and silver. The higher gold values are clearly associated with elevated copper and lead values, as seen in the profiles presenting Au - Cu and Au - (Cu+Pb)/total base metal values. The gold enrichment is most pronounced just outside the ore body as exemplified in Profile 1. The highest gold value (7.35 ppm over 1.4 m) has been detected further west in similar tectonostratigraphic position, in the AKP structure (see also Geological profile 1 in back cover).

The gold enrichment in the more strongly folded part of Lens III, the Nasa structure, is illustrated in Profile 4 (Fig. A5). This is the only profile with intersections of this structure where gold analyses exist. Some higher gold values are also detected in Lens II associated with high copper values.

Minor gold enrichment is found between Lens II and III in Profile 5 (Fig. A6) where the ore lenses are located closer to each other. In this case the elevated values seem to be related to discrete shear zones. Gold analyses do not exist of drill cores intersecting the AKP structure in this section. Further east, in Profile 6 (Fig. A7), the high gold values associated the AKP structure are clearly illustrated (see also Fig. 4 and Geological profile 2). The highest gold grades are recorded just outside the mined ore body and are correlated with higher silver and copper values. The lateral continuation of this gold enrichment is illustrated in the accompanying XZ profile. Minor gold enrichment is found in the lower Lens II and III, but

just a few gold analyses exist. Similar gold enrichment in the wall rocks in the AKP structure is also shown in the Profile 7 and 8 (Fig. A8 and A9).

Additionally, high gold values (≥ 1 ppm Au) can be traced to the easternmost part of the ore body within the AKP structure as shown in Geological profile 3 (in back cover). The profiles thus illustrate major trends in the distribution of gold and base metals along the whole length of the Mofjellet ore body, but also clearly demonstrate the lack of data.

In total, including the previous reported data (Kruse and Burman 1987), 840 gold analyses now exist from the Mofjellet mine. Of these, 35 analyses show gold values in the range 1-7.35 ppm, while 75 analyses have values above 0.5 ppm. All data are presented in Table A1. The anomalous gold values are with few exceptions restricted to two main zones of the Mofjellet deposit, the AKP and ore lens III-Nasa structures.

Table 1 and 2 show the average metal contents (weighted according to the length of each interval) intersected in drill holes where gold values on average are above 0.5 ppm in the AKP and Nasa structure, respectively. The AKP structure has 29 gold-rich intersections with average gold values varying from 0.5 to 3.88 ppm over zones between 0.7 and 9.1 meters thick. The westernmost profile is Y41252 and the easternmost is Y45270, meaning that this gold-bearing structure can be followed for more than 4 km along the axis of the ore body. On average, the gold bearing mineralisation in the AKP structure contains 0.32 % Cu, 0.71 % Pb, 1.61 % Zn, 37 ppm Ag and 1.35 ppm Au in a zone with an average thickness of 2.4 meters.

Most data exist for the profile interval Y44120-Y44134 (Fig. 4). Here, an average of 0.47 % Cu, 0.84 % Pb, 0.76 % Zn, 64 ppm Ag and 2.2 ppm Au is calculated for an average thickness of 1.9 meters. An area of about 100 m² can be outlined in this profile with similar grades, the whole area being in the immediate hanging wall of the former mined ore zone.

Table 1: Average metal contents in gold-bearing intervals of drillholes intersecting the AKP structure

Profile	Hole	Interval	Cu	Pb	Zn	Ag	Au	Meters
41252Y	7710	7.0-9.9	0.17	0.36	0.03	52.8	1.70	2.90
41375Y	1313	87.1-89.9	0.38	0.32	0.07	44.3	3.88	2.80
41380Y	1316	40.7-42.0	0.19	0.49	0.12	38.4	0.80	1.30
41380Y	1315	45.3-53.0	0.12	0.22	0.59	10.5	0.77	7.70
41380Y	1315	62.0-63.0	0.60	0.85	2.19	25.0	0.65	1.00
41380Y	1315	86.0-87.5	0.35	0.11	0.33	12.0	0.55	1.50
41446Y	1226	33.5-34.7	0.37	1.07	3.67	23.0	0.50	1.20
41488Y	1312	40.0-42.3	0.14	0.34	0.41	23.5	0.70	2.30
41506Y	1258	25.2-26.2	0.62	0.94	2.49	51.0	0.80	1.00
41506Y	1258	61.6-65.6	0.33	0.73	2.29	28.8	1.04	4.00
41506Y	1258	83.1-84.1	0.92	0.48	2.38	20.0	0.85	1.00
41506Y	1258	88.1-89.8	0.26	2.55	1.51	61.7	0.80	1.70
41583Y	1305	23.5-32.6	0.18	0.97	4.51	21.0	1.35	9.10
41583Y	1305	53.7-55.3	0.13	0.60	3.27	14.0	0.70	1.60
41583Y	1304	54.9-58.0	0.25	0.58	2.00	19.3	0.65	3.10
41583Y	1304	63.7-64.4	0.94	0.54	1.94	5.0	0.60	0.70
44120Y	781A	53.7-57.4	0.47	1.11	0.42	75.7	2.30	3.70
44120Y	775	60.5-61.6	0.33	2.52	0.05	142.0	1.35	1.10
44131Y	1327	1.25-3.0	0.79	1.56	0.02	99.0	2.98	1.75
44132Y	1326	1.2-2.25	0.28	1.01	0.04	103.7	3.10	1.05
44133Y	1323	11.0-15.4	0.36	0.89	1.42	48.3	1.42	4.40
44133Y	1324	5.0-6.72	0.23	0.56	0.28	37.1	0.79	1.72
44134Y	1321	6.6-9.5	0.08	0.21	0.06	53.5	2.75	2.90
44134Y	1328	1.5-2.3	2.37	0.41	6.01	36.0	2.38	0.80
44193Y	1003	55.95-57.55	0.78	1.08	2.21	46.2	1.11	1.60
44398Y	7604	246.0-247.15	0.14	0.57	1.59	51.3	1.06	1.15
44398Y	7604	254.75-256.3	0.47	0.23	1.17	17.4	0.76	1.55
44984Y	747	59.0-60.0	0.13	0.38	2.15	23.6	1.15	1.00
45270Y	8004	280.15-283.3	0.15	0.48	1.36	20.8	0.64	3.15
Weighted average			0.32	0.71	1.61	36.8	1.35	2.37

There exist very few drill holes that intersect the Nasa structure and even fewer have been analysed for precious metals (Table 2). The gold enriched zone here is on average thinner (1.7 meters, Table 2) and also has less gold and silver (0.8 and 23 ppm, respectively).

Table 2: Average metal contents in gold-bearing intervals of drillholes intersecting the Nasa structure

Profile	Hole	Interval	Cu	Pb	Zn	Ag	Au	Meters
43055Y	1243	73.0-74.2	0.76	1.96	3.68	39.5	0.5	1.2
43055Y	1243	80.9-81.9	0.21	0.7	1.72	32.8	0.7	1
43055Y	1243	87.7-88.7	0.13	0.78	1.49	13.6	0.6	1
43055Y	1243	97.6-100.05	0.16	0.46	0.47	20.2	1.22	2.45
43055Y	1243	115.8-119.1	0.26	0.28	1.14	14.7	0.87	3.3
43055Y	1240	88.4-89.6	0.19	1.81	6.16	35.3	0.7	1.2
44012Y	1013	33.0-34.8	0.26	0.62	0.28	23.4	0.63	1.8
Weighted average			0.27	0.77	1.71	23.1	0.81	1.71

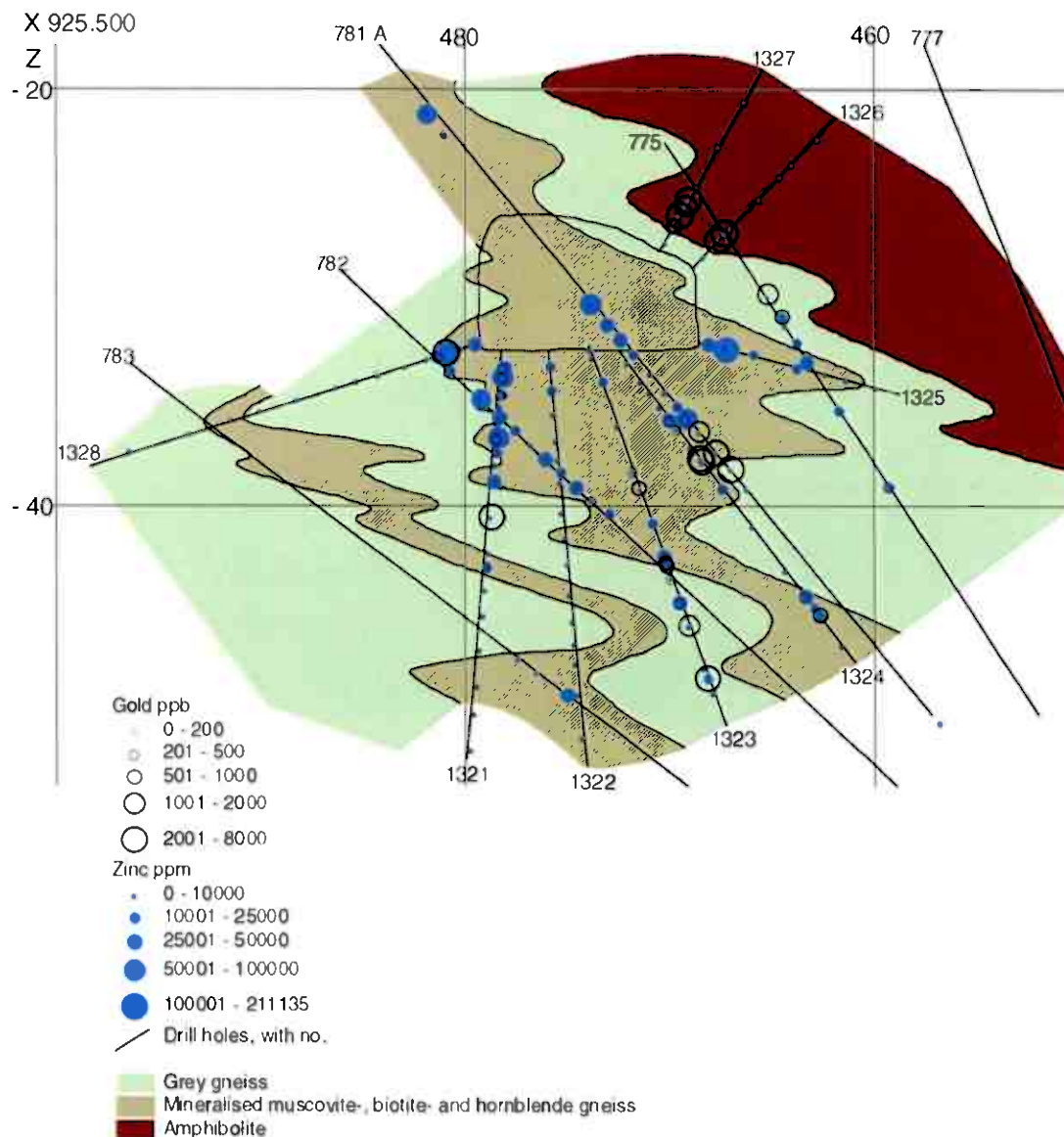


Figure 4: Geology of the gold-bearing AKP structure in profile Y 44130. Data and drill holes from profile interval Y44120-Y44134 have been projected into this profile.

4.2 Gold contents in the different lithologies

One important aspect is to find out if high gold grades are related to certain lithologies. From the mining period and the existing drill cores, it is well known that the ore lenses were associated with biotite-muscovite gneisses. Figure 5a shows that most of the high gold grades are related to intervals with calc-silicate minerals (i.e. diopside, epidote, zoisite), biotite $\pm$ hornblende gneiss or quartz veins. This is further accentuated in Figure 5b, where the percentage in each gold interval for the different lithologies is shown. Nearly 60 % of the gold values of 1 ppm or more are found in the three above-mentioned lithologies. Other important gold hosting lithologies are grey gneiss (actually all of these are biotite-rich) and pegmatite (coarse quartz-feldspar) veins. However, some high grades are also found in muscovite $\pm$ biotite gneiss and also in biotite $\pm$ muscovite gneiss. In fact, the only "barren" lithology is amphibolite.

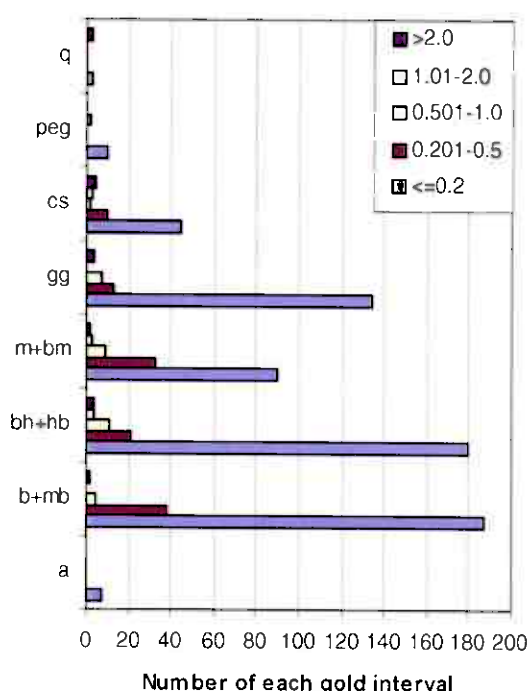


Figure 5a: Graph showing number of each lithology that falls within the different intervals of gold content.

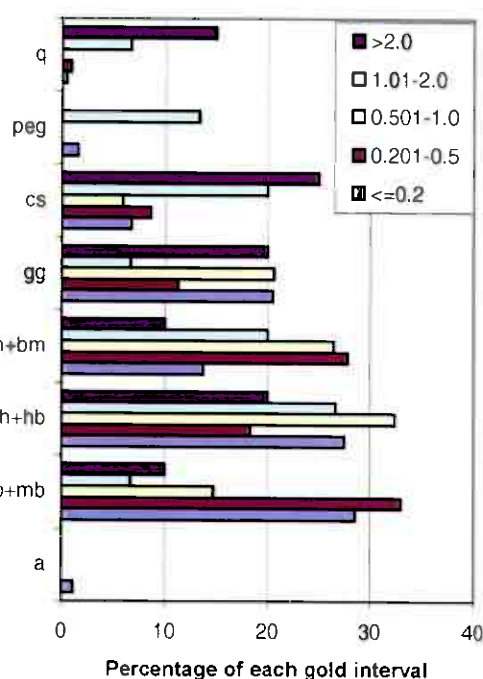


Figure 5b: Graph showing percentage of each interval of gold content that is found in the different lithologies.

q – quartz veins, *peg* – pegmatite veins, *cs* – calc silicate rock (skarn), *gg* – grey gneiss (incl. biotite and muscovite varieties), *m+bm* – muscovite $\pm$ biotite-bearing muscovite gneiss, *bh+hb* – biotite-hornblende and hornblende-biotite gneiss, *b+mb* – biotite $\pm$ muscovite gneiss, *a* – amphibolite (metabasalt).

Summary and implications

The enrichment of gold in quartz veins, calc-silicate assemblages and pegmatite veins, suggest that gold was remobilised and deposited in these rocks during deformation and metamorphism. Remobilisation also explains why enrichments of gold are found in all lithologies, even though some of these lithologies are, apparently, more favourable than others.

4.3 Gold and silver versus other elements

Correlation matrix calculations were carried out on the samples analysed by ACME and also include the old data (Table A1). The matrix (Fig. 6a) shows that gold has a significant positive correlation with copper ($r=0.57$), lead (0.46), silver (0.75), arsenic (0.52) and antimony (0.64). Gold has no correlation with zinc ($r=0.07$). Silver is correlated with the same elements, but also to some degree with bismuth, in agreement with the fact that silver is carried both by Sb-sulphosalts and coupled with bismuth in galena (see Cook, 2001). Copper, lead and zinc are correlated with each other, especially is this true for lead and zinc ($r=0.73$). This shows that the contents of all the major base metals increase with the general increase of sulphide content within the ore. However, as shown in Figure 7, high Cu and Pb values are also found where the values of Zn are very low. The same picture holds when all available data are included (Fig. 6b): Gold and silver are correlated with each other and with copper and lead, but not with zinc.

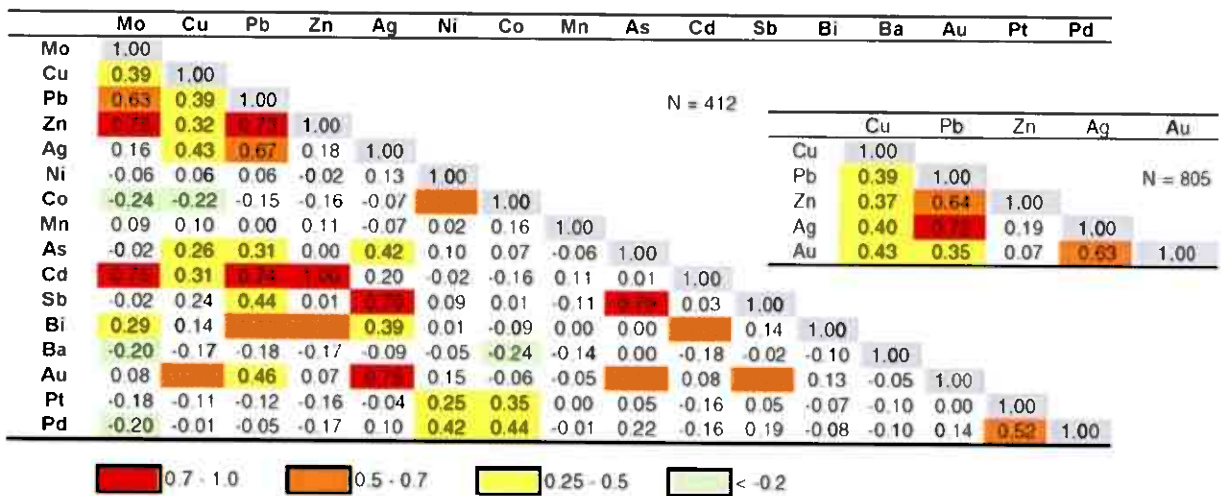


Figure 6a: Correlation matrix for the samples analysed by ACME laboratories. Coloured spaces show significant correlations between elements. The small matrix (b) includes the old data sets (from Kruse and Burman 1987).

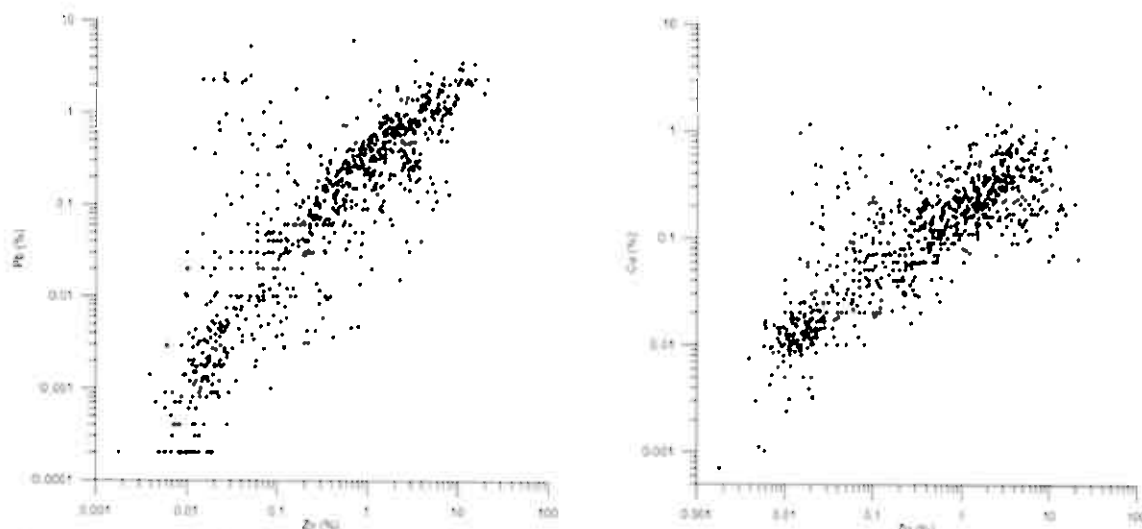


Figure 7: Lead (Pb) and copper (Cu) versus zinc (Zn) in intervals analysed on precious metals, all data. Note tails of high Pb and Cu values with low Zn values. Logarithmic scales.

The prominent positive correlation between gold and silver is clearly seen on the Ag vs. Au plot (Fig. 8).

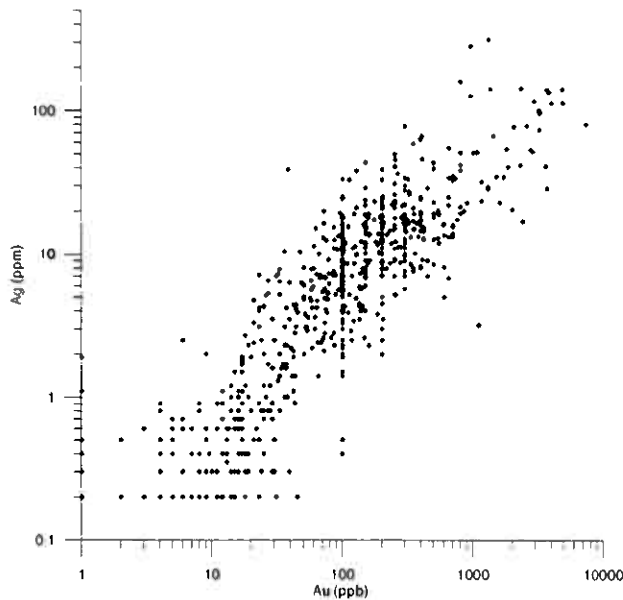


Figure 8: Plot of silver (Ag) versus gold (Au). Logarithmic scale.

As shown above (Fig. 6), both gold and silver are correlated with copper and lead. To investigate this in more detail, gold and silver are plotted versus the ratio $\text{Cu}+\text{Pb}/\Sigma \text{ base metals}$ (Fig. 9). The gold and silver show identical patterns and are clearly enriched in zones where the copper and lead values are high. The same is shown in the triangular Cu-Pb-Zn diagram where the data are compared with the average of the mined ore in the period 1970-1987 (Fig. 10); the high gold values correlates with higher Cu+Pb to Zn ratios.

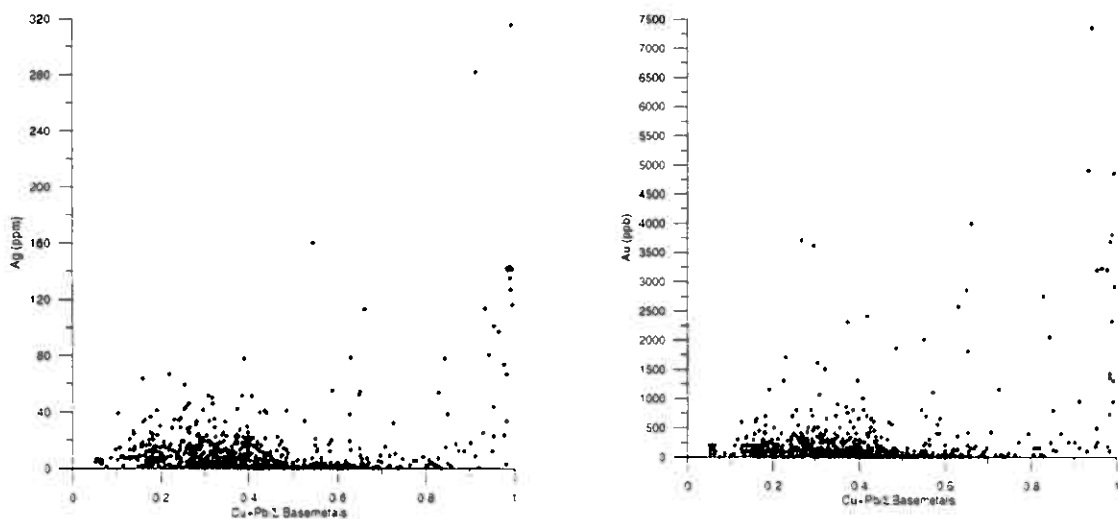


Figure 9: Silver and gold versus the ratio $\text{Cu}+\text{Pb}/\Sigma \text{ base metals}$.

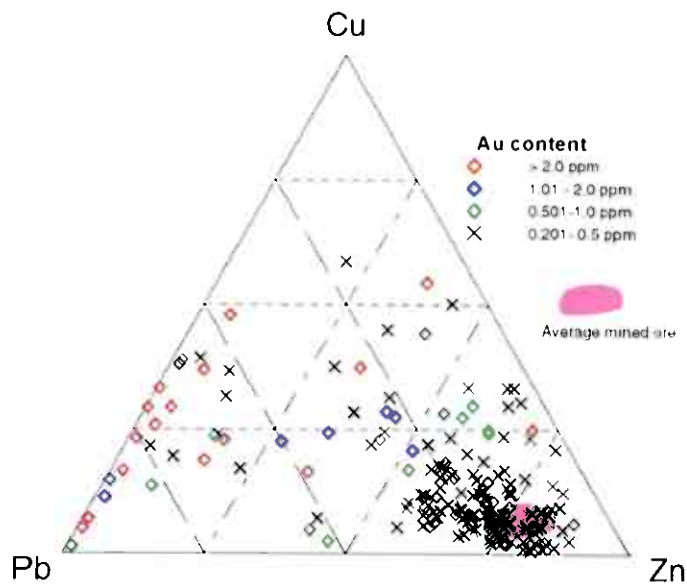


Figure 10: Variation of gold content related to the ratios between copper (Cu), zinc (Zn) and lead (Pb). Note that the highest gold contents are found mainly along the Cu-Pb join. The red area is the average figures for the mined ore in the period 1970-1987 (a total of more than 1 mill. t).

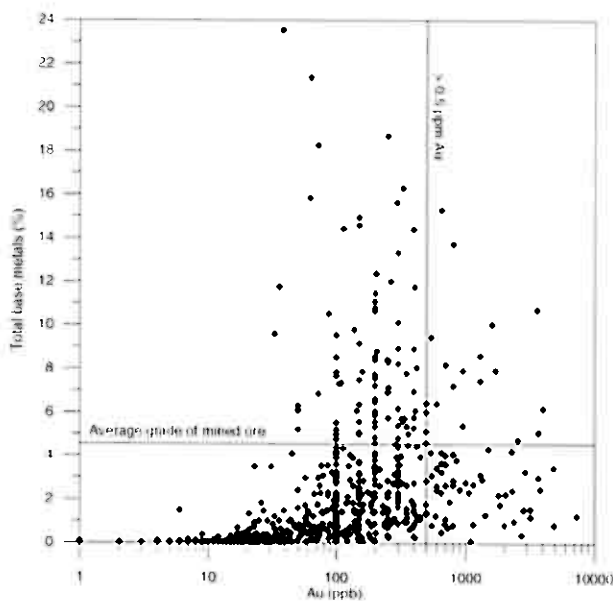


Figure 11: Total base metal content versus gold content, showing that gold is concentrated in zones with lower base metal contents.

From this, it is clear that high gold (and silver) values are found mainly in the sulphide disseminated zones outside the main ore zones. This is also depicted in Fig. 11, which shows that about 75 % of the analysed samples containing more than 0.5 ppm gold, are found in zones that have less than the average grade of the ore previously mined at Motjället (c. 4.6 % base metals).

Summary and implications:

- Gold and silver are enriched in samples with disseminated sulphides.
- Gold and silver are found preferentially in zones with high contents of copper and lead, but relatively low contents of zinc.
- Strong correlation of gold and silver with copper, lead, antimony and arsenic, points to an association of gold and silver with chalcopyrite, galena and various sulphosalts.

5. ORE MINERALOGY

The main opaque minerals in the Mofjellet ores are, in decreasing order of abundance, pyrite (FeS_2), sphalerite ($(\text{Zn,Fe})\text{S}$), galena (PbS), chalcopyrite (CuFeS_2), monoclinic pyrrhotite (Fe_{1-x}S), magnetite (Fe_3O_4), ilmenite (FeTiO_3), rutile (TiO_2), hematite (Fe_2O_3) and arsenopyrite (FeAsS). Several other minerals, including Cu-Pb, Cu-Sb and Ag-Pb-Sb sulphosalts are present as accessory phases. Full details are given in the companion report on ore mineralogy (Cook, 2001).

Twenty-three polished specimens were studied, each 2.5 cm in diameter. These were prepared from the Ag- and Au-rich intersections in seven drill holes (Table 3). Gold grains were identified in seven samples (shown in bold text in the table).

Table 3: Index of studied polished sections

Sample no.	Intersection	Description
Mo 1	DH 1321 1.42 m	Disseminated pyrite, sphalerite & galena in biotite-quartz gneiss.
Mo 2 & Mo 2a	DH 1321 4.30-4.32 m	Semi-massive pyrite-galena-sphalerite ore.
Mo 3	DH 1321 8.45 m	Disseminations of chalcopyrite & galena in biotite gneiss.
Mo 4	DH 1323 13.50-13.53 m	Pyrite & chalcopyrite disseminations along the schistosity planes of phyllosilicates.
Mo 5	DH 1323 13.36 m	Coarse sphalerite in biotite gneiss.
Mo 6	DH 1323 11.12-11.15 m	Disseminated pyrite in biotite-quartz gneiss
Mo 7	DH 1323 17.9 m	Quartz rich ore carrying galena & sulphosalts
Mo 8	DH 1323 6.50 m	Finely disseminated chalcopyrite in gneiss.
Mo 9	DH 1324 12.05 m	Finely disseminated chalcopyrite in gneiss.
Mo 10 & Mo 10a	DH 1324 14.85-14.95 m	Coarse porphyroblastic pyrite carrying galena, sphalerite & some sulphosalts in fracture fillings.
Mo 11	DH 1326 2.14 m	Massive pyrite from micro-shear. Galena & chalcopyrite fill fractures in the pyrite.
Mo 12	DH 1326 1.28 m	Semi-massive dissemination of chalcopyrite & galena in biotite gneiss.
Mo 13	DH 1327 3.07 m	Semi-massive dissemination of chalcopyrite & galena in biotite gneiss.
Mo 14	DH 8004 278.7 m	Massive quartz carrying pyrite & sphalerite adjacent to vein.
Mo 15 & Mo 15a	DbH 8004 279.3 m	Disseminations of chalcopyrite & galena in biotite gneiss. Narrow veinlets.
Mo 16	DbH 1327 2.78 m	Disseminations of prite in quartz-rich gneiss.
Mo 17 & Mo 17a	DbH 1327 1.74 m	Disseminations of chalcopyrite & galena in biotite gneiss. Narrow veinlets.
Mo 18 & Mo 18a	DbH 1328 1.5-1.6 m	Semi-massive ore with pyrite, galena & chalcopyrite. Some sulphosalts.

Table 4: Gold grains identified in this study.

The consecutive "grain number" given (first column) indexes grains to Plates 1 and 2. Grain sizes are given as the diameter of the grain.

Grain	Sample	Size (μm)	Location & mineral association
1	Mo 3	30	In silicate matrix, associated with galena
2	"	2	In silicate matrix, associated with galena
3	"	2	On margin of galena grain
4	"	3	On margin of galena grain
5	"	14	On margin of galena grain
6	"	4	On margin of galena grain
7	"	11	On margin of galena grain
8	"	3	Filling fracture in galena, associated with tetrahedrite
9	"	18	In quartz matrix, associated with galena
10	"	15	On margin of chalcopyrite grain
11	"	3	On margins of tetrahedrite grain
12	"	2	On margins of tetrahedrite grain
13	"	10 x 1	On margins of tetrahedrite grain
14	"	7	In quartz matrix, associated with galena & chalcopyrite
15	"	6	On margins of tetrahedrite grain
16	"	5	On margins of tetrahedrite grain
17	"	3	On margins of tetrahedrite grain
18	"	60 x 1	On margins of tetrahedrite grain, some chalcopyrite
19	"	3	On margins of tetrahedrite grain
20	"	3	In quartz, associated with galena & tetrahedrite
21	"	8	On margins of tetrahedrite grain
22	"	5	Enclosed in tetrahedrite
23	"	4	On margins of tetrahedrite grain
24	"	19	On margin if chalcopyrite, associated with tetrahedrite
25	"	5	In quartz, associated with galena
26	"	3	Enclosed in tetrahedrite
27	Mo 7	10	In silicate matrix, associated with chalcopyrite
28	Mo 10A	15	At margin of chalcopyrite
29	"	15	At margin of chalcopyrite
30	"	5	With chalcopyrite, filling fracture in pyrite
31	"	4	With chalcopyrite, filling fracture in pyrite
32	Mo 12	3	Inclusion in galena
33	"	1	At boundary between chalcopyrite and pyrrhotite
34	"	3	Within fracture in chalcopyrite
35	"	8	At margin of chalcopyrite, assoc. with tetrahedrite
36	"	6	On margin of galena
37	Mo 13	3	At boundary of chalcopyrite and tetrahedrite
38	"	1	At margin between galena and tetrahedrite
39	"	1	At margin between galena, tetrahedrite and bournonite
40	"	2	Inclusion in galena
41	"	2	Inclusion in galena
42	"	5	At margin between galena and tetrahedrite
43	Mo 17A	2	Inclusion in chalcopyrite
44	Mo 18	1	Inclusion in chalcopyrite, itself within pyrite
45	"	22	Inclusion in pyrite
46	"	10	Inclusion in chalcopyrite-pyrrhotite, itself within pyrite
47	"	8	Inclusion in chalcopyrite-pyrrhotite, itself within pyrite
48	"	8	Inclusion in chalcopyrite-pyrrhotite, itself within pyrite
49	"	1	Inclusion in chalcopyrite-pyrrhotite, itself within pyrite

Gold mineralogy

Forty-one gold/electrum grains have been identified. These are tabulated in Table 4, with grain size and association, and photographed in Plates 1 and 2. No other Au-bearing minerals were observed in the samples. Gold chiefly occurs as small grains, sub-10 μm in diameter (Fig. 12). The average grain diameter is 6 μm , the largest is 30 μm . Gold is chiefly associated with chalcopyrite, followed by tetrahedrite-tennantite and galena. Gold is not seen associated with sphalerite. Assemblages containing gold commonly also contain a range of Sb-sulphosalts, tetrahedrite being the most abundant, and many gold grains occur as very thin rims to tetrahedrite grains. Gold grains have a wide range of compositions. The majority were golden yellow in colour, suggesting fineness in excess of .750. Some however, appeared much more silver-rich. Four of these grains were checked by electron microprobe and showed compositional variation from 47.55 to 62.26 wt. % Au (Table 5).

Table 5: Electron probe microanalyses of electrum grains, normalized to 100 wt. %

Wt. %	Grain 33	Grain 32	Grain 35	Grain 34
Ag	47.55	51.04	54.16	62.26
Au	48.80	46.55	41.64	35.61
Hg	1.31	1.83	2.57	1.88
Cu	1.94	0.33	-	0.13
Sb	0.40	0.25	1.64	0.17

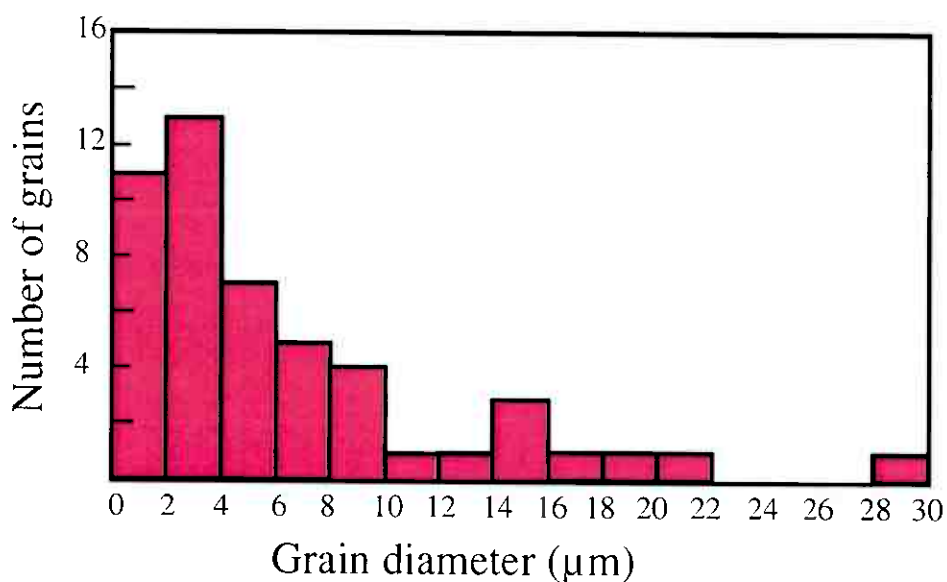


Figure 12: Grain size distribution among the 49 identified gold grains. Diameter is measured as an approximate mean of the longest and shortest dimensions of each grain.

Silver mineralogy

The silver mineralogy of the samples appears to be distributed between galena and tetrahedrite-tennantite, $(\text{Cu}, \text{Ag})_{12}(\text{Fe}, \text{Zn})_2(\text{Sb}, \text{As})_4\text{S}_{13}$, containing up to 23 wt. % Ag. Minor amounts of Ag occur in the form of native silver/electrum and as discrete Ag-minerals (dyscrasite, ramdohrite and diaphorite). Full details are given in the companion report on ore mineralogy.

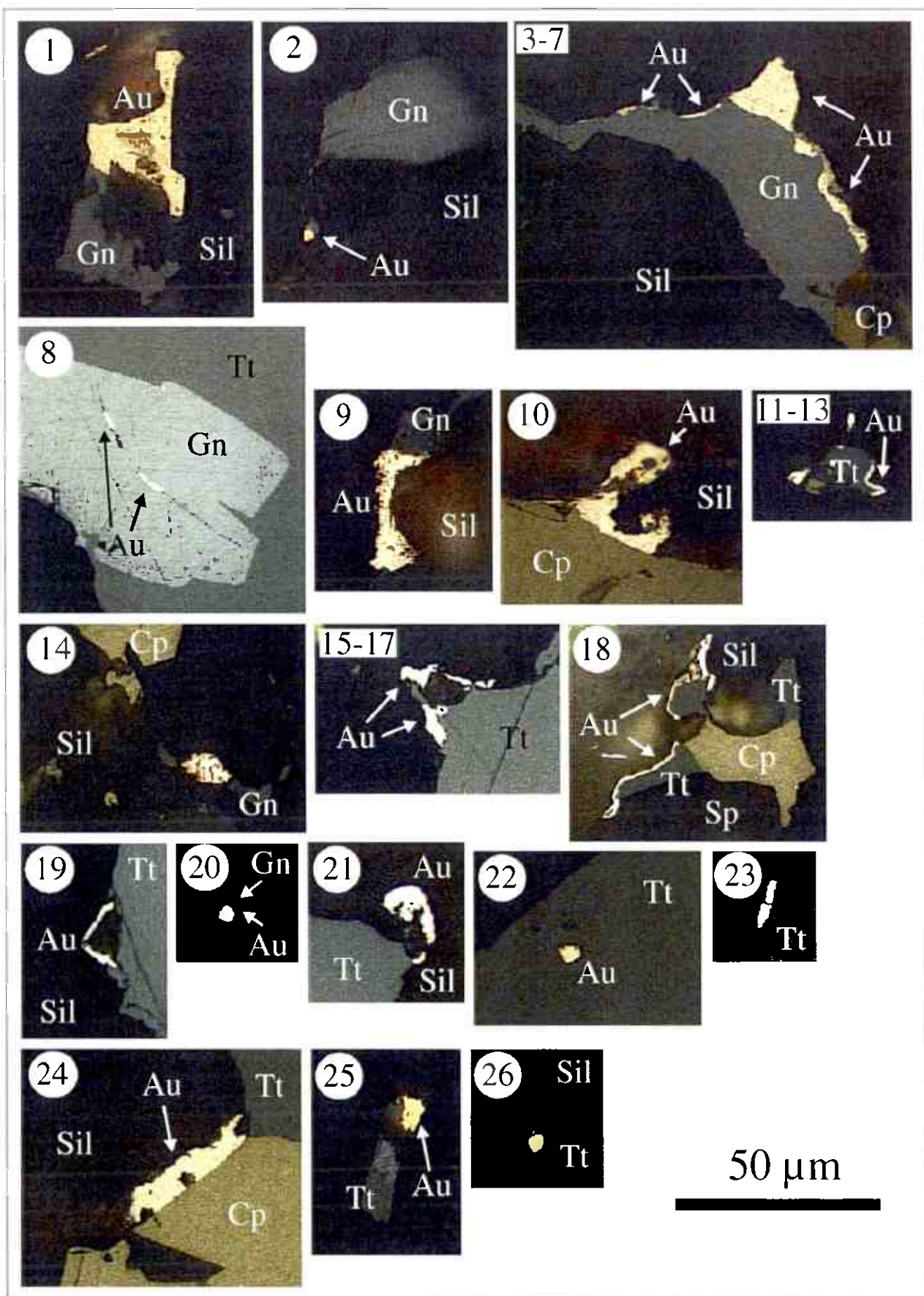


Plate 1 Gold grains observed in sample Mo 3. Abbreviations are Au: gold, Cp: chalcopyrite, Gn: galena, Tt: tetrahedrite, Sp: sphalerite, Sil: silicate. All images are shown at the same scale.

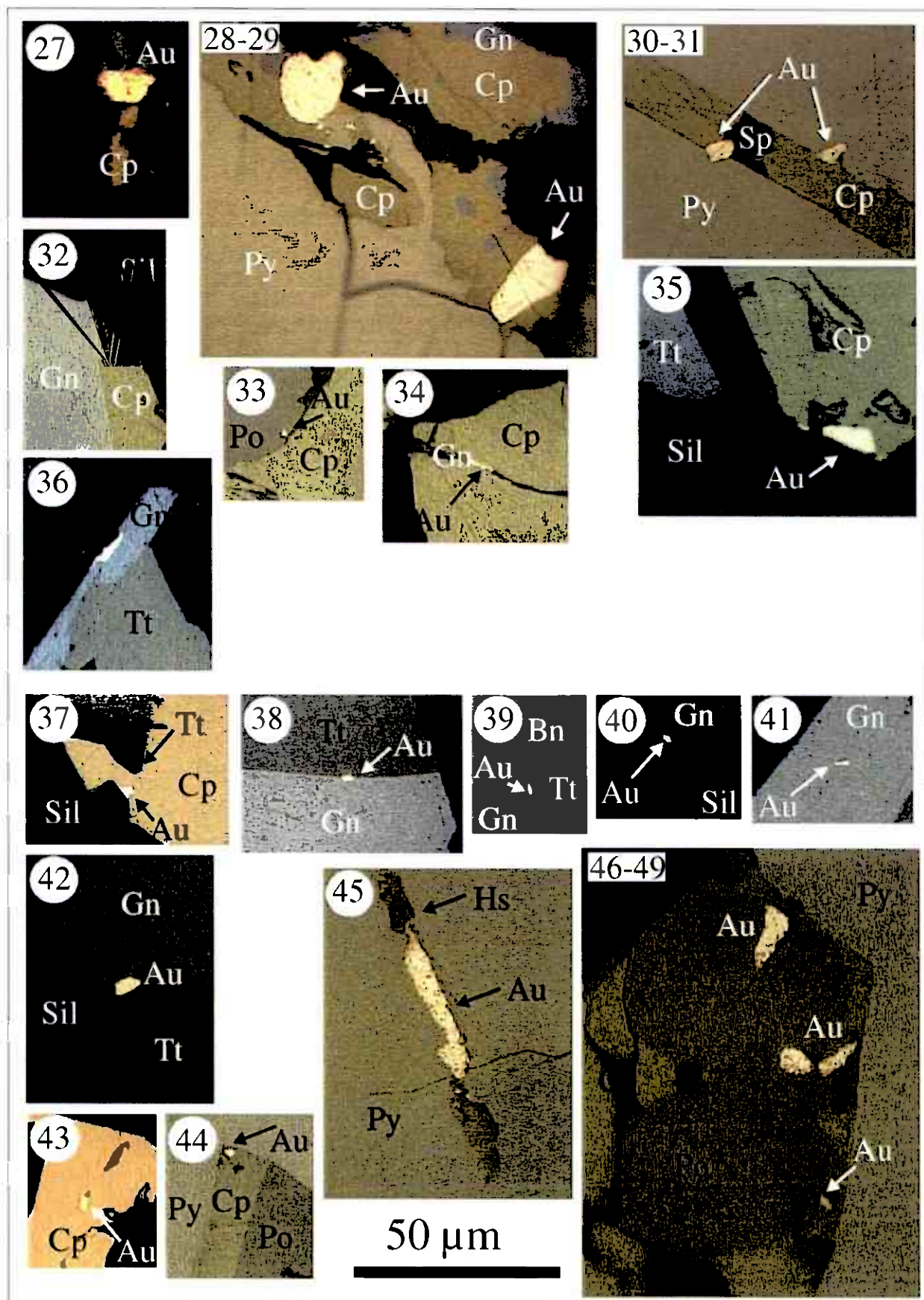


Plate 2 Gold grains observed in samples Mo 7, -10A, -12, -13, -17A and -18. Abbreviations are Au: gold, Cp: chalcopyrite, Gn: galena, Tt: tetrahedrite, Sp: sphalerite, Py: pyrite, Po: pyrrhotite, Hs: hessite, Sil: silicate. All images are shown at the same scale.

Summary and recommendations

- Gold occurs in the form of native gold and alloys with silver (electrum), covering a relatively broad compositional range.
- Gold is typically very fine-grained. Future exploitation of the Mofjellet deposit must carefully consider the implications of the fine average grain size of gold and the fact that it is locked within several different sulphides (chalcopyrite, galena, tetrahedrite).
- Gold is chiefly associated with Sb-rich mineral assemblages. Associated minerals are tetrahedrite and other Sb-sulphosalts, galena and chalcopyrite. Gold is not associated with sphalerite. These findings accord with the element correlations in Fig. 6.
- Silver is chiefly hosted within galena and tetrahedrite. Minor amounts may be present in electrum, dyscrasite and Ag-Sb sulphosalts. Again this accords with element correlations (Fig. 6).
- The mineralogy of the Mofjellet deposit is complex. A detailed and representative assessment of the silver distribution should be carried out prior to any test mining.

6. DEEPER ORE BODIES IN THE SOUTH?

The Mofjellet mining area was in 1974-75 covered by detailed surface mapping in the scale 1:5000. On this basis precise geological profiles were constructed at one kilometre intervals (Marker 1976a, 1976b). By combining these sections it was shown that the Mofjellet ore bodies were located in a major north-facing recumbent fold structure as discussed above (Chapter 2). It was also shown that the exploitable ore was located in fold closures in the lower part of this structure, and thus is structurally controlled. The studies from surface geology, furthermore, revealed the existence of a complementary major south-facing recumbent fold structure at depths in the south with its main closure located approximately 400 meters south and 150 meters below the present Lens III level (Fig. 12). The Mofjellet recumbent fold structure show gently plunging E-W trending fold axes with a weak NE-SW oriented depression crossing the eastern part of the mine area (Marker 1976a, 1976b). East of this depression, fold axes plunge gently to the west, while on the western side they plunge gently to the east. This means that the ore controlling fold structures elaborated from surface studies east of the mining area (Fig. 12) re-appear west of the axial depression in the westernmost Mofjellet near Andfiskå. The geological section constructed from surface data in the west confirms the existence of the major south-facing recumbent fold structure in roughly the same position as in Fig. 12. Both sections show large secondary folds on either side of the main closure.

The major recumbent fold structure in the south, at a lower level than the present mine, opens up the possibility for the existence of large hidden ore bodies to be localized in prominent fold closures of this structure. This possibility was discussed during the work in the late 1970's but was considered to be of no economic interest at that time. A note from the chief geologist in Bergverkselskapet Nord-Norge A/S, A. Kruse, to A/S Sydvaranger in 1981 (Kruse, 1981) extended on this possibility, and he proposed in this a drilling program for its exploration. However, the structure remained unexplored.

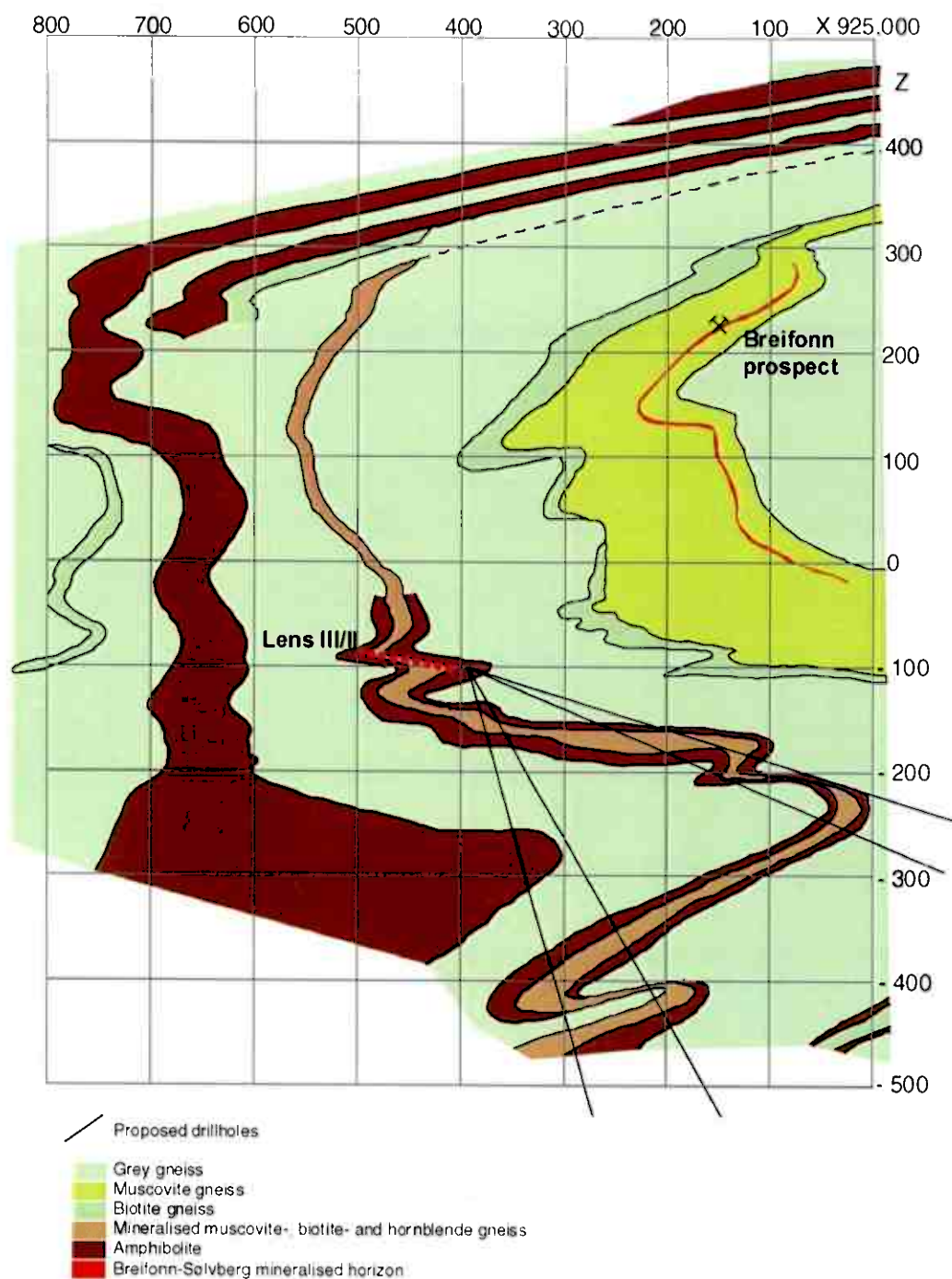


Figure 12. Geological profile of the Moffellet ore-bearing structure constructed from surface mapping. Grid refers to drill section in profile Y 44.800.

We consider the potential for the existence of a major ore body in the deeper-lying south-facing fold structure to be very interesting. Firstly, this structure has a size and shape that is favourable for localizing ore of at least the same size as the orebody that already been mined. Secondly, investigations during production, by the mine geologists A. Kruse and S. Burman and drill core results (Marker 1976b, 1979) show that the sulphide content diminishes towards the east, decreasing firstly in the upper level of the ore horizon. Thus it is likely that the extension of the original ore body was oblique to the E-W oriented ore lenses, and that the thickness and grade of the ore may be greatest in the central mining area.

Thirdly, the ore value increases if high-grade base metal sulphide ore can be mined together with the Au-bearing immediate wall rock, which will be the case if a new prospect can be opened. Allowing for some uncertainty regarding precise location, the main south-facing fold closure is estimated to lie only 150 meters below Lens III level in the existing mine, and the large secondary fold closure on the upper limb of the fold structure (Fig. 12) may even be located higher.

On this basis we propose that the ore potential in the south-facing fold structure is explored in a drilling program assisted by geophysical investigations from the Lens III level of the mine (Fig. 12). By drilling from the existing mine, the length of each drill hole will be minimized to c. 400 meters.

7. SUMMARY AND CONCLUSIONS

- Gold and silver show a strong positive correlation.
- Gold and silver are enriched in zones with disseminated sulphides in the immediate wall rock of the mined ore body.
- Gold and silver are found preferentially in zones with high contents of copper and lead, but relatively low contents of zinc.
- Gold is enriched over the entire length of the mined ore body (c. 4 km), located in marked fold closures: This includes the AKP structure connecting the upper ore lenses I and II (average of 1.35 ppm Au over a thickness of c.2.4 m), and the Nasa structure, the folded continuation of ore lens III (average of 0.8 ppm Au over a thickness of 1.7 m).
- There are minor indications of gold enrichment along later cross-cutting structures, particularly along shear zones between Lens II and Lens III in the eastern part of the ore body.
- Gold occurs only in the form of native gold and alloys with silver (electrum), covering a relatively broad compositional range.
- Gold is typically very fine-grained. Future exploitation of the Mofjellet deposit must carefully consider the implications of the fine average grain size of gold and the fact that it is locked within several different sulphides (chalcopyrite, galena, tetrahedrite). In addition to gold and silver, there are elevated grades of copper, zinc and lead in the fold structures that should be taken into account.
- The major recumbent fold structure in the south at a lower level than the present mine opens up the possibility for the existence of large hidden ore bodies to be structurally localized in prominent fold closures of this structure.

8. RECOMMENDATIONS

The presence of high gold grades in the immediate wall rock of the previously defined ore body deserves further investigations. So far only a limited number of intersections of the promising AKP and Nasa structures have been analysed for precious metals, but there are indications of high gold grades along the entire length of the previously mined ore body.

The ore potential in the south-facing fold structure is proposed explored in a drilling program assisted by geophysical investigations from the Lens III level of the mine. By drilling from the existing mine the length of each drill hole will be minimized to c. 400 meters.

The AKP structure has not been mined or intersected by drill holes between Y42500 and Y44000. It is recommended that this 1.5 km long section should be intersected by a number of short drill holes from the old railway tunnel.

Valuable geological information present in the material left from the former mining company present at the Directorate of Mining in Trondheim and in Mofjellet, should be investigated in detail. Based on the present knowledge of available data we suggest:

- Precious metal analyses of crushed samples from cores previously analysed only for base metals.
- All existing chemical analyses should be processed in order to get an interpretation of the metal zonation in the ore body and to see if any primary structures can be defined.
- The extensive geophysical materials not considered in this study should be taken into account, especially with respect to the potential for a deep sulphide ore body.

9. REFERENCES

- Bjerkgård, T., Larsen, R.B. and Marker, M. 1997: Regional setting of the Bleikvassli Zn-Pb deposit in Nordland, Norway, Norges geologiske undersøkelse Bulletin 433, p.34-35.
- Cook, N.J. 2001: Ore mineralogical investigation of the Mofjell deposit (Mo i Rana, Nordland, Norway) with emphasis on gold and silver distribution. NGU report 2001.051, Geological Survey of Norway.
- Kruse, A. and Burman S., 1987: Gull og sølv i Mofjellet Gruber. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 4332 –Directorate of Mining, Trondheim).
- Kruse, A., 1981: Prospektering på strukturer under linse III. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3256 – Directorate of Mining, Trondheim).
- Larsen, R.B., Bjerkgård, T. and Moralev, G.V., 1995: Distribution of ore-forming elements in sediment-hosted massive sulphide mineralisations in the Rana region, Norway. NGU report 95.151, Geological Survey of Norway, 58 pages.
- Larsen, R.B., Bjerkgård, T., Moralev, G.V. and Pokrovskii, B., 1997: Composition, chemistry and sulphur-isotope systematics of metamorphosed basemetal sulphides in two contrasting geological environments in central North-Norway. In Papunen, H. (ed.): Proceedings to the The Fourth Biennial SGA Meeting, Turku, Finland, p.367-370.
- Marker, M., 1976a: Mofjellet Gruber. Geologien i 3 borprofiler. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3228 –Directorate of Mining, Trondheim).
- Marker, M., 1976b: Strukturegeologiske trekk fra kartbladet Kjempeheia, skala 1:5000. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3247 –Directorate of Mining, Trondheim).
- Marker, M., 1979: Geologien i Jernverksbanens tunnel i Mofjellet, spesielt med vekt på de strukturegeologiske trekk. Skala 1:2000. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3247 –Directorate of Mining, Trondheim).
- Marker, M., 1983: Caledonian and pre-Caledonian geology of the Mofjell area, Nordland. Ph.D. thesis, University of Copenhagen, Denmark.
- Søvegjarto, U., Marker, M., Graversen, O. and Gjelle, S., 1988: Mo i Rana - 1927 I, Bedrock map, scale 1:50000, Geological Survey of Norway.
- Søvegjarto, U., Marker, M. and Gjelle, S., 1989: Storforshei - 2027 IV, Bedrock map, scale 1:50000, Geological Survey of Norway.

Other reports used in this study:

Core descriptions and analytical data from drillholes:

Compilations, Mofjellet Gruber. Diamantboringer fra hull 273-472. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3343 –Directorate of Mining, Trondheim).

Compilations, Mofjellet Gruber. Diamantboringer fra hull 473-759. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3344 –Directorate of Mining, Trondheim).

Compilations: Kjernebeskrivelser, originaler. Mofjellet Gruber. 760-1187. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3354 –Directorate of Mining, Trondheim).

Compilations: Kjernebeskrivelser, originaler. Mofjellet Gruber. (1188-1328). Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3351 –Directorate of Mining, Trondheim).

Compilations: Kjerneboringer Mofjellet Grubefelt. Dagboringer på Mofjellgrubesonens bergarter DU/DV 193-5-1+2 1961-1964. Internal Report Bergverkselskapet Nord-Norge A/S. (Report no. BV 3347 –Directorate of Mining, Trondheim).

APPENDIX

Table A1: All geochemical data including gold analyses used in this study.

Figure A1: East-West projections (vertical – YZ, horizontal – YX) showing locations of drill holes used in N-S profiles (Figures A2-A9 a-d).

Figures A2-A9 a-d: 8 N-S profiles (XZ) with results of chemical analyses in drillholes. In each profile: a) gold compared to zinc contents, b) gold compared to silver contents, c) gold compared to copper contents, d) gold compared to Cu+Pb/total base metal ratios. The locations of the profiles are shown in Figure A1.

Table A1: Analytical data used in this study

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7804	250.00	40828	23.82	16.72-17.65	0.93	12	541	308	1374	2.8	17	15	543	2	5.9	5	-3	77	43	4	4	ACME
7804	250.00	40828	22.70	17.8-18.8	1	8	425	1731	5844	4.9	6	11	464	4	23.5	4	-3	135	56	-2	2	ACME
7804	250.00	40828	21.70	18.8-19.8	1	8	352	178	1905	2.5	12	7	538	3	7.1	4	-3	165	30	-2	-2	ACME
7804	250.00	40828	20.75	19.8-20.7	0.9	11	159	1123	2690	3.5	5	6	316	-2	9.6	5	-3	281	39	3	2	ACME
7804	250.00	40828	19.80	20.7-21.7	1	6	313	314	2195	2	11	10	528	3	8.6	5	-3	319	33	3	-2	ACME
7804	250.00	40828	18.90	21.7-22.5	0.8	9	918	370	1462	3.1	8	7	491	4	6	6	-3	296	52	-2	-2	ACME
7804	250.00	40828	17.90	22.5-23.7	1.2	14	1333	1328	4424	7.1	15	12	723	4	19.8	7	-3	48	67	-2	-2	ACME
7804	250.00	40828	16.85	23.7-24.6	0.9	16	4176	13843	10689	38.1	24	12	708	19	53	21	15	56	128	-2	-2	ACME
7804	250.00	40828	15.93	24.6-25.55	0.95	11	1949	2726	7322	10	22	19	666	6	30.6	6	4	42	66	2	2	ACME
7804	250.00	40828	14.78	25.55-26.9	1.35	9	1202	1151	4296	4.8	23	21	408	4	17.2	5	-3	42	50	-2	-2	ACME
7804	250.00	40828	13.28	26.9-28.55	1.65	4	139	20	105	-0.3	39	30	414	2	0.3	4	-3	115	18	7	4	ACME
7804	250.00	40828	11.95	28.55-29.55	1	5	172	18	143	0.4	23	25	370	2	-0.2	5	-3	31	19	-2	3	ACME
7804	250.00	40828	10.98	29.55-30.5	0.95	6	427	120	826	1	22	18	421	3	2.6	5	-3	39	26	3	5	ACME
7804	250.00	40828	9.90	30.7-31.5	0.8	6	464	90	480	1.2	12	17	309	5	0.8	6	-3	52	14	7	2	ACME
7804	250.00	40828	9.00	31.5-32.5	1	8	796	284	2046	2.4	25	29	470	5	10.7	-3	5	41	21	-2	-2	ACME
7804	250.00	40828	7.90	32.5-33.7	1.2	5	142	11	192	0.6	20	25	418	2	-0.2	5	-3	57	9	-2	2	ACME
7804	250.00	40828	6.93	33.7-34.45	0.75	4	352	10	854	0.9	31	58	415	16	1.6	5	-3	66	11	4	6	ACME
7804	250.00	40828	6.03	34.45-35.5	1.05	6	154	-3	134	0.3	22	25	437	3	-0.2	4	-3	62	14	-2	3	ACME
7804	250.00	40828	4.93	35.5-36.65	1.15	5	129	-3	88	-0.3	27	26	531	2	-0.2	3	-3	44	12	8	3	ACME
7804	250.00	40828	3.83	36.65-37.7	1.05	5	128	-3	85	-0.3	28	29	430	3	-0.2	6	-3	30	9	3	5	ACME
7804	250.00	40828	2.72	37.7-38.85	1.15	4	125	-3	103	0.3	28	30	410	2	-0.2	4	-3	33	9	7	3	ACME
7804	250.00	40828	1.58	38.85-40	1.15	5	123	-3	113	0.3	22	27	520	5	-0.2	5	-3	525	4	4	4	ACME
7805	235.09	40828	19.70	25-27	2		100	200	300	1.3												Mo
7805	234.08	40828	18.27	27-28.5	1.5	5	30	7	46	-0.3	4	4	303	-2	-0.2	-3	-3	105	9	-2	2	ACME
7805	233.19	40828	17.00	28.5-30.1	1.6		100	100	100	0.5												Mo
7805	232.10	40828	15.44	30.6-31.8	1.2	18	1879	1447	3187	5.8	12	12	347	6	15.1	4	-3	34	143	-2	3	ACME
7805	231.53	40828	14.62	31.8-32.6	0.8	37	3036	7205	28929	16.5	18	11	651	12	161.7	12	4	46	292	-2	2	ACME
7805	230.93	40828	13.76	32.6-33.9	1.3		700	500	900	1.5												Mo
7805	230.27	40828	12.82	33.9-34.9	1		300	200	500	1.8												Mo
7805	229.38	40828	11.55	34.9-37	2.1		300	200	500	2.1												Mo
7805	228.15	40828	9.79	37.6-38.6	1	6	162	52	281	0.8	25	28	334	4	0.4	4	-3	117	28	-2	-2	ACME
7805	227.49	40828	8.85	38.6-39.9	1.3	5	166	41	256	0.8	27	26	403	3	0.3	7	-3	80	27	12	4	ACME
7805	225.34	40828	5.78	42.5-43.5	1	6	101	9	210	0.3	16	25	387	2	0.2	4	-3	85	24	-2	-2	ACME
7805	224.86	40828	5.10	43.5-44.15	0.65	5.5	83.5	12	228	0.35	13	16	364	2	0.3	4.5	-3	122.5	13	-2	-2	ACME
7805	224.50	40828	4.59	44.15-44.75	0.6	5	164	29	232	0.5	25	21	439	-2	-0.2	4	-3	469	4	-2	-2	ACME
7805	224.23	40828	4.20	44.75-45.1	0.35	17	3339	2138	17578	10.9	31	23	562	11	87.8	8	-3	53	86	-2	4	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7805	224.10	40828	4.02	45.1-45.2	0.1		200	3500	7200	3.8												Mo
7805	223.87	40828	3.69	45.2-45.9	0.7	5	172	44	368	0.9	32	31	474	-2	-0.2	-3	-3	88	23	-2	6	ACME
7805	223.33	40828	2.91	45.9-47.1	1.2	13	2438	1874	10490	7.1	34	24	519	9	43.8	6	-3	52	85	5	-2	ACME
7805	222.93	40828	2.34	47.1-47.3	0.2		300	200	1000	1.7												Mo
7805	222.30	40828	1.43	47.3-49.3	2		600	900	1900	3.1												Mo
7806	191.00	40844	73.44	5.12-6	0.88	5	253	20	583	0.3	32	27	732	3	0.3	4	-3	163	6	-2	4	ACME
7806	191.00	40844	72.63	6-6.75	0.75	5	332	38	524	0.6	36	28	808	3	0.3	-3	-3	156	11	4	5	ACME
7806	191.00	40844	62.50	16-17	1	7	109	6	125	-0.3	20	30	598	3	0.3	3	-3	43	5	5	3	ACME
7806	191.00	40844	61.73	17-17.55	0.55	10	87	13	151	0.3	24	29	661	-2	0.5	3	-3	39	9	2	-2	ACME
7806	191.00	40844	51.70	27-27.6	0.6	6	173	25	255	0.3	39	35	489	-2	0.2	-3	-3	44	14	3	4	ACME
7806	191.00	40844	51.05	27.6-28.3	0.7	5	206	18	253	0.4	37	30	506	3	-0.2	3	-3	59	19	-2	-2	ACME
7806	191.00	40844	48.03	30.4-31.55	1.15	6	271	9	216	-0.3	28	23	445	3	-0.2	-3	-3	45	15	-2	2	ACME
7806	191.00	40844	46.73	31.55-33	1.45	4	227	9	194	0.4	43	33	585	3	0.3	-3	-3	46	17	-2	2	ACME
7806	191.00	40844	41.90	36.6-37.6	1	5	144	9	286	-0.3	21	22	866	2	0.2	4	-3	116	14	4	6	ACME
7806	191.00	40844	40.85	37.6-38.7	1.1	4	246	4	274	0.5	31	26	691	2	0.2	3	-3	73	9	-2	-2	ACME
7806	191.00	40844	3.18	75-76.65	1.65	6	127	-3	182	0.3	17	23	407	-2	-0.2	-3	-3	124	8	2	4	ACME
7806	191.00	40844	-13.50	92-93	1	4	189	4	123	-0.3	26	40	458	-2	-0.2	-3	-3	39	6	2	-2	ACME
7710	273.00	41252	83.10	1.5-2.3	0.8	19	2258	283	1964	3.5	11	13	307	12	8.3	7	-3	30	204	3	-2	ACME
7710	273.00	41252	77.65	7-7.7	0.7	5	2932	4486	522	113.7	23	16	509	124	5.5	216	7	122	4897	2	3	ACME
7710	273.00	41252	77.25	7.7-7.8	0.1	8	4618	26232	256	315.7	28	14	171	53	42.6	417	53	45	1303	-2	4	ACME
7710	273.00	41252	76.60	7.8-9	1.2	5	876	1250	269	12.2	24	20	438	8	1.2	14	-3	143	254	-2	-2	ACME
7710	273.00	41252	75.70	9-9.6	0.6	6	1361	753	203	8.6	19	37	318	6	0.3	6	-3	77	157	2	2	ACME
7710	273.00	41252	75.25	9.6-9.9	0.3	6	1964	9467	265	73.6	21	17	460	18	6.6	64	10	125	3208	5	3	ACME
7710	273.00	41252	74.55	9.9-11	1.1	5	634	202	148	3.4	14	25	390	2	0.2	3	-3	69	122	4	-2	ACME
7710	273.00	41252	60.85	23.3-25	1.7	18	1274	487	1077	2.5	12	12	514	5	7.8	4	3	53	118	-2	-2	ACME
7710	273.00	41252	27.70	56.6-58	1.4	10	1428	996	2598	4.3	11	15	690	6	14.5	8	3	50	143	-2	-2	ACME
7710	273.00	41252	22.40	61.9-63.3	1.4		2000	900	4000													Mo
7710	273.00	41252	21.60	63.3-63.5	0.2		500	100	1000													Mo
7710	273.00	41252	21.43	63.5-63.65	0.15		5900	4700	1600													Mo
7710	273.00	41252	20.45	63.65-65.45	1.8		1300	700	2100													Mo
7710	273.00	41252	17.50	67-68	1	20	2165	3029	7069	12.9	16	10	386	36	35.6	97	4	45	420	2	3	ACME
7710	273.00	41252	16.50	68-69	1	26	2114	1812	5146	11.2	15	11	359	11	24	9	-3	38	266	-2	-2	ACME
7710	273.00	41252	15.50	69-70	1	13	1787	646	1965	3.9	17	7	436	5	7.8	5	4	58	111	7	-2	ACME
7710	273.00	41252	-6.90	91.4-92.4	1	12	1407	84	1021	2.3	23	21	595	-2	3.2	5	-3	44	37	3	-2	ACME
7710	273.00	41252	-7.60	92.4-92.8	0.4	18	1407	392	3767	2.8	22	19	727	-2	15.1	-3	27	18	86	-2	-2	ACME
7710	273.00	41252	-8.25	92.8-93.7	0.9	8	742	89	624	2.6	11	11	553	-2	0.4	3	-3	77	71	-2	-2	ACME
7710	273.00	41252	-9.00	93.7-94.3	0.6	26	1574	4040	8503	15.6	25	9	493	4	47.1	9	-3	69	111	-2	-2	ACME
7710	273.00	41252	-9.80	94.3-95.3	1	17	1760	3974	11122	11.9	17	14	635	9	50.5	7	6	45	186	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7710	273.00	41252	-10.80	95.3-96.3	1	12	2291	653	5614	7.1	26	16	536	-2	22.7	-3	-3	52	89	2	-2	ACME
7710	273.00	41252	-11.65	96.3-97	0.7	16	1193	950	4883	6.3	15	16	517	4	19.3	6	4	53	48	2	-2	ACME
7710	273.00	41252	-12.40	97-97.8	0.8	10	828	913.5	4061	4.75	15	12	413.5	2.5	16.7	-3	-3	47.5	21	-2	2	ACME
1314	310.98	41374	-11.33	3.7-4.7	1		400	1100	1900	4									150			Mo
1314	309.74	41374	-11.71	4.7-6.3	1.6		1200	10200	53200	13									200			Mo
1314	308.16	41374	-12.19	6.3-8	1.7		700	2600	24800	7									300			Mo
1314	306.54	41374	-12.69	8-9.7	1.7		1100	4000	13300	9									300			Mo
1314	304.91	41374	-13.18	9.7-11.4	1.7		800	2500	10300	8									350			Mo
1314	303.29	41374	-13.68	11.4-13.1	1.7		1500	3500	26000	9									150			Mo
1314	301.85	41374	-14.12	13.1-14.4	1.3		3700	6200	20500	16									300			Mo
1314	300.46	41374	-14.54	14.4-16	1.6		5900	1300	12700	10									300			Mo
1314	298.89	41374	-15.03	16-17.7	1.7		5000	2200	14100	11									300			Mo
1314	297.16	41374	-15.55	17.7-19.6	1.9		1700	33900	151200	41									250			Mo
1314	295.59	41374	-16.04	19.6-21	1.4		2200	2400	9200	7									100			Mo
1314	293.82	41374	-16.58	21-23.3	2.3		1800	300	2500	6									100			Mo
1314	292.05	41374	-17.12	23.3-24.7	1.4		1900	2200	6000	10									100			Mo
1314	275.60	41374	-22.15	40.7-41.7	1		900	1600	600	6									150			Mo
1314	274.60	41374	-22.45	41.3-43.2	1.9		1200	1000	5400	9									100			Mo
1314	272.87	41374	-22.98	43.2-44.9	1.7		600	3000	10500	11									100			Mo
1314	271.30	41374	-23.46	44.9-46.5	1.6		400	21000	400	3									100			Mo
1313	297.65	41375	91.75	98.4-99.1	0.7		1500	200	900	3.5									100			Mo
1313	297.84	41375	90.67	96.9-98.4	1.5		1000	200	1000	3.3									100			Mo
1313	299.31	41375	82.34	88.5-89.9	1.4		5900	5700	700	80.4									7350			Mo
1313	299.55	41375	80.97	87.1-88.5	1.4		1700	600	600	8.2									400			Mo
1313	304.24	41375	54.38	60.2-61.4	1.2		2400	4200	1000	17.4									400			Mo
1315	307.10	41380	82.46	87.5-89.1	1.6		700	200	400	1									-100			Mo
1315	307.24	41380	80.92	86-87.5	1.5		3500	1100	3300	12									550			Mo
1315	307.37	41380	79.43	84.5-86	1.5		1400	1000	1600	4									100			Mo
1315	307.51	41380	77.83	82.8-84.5	1.7		1600	1800	4700	4									150			Mo
1315	307.63	41380	76.49	81.8-82.8	1		2800	2600	8600	7									250			Mo
1315	307.94	41380	72.95	75.7-81.8	6.1		3300	8600	32700	15									360			Mo
1315	308.28	41380	69.07	74-75.7	1.7		600	300	3400	2									100			Mo
1315	308.39	41380	67.72	73-74	1		200	100	700	2									100			Mo
1315	309.35	41380	56.76	62-63	1		6000	8500	21900	25									650			Mo
1315	309.44	41380	55.82	61.1-62	0.9		11600	1500	25100	19									300			Mo
1315	310.22	41380	46.80	52-53	1		900	2500	8200	9									450			Mo
1315	310.41	41380	44.66	48.7-52	3.3		1000	1900	5200	9									250			Mo
1315	310.63	41380	42.17	47-48.7	1.7		1800	1600	6300	8									350			Mo

	DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
	1315	310.78	41380	40.47	45.3-47	1.7		1100	3000	5700	17									2400			Mo
	1315	310.91	41380	38.98	44-45.3	1.3		600	600	2300	5									100			Mo
	1316	315.00	41380	38.45	42-45.9	3.9		500	400	1000	4									-100			Mo
	1315	311.03	41380	37.59	42.5-44	1.5		700	600	2000	6									150			Mo
	1316	315.00	41380	35.85	40.7-42	1.3		1900	4900	1200	38.4									800			Mo
	1316	315.00	41380	34.60	39.5-40.7	1.2		600	800	700	7									150			Mo
	1316	315.00	41380	33.25	38-39.5	1.5		900	1400	1000	9									150			Mo
	1316	315.00	41380	28.75	30.5-38	7.5		400	300	900	2									-100			Mo
	8411	402.03	41380	16.19	28.1-28.85	0.75		800	5300	11700													Mo
	8411	403.03	41380	14.06	30.5-31.15	0.65		1600	6700	31300	5												Mo
	8411	403.33	41380	13.41	31.15-31.95	0.8		1300	600	3500	1												Mo
	8411	403.72	41380	12.57	31.95-33	1.05		3000	23500	72000	16												Mo
	8411	404.18	41380	11.59	33-34.1	1.1		3000	15700	43200	18												Mo
	8408	388.60	41380	10.83	30.55-32	1.45		14700	7900	51200	11												Mo
	8408	388.60	41380	9.40	32-33.4	1.4		9600	13500	142400	8												Mo
	8409	379.94	41380	7.78	34.75-36	1.25		3800	14000	35200	10												Mo
	8409	379.61	41380	6.44	36-37.5	1.5		2800	900	5500	1												Mo
	8409	379.25	41380	4.99	37.5-39	1.5		6700	7500	111200	6												Mo
	8410	368.58	41380	4.82	41.6-42.85	1.25		1900	400	1400	0.5												Mo
	8409	378.97	41380	3.87	39-39.8	0.8		4500	2700	54000	4												Mo
	8410	368.01	41380	3.76	42.85-44	1.15		3000	8700	83200	7												Mo
	8410	367.51	41380	2.81	44-45	1		6600	1000	46800	3												Mo
	8410	367.04	41380	1.93	45-46	1		21300	600	32500	12												Mo
	8410	366.57	41380	1.04	46-47	1		3300	600	29200	3												Mo
	8410	366.06	41380	0.09	47-48.15	1.15		3700	700	55200	3												Mo
	1226	324.69	41446	50.67	34.7-35.7	1		1000	1600	5300	6									150			Mo
	1226	324.88	41446	49.58	33.5-34.7	1.2		3700	10700	36700	23									500			Mo
	1226	325.07	41446	48.50	32.5-33.5	1		3700	7200	66800	15									350			Mo
	1226	325.29	41446	47.27	31-32.5	1.5		1600	3200	27100	9									200			Mo
	1226	325.55	41446	45.79	29.5-31	1.5		1400	1400	45600	5									200			Mo
	1226	325.81	41446	44.31	28-29.5	1.5		2300	900	52400	6									150			Mo
	1226	326.07	41446	42.84	26.5-28	1.5		2100	1100	57600	5									50			Mo
	1226	326.29	41446	41.56	25.4-26.5	1.1		5500	1400	56000	8									50			Mo
	1226	326.47	41446	40.57	24.5-25.4	0.9		1500	500	3400													Mo
	1226	326.63	41446	39.64	23.5-24.5	1		1600	500	2500													Mo
	1226	329.91	41446	21.02	4.3-5.9	1.6		1200	300	1600													Mo
	1226	330.17	41446	19.59	3-4.3	1.3		3300	1300	3100													Mo
	1226	330.43	41446	18.12	1.3-3	1.7		400	300	1000													Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1226	330.69	41446	16.64	0-1.3	1.3		2700	300	13700													Mo
8407	430.71	41451	16.03	34.5-35.2	0.7	9	210	1638	1665	5.3	19	22	274	2	11.4	3	-3	45	27	-2	-2	ACME
8407	431.26	41451	15.46	35.3-36	0.7	7	341	113	704	1.8	26	25	368	-2	2.6	-3	-3	39	17	3	6	ACME
8407	431.70	41451	15.01	36-36.55	0.55	6	227	766	2238	2.9	7	6	215	2	8	-3	-3	449	53	-2	3	ACME
8407	432.32	41451	14.36	36.55-37.8	1.25	8	293	865	2290	4.3	12	12	388	-2	8.6	-3	-3	101	104	-2	-2	ACME
8407	433.17	41451	13.48	37.8-39	1.2	6	125	22	176	0.8	18	23	332	2	0.3	-3	-3	53	8	-2	-2	ACME
8407	433.94	41451	12.69	39-40	1	6	114	6	105	0.4	20	29	387	-2	-0.2	3	-3	34	12	4	3	ACME
8407	434.63	41451	11.97	40-41	1	6	149	3	136	0.5	16	22	350	-2	-0.2	-3	-3	78	5	5	-2	ACME
8407	435.33	41451	11.25	41-42	1	5	160	-3	122	0.5	22	25	458	-2	-0.2	-3	-3	266	5	2	-2	ACME
8407	440.09	41451	6.32	47.85-48.85	1	8	96	-3	57	0.6	20	27	756	2	0.2	-3	-3	108	3	-2	4	ACME
8403	379.58	41455	-3.47	49.5-53.1	3.6		11200	2200	134800	6												Mo
8403	378.55	41455	-5.19	53.1-53.5	0.4		6400	3800	132300													Mo
8403	376.18	41455	-9.13	56.8-59	2.2		200	400	800										100			Mo
8404	370.15	41455	-0.74	53.8-55.5	1.7		10300	20200	69600	23									1600			Mo
8404	368.51	41455	-2.63	55.5-58.8	3.3		7900	24000	69200	18									300			Mo
8404	366.21	41455	-5.27	58.8-62.5	3.7		5600	6800	48000	8									200			Mo
8404	363.62	41455	-8.25	62.5-66.7	4.2		4200	1300	80000	3									200			Mo
8405	396.80	41455	6.16	35.35-35.75	0.4		3200	6900	16800													Mo
8405	396.47	41455	4.92	35.75-37.9	2.15		1800	13100	146000	8												Mo
8406	410.17	41455	11.66	29.45-30.4	0.95		4800	13600	66000													Mo
8406	410.31	41455	10.60	30.4-31.6	1.2		6800	12500	55600	10												Mo
1312	310.55	41488	65.58	79.3-80.3	1		3600	3200	15500	8									150			Mo
1312	314.53	41488	50.71	63.6-65.2	1.6		4700	4000	6300	17									400			Mo
1312	314.87	41488	49.45	62.6-63.6	1		1700	4300	1100	15									250			Mo
1312	320.42	41488	28.73	41-42.3	1.3		1100	2800	5400	17									350			Mo
1312	320.72	41488	27.62	40-41	1		1900	4200	2300	32									1150			Mo
1312	326.37	41488	6.51	18.3-19	0.7		1900	3000	3800	7									300			Mo
1312	326.50	41488	6.03	18-18.3	0.3		1100	4500	15000	10									200			Mo
1312	326.74	41488	5.16	16.5-18	1.5		900	700	2500	4									100			Mo
7001	328.00	41490	78.50	0-3	3		6100	6900	31100													Mo
7001	328.00	41490	43.50	36-37	1	9	3295	3989	4320	19.1	13	11	507	7	19.6	7	5	64	355	3	-2	ACME
7001	328.00	41490	42.50	37-38	1	9	1114	353	1710	3	6	6	493	-2	5.6	-3	-3	190	52	4	3	ACME
7001	328.00	41490	31.70	48.05-48.55	0.5	6	6039	58	1268	7.1	9	7	477	-2	3.4	-3	-3	175	23	3	3	ACME
7001	328.00	41490	23.60	55.9-56.9	1	18	1891	653	11947	7.9	14	10	490	4	64.4	-3	3	56	142	-2	3	ACME
7001	328.00	41490	22.55	56.9-58	1.1	7	181	32	409	0.6	10	6	387	-2	-0.2	3	3	687	7	-2	-2	ACME
7001	328.00	41490	21.50	58-59	1	6	369	38	1143	0.9	5	9	838	3	0.5	-3	-3	609	17	-2	2	ACME
7001	328.00	41490	20.65	59-59.7	0.7	5	469	27	713	0.8	10	10	506	3	0.3	-3	-3	556	25	-2	-2	ACME
7001	328.00	41490	9.70	70-70.6	0.6	16	908	851	4387	4.2	7	8	506	-2	20.9	4	-3	160	37	-2	3	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7001	328.00	41490	-12.40	92-92.8	0.8		3600	500	900													Mo
7001	328.00	41490	-13.35	92.8-93.9	1.1		4900	3000	48700													Mo
7001	328.00	41490	-14.45	93.9-95	1.1		6000	1400	116300													Mo
7001	328.00	41490	-15.40	95-95.8	0.8		9500	1400	37800													Mo
7001	328.00	41490	-16.10	95.8-96.4	0.6		2200	200	1900													Mo
7001	328.00	41490	-26.28	105.75-106.8	1.05	8	1653	4416	2242	10.3	35	30	601	6	10.7	6	8	36	47	6	4	ACME
7001	328.00	41490	-27.40	106.8-108	1.2	5	106	8	115	-0.3	20	22	592	-2	-0.2	-3	-3	330	2	4	6	ACME
7005	328.17	41490	79.53	0-1	1	37	5921	7476	36610	10.1	23	10	609	15	177.5	15	7	35	361	-2	-2	ACME
7005	328.55	41490	78.50	1-2.2	1.2	37	1599	4651	19708	7.9	14	11	690	11	98.6	8	4	26	218	-2	3	ACME
7005	328.89	41490	77.56	2.2-3	0.8	5.5	180	54.5	269	0.4	7	5	298	-2	0.55	-3	-3	401.5	9.5	2	4	ACME
7005	337.65	41490	53.48	28-28.45	0.45	8	1203	46	271	2.1	3	7	238	-2	0.7	-3	-3	226	42	-2	-2	ACME
7005	340.18	41490	46.52	35-36.25	1.25	10	1970	421	1920	3.3	14	10	456	-2	7.2	-3	-3	91	73	-2	-2	ACME
7005	340.53	41490	45.58	36.25-37	0.75	7	244	37	405	0.5	5	5	336	-2	-0.2	-3	-3	854	5	-2	-2	ACME
7005	340.83	41490	44.76	37-38	1	10	1856	93	3580	3.6	13	15	455	-2	15.5	-3	-3	67	54	6	-2	ACME
7005	341.17	41490	43.82	38-39	1	7	1076	485	834	9.1	5	10	465	4	0.5	-3	5	361	410	-2	2	ACME
7005	341.51	41490	42.88	39-40	1	5	141	27	257	0.6	6	6	291	-2	0.2	-3	-3	557	5	-2	-2	ACME
7005	341.85	41490	41.94	40-41	1	7	223	28	1217	0.6	4	6	335	-2	4.6	-3	-3	627	7	2	-2	ACME
7005	342.19	41490	41.00	41-42	1	5	430	42	2164	0.9	8	5	409	-2	9.4	4	3	357	12	-2	-2	ACME
7005	342.64	41490	39.78	42-43.6	1.6		1600	1100	6700													Mo
7005	343.15	41490	38.37	43.6-45	1.4		400	700	2600													Mo
7005	343.49	41490	37.43	45-45.6	0.6		1500	400	24400													Mo
7005	344.21	41490	35.46	45.6-49.2	3.6		800	400	3500													Mo
7005	345.27	41490	32.55	50-51	1	6	790	31	2224	1.6	6	5	362	2	15.4	-3	-3	228	37	3	-2	ACME
7005	345.67	41490	31.46	51-52.3	1.3	6	761	91	708	1.4	7	5	422	-2	0.5	-3	-3	406	65	-2	-2	ACME
7005	345.98	41490	30.59	52.3-52.85	0.55		4200	1800	86900													Mo
7005	346.27	41490	29.80	52.85-54	1.15	7	656	690	849	2.4	6	4	334	-2	3.5	-3	-3	529	64	-2	2	ACME
7005	347.73	41490	25.78	57.1-58.3	1.2	11	1156	28	1183	1.9	12	11	484	-2	4.3	3	3	143	20	-2	-2	ACME
7005	348.85	41490	22.71	60-61.93	1.93		900	5600	18400													Mo
7005	349.45	41490	21.07	61.93-63.5	1.57	8	242	17	572	1	5	8	438	-2	0.4	-3	-3	429	14	-2	-2	ACME
7005	350.02	41490	19.51	63.5-65.25	1.75	8	925	34	550	1.9	10	6	446	-2	0.3	-3	-3	449	42	2	-2	ACME
7005	350.54	41490	18.07	65.25-66.55	1.3	8	142	12	350	0.5	3	6	394	2	-0.2	-3	-3	483	4	-2	-2	ACME
7005	359.98	41490	-7.86	93-94	1	6	105	29	88	-0.3	5	3	298	-2	-0.2	-3	-3	210	8	5	-2	ACME
7005	360.27	41490	-8.66	94-94.7	0.7		6200	6600	9900													Mo
7005	360.53	41490	-9.36	94.7-95.5	0.8		4800	400	24400													Mo
7005	360.82	41490	-10.16	95.5-96.4	0.9		6700	3400	41400													Mo
7005	361.02	41490	-10.73	96.4-96.7	0.3		6900	1800	57900													Mo
7005	361.25	41490	-11.36	96.7-97.75	1.05	6	453	51	230	1.1	21	22	399	2	0.5	3	-3	51	42	-2	-2	ACME
7005	361.59	41490	-12.30	97.75-98.7	0.95	12	1044	1525	2724	7	15	17	344	4	12.7	8	-3	35	118	3	2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7005	361.95	41490	-13.26	98.7-99.8	1.1	13	1075	3988	9343	11.3	17	19	474	7	41.1	5	4	45	60	2	-2	ACME
1262	304.21	41493	61.03	73.6-74.3	0.7		4700	2400	21800	9												Mo
1262	312.36	41493	3.05	14.9-15.9	1		1100	900	9900	7									450			Mo
1262	312.50	41493	2.06	13.9-14.9	1		1400	4200	14600	14									150			Mo
1262	312.63	41493	1.12	13-13.9	0.9		1200	4400	8700	18									200			Mo
1262	313.73	41493	-6.73	5-6.05	1.05		2100	600	4000	5									100			Mo
1258	311.51	41506	72.33	89.8-90.8	1		300	1000	300	4									150			Mo
1258	311.91	41506	71.58	89.1-89.8	0.7		800	52400	500	127									950			Mo
1258	312.30	41506	70.83	88.1-89.1	1		3800	6700	25400	16									700			Mo
1258	312.77	41506	69.95	87.1-88.1	1		2100	6100	18000	12									300			Mo
1258	313.24	41506	69.06	86.1-87.1	1		200	200	400	1									-100			Mo
1258	313.71	41506	68.18	85.1-86.1	1		1800	6000	15000	13									200			Mo
1258	314.18	41506	67.30	84.1-85.1	1		6700	4800	32900	15									300			Mo
1258	314.65	41506	66.41	83.1-84.1	1		9200	4800	23800	20									850			Mo
1258	315.12	41506	65.53	82.1-83.1	1		2400	3500	15500	11									200			Mo
1258	315.59	41506	64.65	81.1-82.1	1		600	1000	2900	2									-100			Mo
1258	321.93	41506	52.73	67.6-68.6	1		2100	500	900	1									-100			Mo
1258	322.40	41506	51.85	66.6-67.6	1		2200	4700	29600	12									150			Mo
1258	322.87	41506	50.96	65.6-66.6	1		1300	2000	48800	6									50			Mo
1258	323.34	41506	50.08	64.6-65.6	1		2300	4000	31600	12									200			Mo
1258	323.81	41506	49.20	63.6-64.6	1		3000	9700	26600	29									450			Mo
1258	324.28	41506	48.31	62.6-63.6	1		5400	8000	27900	22									650			Mo
1258	324.75	41506	47.43	61.6-62.6	1		2500	7300	5300	52									2850			Mo
1258	327.23	41506	42.75	56.2-57.4	1.2		3400	2400	23900	8									100			Mo
1258	327.75	41506	41.78	55.2-56.2	1		400	400	2100	0.5									-100			Mo
1258	332.70	41506	32.47	44.7-45.6	0.9		7300	400	26900	17									200			Mo
1258	333.15	41506	31.63	43.7-44.7	1		300	200	300	0.2									-100			Mo
1258	340.94	41506	16.97	27.1-28.1	1		400	200	700	2									-100			Mo
1258	341.39	41506	16.13	26.2-27.1	0.9		1800	100	1600	7									100			Mo
1258	341.83	41506	15.29	25.2-26.2	1		6200	9400	24900	51									800			Mo
1258	342.30	41506	14.41	24.2-25.2	1		200	200	700	3									-100			Mo
1258	343.24	41506	12.64	22.3-23.1	0.8		200	1400	3400	4									100			Mo
1258	343.67	41506	11.85	21.3-22.3	1		700	100	1000	2									-100			Mo
1258	344.13	41506	10.97	20.3-21.3	1		700	200	900	2									-100			Mo
1304	330.40	41583	76.60	64.4-65.6	1.2		3500	12500	59600	7									200			Mo
1304	330.40	41583	75.65	63.7-64.4	0.7		9400	5400	19400	5									600			Mo
1304	330.40	41583	71.40	59.3-60.3	1		700	600	1600	1.7									-100			Mo
1304	330.40	41583	70.25	58-59.3	1.3		2400	5000	65200	6									-100			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1304	330.40	41583	68.85	56.5-58	1.5		2400	5800	20200	19.3									800			Mo
1304	330.40	41583	67.30	54.9-56.5	1.6		2600	5800	19900	19.3									500			Mo
1304	330.40	41583	65.85	53.6-54.9	1.3		600	3200	9500													Mo
1304	330.40	41583	64.70	52.6-53.6	1		200	700	1600													Mo
1304	330.40	41583	40.10	28-29	1		600	600	2600													Mo
1304	330.40	41583	38.85	26.5-28	1.5		6000	7100	34900	14.5									300			Mo
1304	330.40	41583	37.35	25-26.5	1.5		3500	2600	7800	7.1									200			Mo
1304	330.40	41583	34.20	20.2-25	4.8		3900	1800	34300	7.8									200			Mo
1304	330.40	41583	31.30	19.2-20.2	1		1000	2600	6000													Mo
1304	330.40	41583	27.80	15.7-16.7	1		700	200	1000													Mo
1304	330.40	41583	26.70	14.5-15.7	1.2		1800	200	3800													Mo
1304	330.40	41583	25.35	13-14.5	1.5		2400	200	13100													Mo
1304	330.40	41583	23.90	11.6-13	1.4		2500	200	19100													Mo
1304	330.40	41583	22.70	10.6-11.6	1		300	200	1100													Mo
1304	330.40	41583	12.40	0-1.6	1.6		2300	3100	25900													Mo
1305	325.01	41583	67.49	55.3-56.9	1.6		2100	6800	22900	12.8									300			Mo
1305	325.15	41583	65.89	53.7-55.3	1.6		1300	6000	32700	14									700			Mo
1305	327.02	41583	44.57	32.6-33.6	1		1400	600	1300	1.5									-100			Mo
1305	327.13	41583	43.28	31-32.6	1.6		1700	17600	66400	28.7									1300			Mo
1305	327.26	41583	41.73	29.5-31	1.5		1500	8700	53600	16.2									600			Mo
1305	327.39	41583	40.24	28-29.5	1.5		1700	16500	60800	34.5									1700			Mo
1305	327.53	41583	38.75	26.5-28	1.5		3000	10500	37200	28.8									3700			Mo
1305	327.66	41583	37.25	25-26.5	1.5		1100	2500	28800	8.9									200			Mo
1305	327.79	41583	35.76	23.5-25	1.5		1600	1700	22600	8.1									600			Mo
1305	327.92	41583	34.21	21.9-23.5	1.6		2000	900	13500	5.7									300			Mo
1305	328.03	41583	32.92	20.9-21.9	1		900	200	1200	2.5									100			Mo
1305	329.79	41583	12.85	0.9-1.6	0.7		1700	400	38800	4.5									200			Mo
1306	323.63	41583	47.15	35.6-36.6	1		400	100	900	0.9									-100			Mo
1306	323.86	41583	45.87	34-35.6	1.6		4700	11400	72800	24.2									400			Mo
1306	324.13	41583	44.34	32.5-34	1.5		2000	11200	82000	24.4									100			Mo
1306	324.34	41583	43.11	31.5-32.5	1		1200	600	3200	3.2									-100			Mo
1306	325.39	41583	37.16	25.5-26.4	0.9		2600	6800	25900	16.2									300			Mo
1306	325.60	41583	35.97	24-25.5	1.5		3000	1100	14900	7.9									100			Mo
1306	325.87	41583	34.45	22.4-24	1.6		700	100	1400	2.3									-100			Mo
1306	329.58	41583	13.42	1.5-2.2	0.7		2300	1800	74000	6.5									100			Mo
1109	395.64	41594	2.24	35.45-35.85	0.4		1700	2600	31200													Mo
1109	398.56	41594	-0.58	39-40.4	1.4	6	86	30	132	0.3	7	4	341	-2	-0.2	3	3	333	8	-2	-2	ACME
1109	399.21	41594	-1.20	40.4-40.8	0.4		2100	5200	13300													Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.	
1109	399.78	41594	-1.76	40.8-42	1.2		2900	1700	4600													Mo	
1109	400.57	41594	-2.52	42-43	1		3400	2000	8500													Mo	
1109	401.47	41594	-3.39	43-44.5	1.5	7	314	61	357	-0.3	3	6	352	-2	1.1	-3	-3	489	6	-2	-2	ACME	
1109	402.33	41594	-4.22	44.6-45.3	0.7		3200	7800	24800													Mo	
1109	402.91	41594	-4.78	45.3-46.2	0.9		3700	4700	37000													Mo	
1109	403.34	41594	-5.20	46.2-46.5	0.3		2000	300	700													Mo	
1109	403.79	41594	-5.64	46.5-47.45	0.95		5400	7300	32400													Mo	
1109	404.51	41594	-6.33	47.45-48.5	1.05	6	52	9	70	-0.3	6	4	305	-2	-0.2	3	-3	241	-2	4	2	ACME	
1109	405.27	41594	-7.06	48.6-49.45	0.85	6	264	78	581	0.4	4	7	299	3	2.2	-3	-3	409	16	-2	-2	ACME	
1109	405.91	41594	-7.68	49.45-50.4	0.95	6	115	-3	111	-0.3	19	22	323	-2	0.3	-3	-3	43	11	5	-2	ACME	
1133	289.20	41660	28.60	0-1	1	6	91	33	153	-0.3	31	19	722	-2	0.4	3	-3	198	12	10	6	ACME	
1133	288.60	41660	27.80	1-2	1	6	114	8	165	-0.3	25	23	847	2	0.3	-3	-3	176	9	5	3	ACME	
1133	286.79	41660	25.41	4-5	1	5	166	21.5	274	0.6	48	36.5	616.5	2	0.25	-3	-3	56	13.5	12	9	ACME	
1133	273.55	41660	7.84	26-27	1	7	182	24	277	0.4	33	30	573	5	-0.2	-3	-3	47	7	6	8	ACME	
1133	271.70	41660	5.38	29.15-30	0.85	6	107	18	201	-0.3	42	37	531	3	0.3	-3	3	29	45	14	11	ACME	
1133	262.72	41660	-6.54	44-45	1	7	151	7	75	-0.3	62	41	502	2	-0.2	5	3	91	12	5	15	ACME	
1133	258.51	41660	-12.13	51-52	1	6	247	4	117	-0.3	33	33	600	-2	0.3	3	-3	73	23	12	6	ACME	
1133	249.28	41660	-24.37	66-67.65	1.65	6	174	15	126	-0.3	48	42	542	-2	0.4	3	3	58	31	7	10	ACME	
1133	248.49	41660	-25.43	67.65-68.65	1		500	100	800													Mo	
1133	247.84	41660	-26.29	68.65-69.8	1.15		2300	7700	20300													Mo	
1133	247.19	41660	-27.14	69.8-70.8	1		100	100	100													Mo	
1133	246.24	41660	-28.40	71.4-72.35	0.95	12	587	639	3278	2.9	13	14	471	5	16	3	-3	184	116	-2	3	ACME	
1133	239.49	41660	-37.37	82.9-83.3	0.4	6	33	26	207	0.3	8	9	592	-2	-0.2	4	-3	537	11	-2	-2	ACME	
1133	239.11	41660	-37.87	83.3-84.15	0.85		600	500	1400													Mo	
1133	238.48	41660	-38.71	84.15-85.4	1.25		5000	3000	24200													Mo	
1133	237.80	41660	-39.60	85.4-86.4	1		600	1800	1900													Mo	
1133	237.11	41660	-40.52	86.4-87.7	1.3		800	400	1700													Mo	
1133	236.63	41660	-41.16	87.7-88	0.3	6	116	20	231	0.7	17	21	436	2	0.4	3	-3	67	29	7	3	ACME	
1133	236.24	41660	-41.68	88-89	1	6	146	9	192	0.4	26	29	464	3	0.3	-3	-3	62	25	5	3	ACME	
558	384.85	42700	-47.55	28.6-28.8	0.2		700	35000	110000	29									150				Mo
558	384.55	42700	-48.07	28.8-29.8	1		1700	2800	6200	6									150				Mo
558	384.21	42700	-48.66	29.8-30.15	0.35		2600	13000	26200	42									2300				Mo
558	383.99	42700	-49.05	30.15-30.7	0.55		1800	2800	6000	9									450				Mo
558	383.68	42700	-49.59	30.7-31.4	0.7		5200	9300	16100	19									550				Mo
556	376.55	42950	-56.94	16.4-17.4	1		300	400	600	2									50				Mo
556	375.91	42950	-58.04	17.4-18.95	1.55		2000	4900	17200	8									50				Mo
556	375.41	42950	-58.91	18.95-19.4	0.45		6400	10000	58300	15									150				Mo
556	374.85	42950	-59.88	19.4-21.2	1.8		1200	3800	10800	5									50				Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
556	374.15	42950	-61.09	21.2-22.2	1		3300	18000	1600	25									100			Mo
1240	388.11	43055	-47.69	0-0.6	0.6		2300	5800	22100	11.2									100			Mo
1240	387.20	43055	-47.97	0.6-1.9	1.3		8500	20900	44800	29.4									1300			Mo
1240	386.06	43055	-48.32	1.9-3	1.1		3800	11200	38800	15.5									300			Mo
1240	385.29	43055	-48.55	3-3.5	0.5		1800	2900	8600	5.7									100			Mo
1240	384.57	43055	-48.77	3.5-4.5	1		3100	11100	43200	19.3									400			Mo
1240	383.62	43055	-49.06	4.5-5.5	1		4700	8800	42000	14									200			Mo
1240	382.57	43055	-49.38	5.5-6.7	1.2		3700	12300	13100	16.1									200			Mo
1240	381.37	43055	-49.75	6.7-8	1.3		4400	30300	102400	42									800			Mo
1240	380.27	43055	-50.09	8-9	1		2500	20700	66000	28									300			Mo
1240	379.32	43055	-50.38	9-10	1		3200	23100	106800	30									300			Mo
1240	378.36	43055	-50.67	10-11	1		6400	11900	41600	19									500			Mo
1240	377.40	43055	-50.96	11-12	1		3900	14600	46400	24									200			Mo
1240	376.45	43055	-51.25	12-13	1		1400	600	1200	2.1									-100			Mo
1240	375.49	43055	-51.55	13-14	1		400	400	900	1.2									-100			Mo
1240	372.24	43055	-52.54	16.4-17.4	1		700	300	1300	1									-100			Mo
1240	371.47	43055	-52.77	17.4-18	0.6		3600	600	18700	4.7									-100			Mo
1240	370.71	43055	-53.01	18-19	1		3600	500	7300	4.1									100			Mo
1240	369.75	43055	-53.30	19-20	1		700	400	1300	1.3									-100			Mo
1240	336.14	43055	-63.58	54.4-54.9	0.5		7700	2100	13500	12.7									-100			Mo
1240	332.03	43055	-64.84	58.45-59.45	1		800	600	3600	1.5									-100			Mo
1240	331.12	43055	-65.11	59.45-60.35	0.9		4800	6600	16000	14.6									400			Mo
1240	330.23	43055	-65.38	60.35-61.3	0.95		500	400	2000	1.4									-100			Mo
1240	328.97	43055	-65.77	61.3-63	1.7		1500	3800	5900	8.7									100			Mo
1240	326.72	43055	-66.46	64-65	1		11200	3100	8400	13									-100			Mo
1240	325.76	43055	-66.75	65-66	1		6300	2400	28200	9									-100			Mo
1240	324.81	43055	-67.04	66-67	1		6600	2600	25000	9									200			Mo
1240	321.94	43055	-67.92	69-70	1		2500	3300	11100	8									400			Mo
1240	321.17	43055	-68.15	70-70.6	0.6		1700	9900	72400	13									200			Mo
1240	320.41	43055	-68.39	70.6-71.6	1		200	300	100	0									-100			Mo
1240	304.34	43055	-73.30	87.4-88.4	1		400	200	100	1.6									-100			Mo
1240	303.29	43055	-73.62	88.4-89.6	1.2		1900	18100	61600	35.3									700			Mo
1240	302.14	43055	-73.97	89.6-90.8	1.2		400	2500	7700	5.4									100			Mo
1240	300.99	43055	-74.32	90.8-92	1.2		300	300	100	1.4									100			Mo
1240	299.94	43055	-74.64	92-93	1		2000	700	3700	6.1									100			Mo
1240	298.99	43055	-74.94	93-94	1		5000	5600	12200	22									300			Mo
1240	281.20	43055	-80.37	111.6-112.6	1		200	200	100	1.8									-100			Mo
1240	280.53	43055	-80.58	112.6-113	0.4		900	16000	43200	33.2									200			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1240	279.86	43055	-80.78	113-114	1		600	700	1700	3.5									-100			Mo
1241	340.47	43055	-64.51	50.4-51.4	1		200	100	300	2.1									-100			Mo
1241	337.65	43055	-65.53	53.4-54.4	1		1900	1700	51600	5									100			Mo
1241	336.62	43055	-65.91	54.4-55.6	1.2		11400	1900	36600	16									100			Mo
1241	334.36	43055	-66.73	56.8-58	1.2		7400	1500	12100	12									-100			Mo
1241	332.39	43055	-67.45	59-60	1		500	700	1700	5.4									-100			Mo
1241	308.43	43055	-76.17	84.5-85.5	1		500	200	300	4.4									-100			Mo
1241	306.08	43055	-77.03	85.5-89.5	4		900	1600	4100	8									-100			Mo
1241	303.73	43055	-77.88	89.5-90.5	1		200	100	400	1.7									-100			Mo
1242	387.72	43055	-47.34	0-1.25	1.25		10000	36600	79200													Mo
1242	386.57	43055	-47.83	1.25-2.5	1.25		5500	12200	58400													Mo
1242	385.54	43055	-48.27	2.5-3.5	1		2600	7700	19700													Mo
1242	384.53	43055	-48.70	3.5-4.7	1.2		4800	23000	60400													Mo
1242	383.42	43055	-49.17	4.7-5.9	1.2		8500	13700	60800													Mo
1242	382.18	43055	-49.70	5.9-7.4	1.5		100	200	600													Mo
1242	380.38	43055	-50.46	7.4-9.8	2.4		1200	600	2900													Mo
1242	378.73	43055	-51.16	9.8-11	1.2		1600	1100	14900													Mo
1242	377.67	43055	-51.61	11-12.1	1.1		1100	1900	15000													Mo
1242	349.82	43055	-63.43	40.6-43	43		2600	2100	10800	7.6									350			Mo
1242	344.71	43055	-65.60	46.7-48	1.3		3600	3700	31600	6.6									100			Mo
1242	343.66	43055	-66.05	48-49	1		1900	9900	20700	12.4									200			Mo
1242	342.74	43055	-66.44	49-50	1		2800	6300	31900	8.8									100			Mo
1242	341.58	43055	-66.93	50-51.5	1.5		2900	2700	3000	8.6									200			Mo
1242	339.51	43055	-67.81	51.5-54.5	3		2400	2200	400	0.4									-100			Mo
1242	336.71	43055	-69.00	54.5-57.6	3.1		600	500	800	0.9									-100			Mo
1242	323.40	43055	-74.65	70-71	1		1300	1000	7500	6.7									-100			Mo
1242	322.48	43055	-75.04	71-72	1		1500	2500	36900	13.1									-100			Mo
1242	321.38	43055	-75.51	72-73.4	1.4		1100	1400	4600	5.1									-100			Mo
1242	320.09	43055	-76.05	73.4-74.8	1.4		600	900	4700	4.1									-100			Mo
1243	327.86	43055	-62.32	62-63	1		100	200	300	1.4									-100			Mo
1243	326.79	43055	-62.59	63-64.2	1.2		1600	3800	6000	7.9									100			Mo
1243	325.62	43055	-62.88	64.2-65.4	1.2		2800	9500	20400	22.4									300			Mo
1243	324.56	43055	-63.14	65.4-66.4	1		400	1800	2800	3.9									100			Mo
1243	322.08	43055	-63.76	68.3-68.6	0.3		1900	37200	32800	160									800			Mo
1243	318.15	43055	-64.74	72-73	1		200	1200	400	5.3									-100			Mo
1243	317.09	43055	-65.01	73-74.2	1.2		7600	19600	36800	39.5									500			Mo
1243	315.92	43055	-65.30	74.2-75.4	1.2		1200	1700	4400	10.9									100			Mo
1243	314.76	43055	-65.59	75.4-76.6	1.2		1000	1700	3800	7									-100			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1243	313.69	43055	-65.85	76.6-77.6	1		400	400	1100	2.1									-100			Mo
1243	309.52	43055	-66.89	80.9-81.9	1		2100	7000	17200	32.8									700			Mo
1243	308.50	43055	-67.15	81.9-83	1.1		1700	5100	10200	11.2									100			Mo
1243	307.48	43055	-67.40	83-84	1		2100	2100	19600	4									-100			Mo
1243	306.51	43055	-67.64	84-85	1		4700	7600	33500	12.8									200			Mo
1243	305.54	43055	-67.88	85-86	1		10200	2600	31100	9.7									300			Mo
1243	304.57	43055	-68.13	86-87	1		9900	2400	31600	10.5									-100			Mo
1243	303.74	43055	-68.33	87-87.7	0.7		3800	10700	62000	15.2									100			Mo
1243	302.92	43055	-68.54	87.7-88.7	1		1300	7800	14900	13.6									600			Mo
1243	299.91	43055	-69.29	90.8-91.8	1		200	900	1000	2.8									-100			Mo
1243	299.33	43055	-69.43	91.8-92	0.2		5400	10600	50000	16.3									200			Mo
1243	295.45	43055	-70.40	95.4-96.4	1		200	100	400	1.2									-100			Mo
1243	294.38	43055	-70.67	96.4-97.6	1.2		1200	800	2300	4.9									-100			Mo
1243	293.22	43055	-70.96	97.6-98.8	1.2		1000	7200	5800	19.8									400			Mo
1243	292.03	43055	-71.25	98.8-100.05	1.25		2200	2200	3600	20.6									2000			Mo
1243	290.96	43055	-71.52	100.05-101	0.95		1000	3900	6900	8.3									-100			Mo
1243	287.30	43055	-72.43	104-104.6	0.6		200	100	500	1.4									-100			Mo
1243	286.47	43055	-72.64	104.6-105.7	1.1		500	100	300	2									-100			Mo
1243	285.62	43055	-72.85	105.7-106.35	0.65		300	100	100	1									-100			Mo
1243	284.70	43055	-73.08	106.35-107.6	1.25		1500	4800	10900	17.6									100			Mo
1243	283.76	43055	-73.32	107.6-108.3	0.7		1000	3300	15300	12.9									100			Mo
1243	282.69	43055	-73.58	108.3-109.8	1.5		1300	1500	3400	7.4									100			Mo
1243	281.77	43055	-73.81	109.8-110.2	0.4		500	500	600	2.8									-100			Mo
1243	275.65	43055	-75.34	115.8-116.8	1		200	200	300	3.2									1100			Mo
1243	274.59	43055	-75.60	116.8-118	1.2		1400	500	4300	5.7									100			Mo
1243	273.47	43055	-75.88	118-119.1	1.1		6200	7600	29100	34.9									1500			Mo
1243	272.50	43055	-76.12	119.1-120	0.9		600	100	500	3.9									-100			Mo
932	371.35	43130	-62.56	8.1-9.1	1		600	2700	1300	8.7									-100			Mo
932	370.96	43130	-63.08	9.1-9.4	0.3		4000	14100	23000	39									200			Mo
932	370.67	43130	-63.49	9.4-10.1	0.7		200	300	400	0.9									-100			Mo
932	370.17	43130	-64.18	10.1-11.1	1		3000	12100	38200	23									200			Mo
932	369.58	43130	-64.98	11.1-12.1	1		1700	14100	34800	19									150			Mo
932	369.02	43130	-65.75	12.1-13	0.9		2800	2500	30600	5.6									100			Mo
932	368.67	43130	-66.24	13-13.3	0.3		200	300	1200	0.9									-100			Mo
932	368.32	43130	-66.72	13.3-14.2	0.9		1600	8300	31900	9.2									100			Mo
932	367.91	43130	-67.29	14.2-14.7	0.5		600	2100	800	5.2									250			Mo
417	373.44	43140	-63.84	7.85-9	1.15		2100	7900	13300	16									150			Mo
417	372.97	43140	-64.83	9-10.05	1.05		3600	10600	77200	16									150			Mo

[illegible]

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
371	363.31	43599	-82.45	57.85-59	1.15		2400	1100	3200	4												Mo
373	363.46	43599	-55.28	34.8-35.7	0.9		3700	7700	5800													Mo
373	362.23	43599	-56.60	35.7-38.4	2.7		3100	6100	14300													Mo
373	361.02	43599	-57.89	38.4-39.25	0.85		400	900	1100													Mo
373	348.90	43599	-70.89	55.6-57.6	2		800	1400	3800	4												Mo
373	347.74	43599	-72.14	57.6-59	1.4		4300	6400	20700	16												Mo
373	346.53	43599	-73.44	59-61.15	2.15		5000	3400	15900	10												Mo
373	345.28	43599	-74.77	61.15-62.65	1.5		900	1400	3400	2												Mo
373	344.26	43599	-75.87	62.65-64.15	1.5		2000	900	2500	3												Mo
373	343.24	43599	-76.96	64.15-65.65	1.5		2300	700	3600	4												Mo
374	330.27	43599	-69.22	68.55-69.95	1.4		3200	3200	20400	7												Mo
374	318.13	43599	-77.72	82.85-85.3	2.45		2000	4000	11200	13												Mo
374	312.27	43599	-81.82	89.95-92.5	2.55		2000	800	6800	2												Mo
374	310.16	43599	-83.30	92.5-95.1	2.6		1600	15700	58300	10												Mo
598	350.95	43790	-71.15	8.8-9.8	1		400	300	100													Mo
598	349.43	43790	-72.03	9.8-12.3	2.5		3400	5300	23000	15.5												Mo
598	348.17	43790	-72.75	12.3-12.7	0.4		1900	3700	18800	10.4												Mo
598	347.01	43790	-73.43	12.7-15	2.3		2600	5000	16000	18.8												Mo
598	345.58	43790	-74.25	15-16	1		1300	1700	3000													Mo
598	343.63	43790	-75.38	17.25-18.25	1		1500	200	1900													Mo
598	342.87	43790	-75.81	18.25-19	0.75		1200	2400	4100	6.4												Mo
598	342.11	43790	-76.25	19-20	1		1700	3400	2300	9.2												Mo
598	341.25	43790	-76.75	20-21	1		1500	1400	7800	5.8												Mo
598	340.55	43790	-77.15	21-21.6	0.6		600	600	1800	2.1												Mo
598	340.12	43790	-77.40	21.6-22	0.4		2200	3700	30000	10.4												Mo
598	339.47	43790	-77.78	22-23.1	1.1		700	300	1200	1.6												Mo
598	338.61	43790	-78.28	23.1-24	0.9		2100	5800	23000	17.9												Mo
598	337.48	43790	-78.93	24-25.7	1.7		1700	1300	4200													Mo
598	336.57	43790	-79.45	25.7-26.1	0.4		1400	200	800													Mo
598	335.96	43790	-79.80	26.1-27.1	1		500	100	600													Mo
531	386.70	43884	-57.44	20.4-22	1.6	5	1037	470	740	3.8	25	26	440	-2	4.9	4	-3	31	185	3	-2	ACME
531	386.20	43884	-58.31	20-20.4	0.4	9	119	133	687	-0.3	4	2	105	-2	2.9	-3	-3	387	4	-2	2	ACME
531	385.85	43884	-58.91	19-20	1	7	4110	597	5353	2	26	12	651	3	24.8	-3	-3	31	25	2	3	ACME
531	385.35	43884	-59.78	18-19	1	69	4703	14480	98330	10.4	50	13	351	17	419.8	8	17	59	36	2	3	ACME
531	384.90	43884	-60.56	17.2-18	0.8	52	2117	16463	194950	7.2	17	7	697	17	832.3	18	10	41	63	-2	-2	ACME
531	384.58	43884	-61.12	16.7-17.2	0.5	15	9783	312	28884	4.5	28	1	255	-2	151.9	-3	-3	32	134	2	3	ACME
531	384.23	43884	-61.73	15.8-16.7	0.9	19	1356	1798	3742	4.3	9	7	266	3	20.8	5	-3	27	135	-2	2	ACME
531	383.80	43884	-62.46	15-15.8	0.8	77	5494	6759	85414	7.3	35	8	398	17	369.7	9	-3	37	137	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
531	383.35	43884	-63.24	14-15	1	42	2949	5250	10404	10.2	14	12	422	5	68	10	5	28	190	5	2	ACME
531	382.85	43884	-64.11	13-14	1	65	3238	20600	81114	12.6	20	7	339	13	346.3	18	8	30	87	-2	-2	ACME
531	382.43	43884	-64.84	12.3-13	0.7	60	6257	6081	31820	14.5	21	9	438	9	165.5	13	-3	36	422	-2	-2	ACME
531	382.20	43884	-65.23	12.1-12.3	0.2	6	2153	7793	1076	17.9	3	1	76	4	7.8	6	3	319	252	-2	3	ACME
531	381.65	43884	-66.19	10.2-12	1.8	17	2749	2123	9211	4.8	13	7	356	2	48.6	5	-3	40	77	-2	-2	ACME
531	380.90	43884	-67.49	9-10.2	1.2	40	5695	15616	93205	15.5	21	6	511	21	328.8	10	15	56	202	2	-2	ACME
531	380.35	43884	-68.44	8-9	1	17	1928	4818	15570	6.8	10	7	507	6	74.5	7	-3	24	67	2	-2	ACME
531	379.83	43884	-69.35	6.9-8	1.1	22	2922	7457	21843	10.7	13	6	395	5	104.7	11	-3	33	92	3	2	ACME
536	360.03	43892	-59.96	15-17	2	2	145	86	182	0.7	35	26	387	3	0.7	5	-3	45	25	-2	6	ACME
536	360.59	43892	-61.52	13.7-15	1.3	5	240	263	230	0.8	31	28	442	-2	1.4	5	-3	43	33	11	7	ACME
536	361.02	43892	-62.69	12.5-13.7	1.2	1	168	49	282	0.3	31	30	405	3	0.5	-3	-3	23	39	9	8	ACME
536	361.41	43892	-63.77	11.4-12.5	1.1	4	119	96	364	0.3	29	28	507	3	1.1	4	-3	32	30	-2	3	ACME
536	361.80	43892	-64.83	10.25-11.4	1.15	4	561	473	2443	1	28	23	379	-2	10.7	-3	-3	25	38	-2	7	ACME
536	362.12	43892	-65.72	9.5-10.25	0.75	25	4630	15147	58708	19.1	22	11	455	24	235.6	10	17	17	159	-2	-2	ACME
536	362.47	43892	-66.68	8.2-9.5	1.3	15	2948	7586	29082	17.4	22	9	576	16	142.8	13	5	17	316	3	7	ACME
536	363.05	43892	-68.26	6.15-8.2	2.05	11	2195	4732	14757	7.6	18	8	398	8	70	7	-3	26	86	2	6	ACME
536	363.58	43892	-69.71	5.1-6.15	1.05	29	4889	6424	61986	8.6	19	6	435	13	244.4	7	5	27	109	-2	-2	ACME
536	363.93	43892	-70.68	4.1-5.1	1	12	2261	4546	12039	8.6	17	12	733	12	54.1	6	-3	20	123	-2	-2	ACME
536	364.27	43892	-71.62	3.1-4.1	1	10	2133	937	6688	4	11	11	709	16	29.5	8	3	16	138	-2	4	ACME
536	364.54	43892	-72.37	2.5-3.1	0.6	13	2189	609	5490	3	12	9	563	-2	25.4	-3	-3	22	61	-2	-2	ACME
536	364.83	43892	-73.17	1.4-2.5	1.1	16	4658	1118	9268	5.7	12	6	499	4	47.5	6	-3	27	137	-2	2	ACME
536	365.13	43892	-73.99	0.75-1.4	0.65	45	6665	5947	60341	11.9	24	10	755	19	234.5	11	5	32	105	4	2	ACME
536	365.37	43892	-74.65	0-0.75	0.75	38	4279	17419	61305	26	12	8	515	8	219.9	21	9	30	251	-2	-2	ACME
539	420.26	43898	-32.69	49.2-50	0.8	3	95	3	70	-0.3	18	21	556	-2	-0.2	-3	-3	309	5	3	2	ACME
539	420.26	43898	-32.69	49.2-50	0.8	2	93	2	68	-0.3	18	20	544	2	-0.2	-3	-3	341	3	-2	3	ACME
539	420.01	43898	-33.40	48.5-49.2	0.7	1	100	2	99	-0.3	16	21	401	-2	-0.2	-3	-3	101	6	4	4	ACME
539	419.75	43898	-34.10	47.7-48.5	0.8	2	84	4	73	-0.3	15	21	473	-2	-0.2	-3	-3	148	15	-2	-2	ACME
539	419.49	43898	-34.81	47-47.7	0.7	2	122	9	184	0.3	30	30	534	2	0.3	-3	-3	14	10	-2	-2	ACME
539	419.20	43898	-35.60	46-47	1	3	114	4	82	-0.3	22	22	400	-2	-0.2	-3	-3	36	5	4	4	ACME
539	418.86	43898	-36.54	45-46	1	1	164	2	59	-0.3	24	28	408	2	-0.2	-3	-3	44	5	5	5	ACME
539	418.52	43898	-37.48	44-45	1	4	101	3	122	0.3	22	27	334	3	-0.2	-3	-3	12	16	2	5	ACME
539	418.18	43898	-38.42	43-44	1	2	42	5	67	-0.3	22	24	176	-2	-0.2	-3	-3	11	3	7	4	ACME
539	417.84	43898	-39.36	42-43	1	2	86	7	85	-0.3	12	18	338	-2	-0.2	-3	-3	37	3	3	-2	ACME
539	417.49	43898	-40.30	41-42	1	3	102	9	137	-0.3	22	26	339	-2	-0.2	-3	-3	11	6	4	3	ACME
539	417.15	43898	-41.24	40-41	1	3	121	12	125	-0.3	18	27	454	-2	0.2	-3	-3	12	9	2	2	ACME
539	416.81	43898	-42.18	39-40	1	1	159	20	177	-0.3	28	29	564	-2	0.2	-3	-3	15	8	-2	3	ACME
539	416.47	43898	-43.12	38-39	1	5	143	44	223	-0.3	30	30	639	-2	0.3	-3	-3	11	8	4	5	ACME
539	416.13	43898	-44.06	37-38	1	-1	123	36	228	-0.3	21	24	395	-2	0.4	-3	-3	15	11	3	2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
539	415.78	43898	-45.00	36-37	1	4	189	283	1084	0.9	23	23	403	3	3.6	-3	-3	14	17	5	6	ACME
539	415.46	43898	-45.89	35.1-36	0.9	1	185	253	1035	0.8	18	21	341	-2	3.3	-3	-3	17	16	3	3	ACME
539	414.82	43898	-47.66	33.45-33.9	0.45	41	2086	22446	133722	15.1	16	11	425	-2	570.9	11	18	11	62	3	2	ACME
539	414.63	43898	-48.16	32.82-33.45	0.63	57	7344	23302	151851	16.4	30	4	399	-2	648.3	12	21	11	72	-2	-2	ACME
539	414.44	43898	-48.70	32.3-32.82	0.52	23	3646	5890	25147	7	23	8	300	2	93.5	-3	18	14	31	-2	2	ACME
539	414.18	43898	-49.42	31.3-32.3	1	23	643	23468	211135	38.9	11	5	531	-2	901.4	16	125	15	38	2	2	ACME
539	413.78	43898	-50.50	30.2-31.1	0.9		3100	7500	16400													Mo
539	413.29	43898	-51.86	28.2-30.2	2		3400	2200	12100													Mo
539	412.74	43898	-53.36	27-28.2	1.2		500	500	2000													Mo
539	412.47	43898	-54.12	26.6-27	0.4		1600	3000	16600													Mo
539	412.15	43898	-54.99	25.15-26.6	1.45		1100	3900	3600													Mo
539	411.82	43898	-55.90	24.65-25.15	0.5		5100	12200	41300													Mo
539	411.56	43898	-56.61	23.65-24.65	1		700	2200	5800													Mo
539	410.21	43898	-60.32	19.7-20.7	1		1400	1800	3500													Mo
539	409.73	43898	-61.63	18.3-19.3	1		5200	7900	28500													Mo
539	409.39	43898	-62.57	17.3-18.3	1		300	0	500													Mo
539	406.79	43898	-69.72	9.7-10.7	1		2000	4400	11700													Mo
539	406.43	43898	-70.70	8.6-9.7	1.1		4500	10300	45600													Mo
539	406.14	43898	-71.50	8-8.6	0.6		1300	2900	9000													Mo
539	405.96	43898	-71.99	7.55-8	0.45		8100	18900	44700													Mo
539	405.52	43898	-73.19	5.45-7.55	2.1		1400	200	1300													Mo
539	404.95	43898	-74.77	4.2-5.45	1.25		2900	1900	6600													Mo
539	404.63	43898	-75.64	3.6-4.2	0.6		1300	1300	3700													Mo
7101	408.00	43901	192.58	14.25-16	1.75	14	2391	3496	7997	12.3	17	16	494	6	42.7	12	3	30	138	6	-2	ACME
7101	408.00	43901	127.60	79.55-80.65	1.1	2	32	32	208	0.5	123	27	536	2	0.7	-3	-3	1449	4	3	3	ACME
7101	408.00	43901	111.35	95.7-97	1.3	4	138	47	241	1	26	32	549	4	0.4	-3	-3	21	16	15	6	ACME
7101	408.00	43901	106.33	100.75-102	1.25	3	131	8	227	0.4	14	16	626	2	0.2	-3	-3	154	5	6	-2	ACME
7101	408.00	43901	-51.48	258.35-260	1.65	4	90	7	110	0.6	20	24	476	2	0.2	4	3	47	6	7	7	ACME
7101	408.00	43901	-53.30	260-262	2	4	201	20	118	0.8	24	24	364	-2	-0.2	-3	3	27	24	6	3	ACME
7101	408.00	43901	-55.30	262-264	2	4	174	74	270	1	18	26	397	3	1.3	4	-3	35	36	-2	-2	ACME
7101	408.00	43901	-57.30	264-266	2	8	1942	2453	3539	11.9	20	23	396	6	27.1	8	5	24	237	4	4	ACME
7101	408.00	43901	-59.68	266-268.75	2.75	7	588	726	2977	2.8	14	20	424	-2	16.6	3	6	24	73	3	2	ACME
7101	408.00	43901	-61.55	268.9-269.6	0.7	20	4349	2933	33397	3.9	30	24	446	-2	178.9	3	3	17	45	5	2	ACME
7101	408.00	43901	-62.48	269.6-270.75	1.15	49	2795	10039	82801	7.8	25	13	469	10	357.6	7	21	41	33	-2	-2	ACME
7101	408.00	43901	-63.58	270.75-271.8	1.05	22	2827	1558	13832	3.5	18	10	311	4	76.5	4	3	23	135	3	-2	ACME
7101	408.00	43901	-64.55	271.8-272.7	0.9	48	4899	1423	28956	3.9	20	10	429	4	161.8	-3	9	39	76	6	5	ACME
7101	408.00	43901	-65.40	272.7-273.5	0.8	52	1908	15317	76958	20.2	18	7	305	32	290.8	29	8	34	541	-2	2	ACME
7101	408.00	43901	-66.35	273.5-274.6	1.1	41	1063	21333	101187	21.5	27	8	418	28	432	37	11	18	204	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7101	408.00	43901	-68.35	274.6-277.5	2.9	21	6933	3120	12322	11.6	15	7	445	4	60.5	14	5	21	186	3	2	ACME
7101	408.00	43901	-70.23	277.5-278.35	0.85	17	1589	5658	22456	6.9	9	5	499	7	105.5	11	4	23	72	4	-2	ACME
7101	408.00	43901	-70.85	278.35-278.75	0.4	9	1019	1412	4669	2.1	5	5	452	-2	20.4	-3	-3	62	72	-2	-2	ACME
7101	408.00	43901	-71.60	278.75-279.85	1.1	28	7022	9475	67410	14.9	18	8	794	20	253.3	12	4	16	248	2	-2	ACME
7101	408.00	43901	-72.53	279.85-280.6	0.75	8	2249	1645	9267	3.3	10	3	377	4	42	5	-3	61	21	-2	-2	ACME
7101	408.00	43901	-73.25	280.6-281.3	0.7	29	6900	8413	41640	13.2	13	10	785	16	212.9	9	5	18	335	2	4	ACME
7101	408.00	43901	-76.93	284-285.25	1.25	18	3230	1143	5341	8.5	8	6	354	-2	26	7	-3	30	335	2	-2	ACME
7101	408.00	43901	-77.70	285.25-285.55	0.3	14	1339	136	8400	1.4	8	15	1010	-2	40.2	-3	-3	35	43	2	-2	ACME
7101	408.00	43901	-78.23	285.55-286.3	0.75	21	3376	5100	12579	19.1	14	7	307	3	61.7	17	6	41	123	4	-2	ACME
7101	408.00	43901	-78.88	286.3-286.85	0.55	52	4513	8265	22645	15.4	27	51	345	20	109.9	13	6	13	86	3	3	ACME
7101	408.00	43901	-81.38	288.35-289.8	1.45	29	2812	6927	23917	13.7	17	12	577	14	117.5	18	5	30	219	4	5	ACME
7101	408.00	43901	-82.98	289.8-291.55	1.75	33	3399	3188	13658	7.9	20	16	580	3	71	8	3	21	100	2	4	ACME
7101	408.00	43901	-84.13	291.55-292.1	0.55	40	2862	4655	28060	14.4	17	12	581	11	140.2	16	4	28	308	2	-2	ACME
7101	408.00	43901	-85.35	292.1-294	1.9	42	6240	8338	65774	12.7	28	7	419	13	240.8	11	20	34	421	2	-2	ACME
7101	408.00	43901	-87.30	294-296	2	23	3160	8497	17979	7.8	28	14	541	5	99	9	6	36	57	2	2	ACME
7101	408.00	43901	-96.10	303.25-304.35	1.1	-1	1572	121	1293	1.5	18	26	764	-2	2.5	-3	-3	35	15	3	3	ACME
7101	408.00	43901	-97.31	304.57-305.45	0.88	11	558	748	2343	2.7	7	9	406	-2	10	-3	-3	39	18	4	4	ACME
1013	352.46	44012	-74.89	12.75-13.2	0.45	10	1264	615	3735	4.7	10	7	509	-2	14.1	6	-3	22	64	-2	-2	ACME
1013	350.28	44012	-76.15	15.25-15.75	0.5	6	310	559	2281	4.9	25	16	845	-2	13.7	-3	9	18	73	-2	-2	ACME
1013	349.35	44012	-76.69	16.15-17	0.85	8	297	934	2949	1.9	12	11	500	2	10.4	4	-3	48	17	-2	2	ACME
1013	348.54	44012	-77.15	17-18	1	3	93	35	182	0.6	11	9	473	-2	-0.2	-3	-3	80	15	-2	-2	ACME
1013	347.81	44012	-77.58	18-18.7	0.7	9	1174	1265	5855	3.8	17	18	699	5	23.7	5	5	11	51	2	-2	ACME
1013	347.14	44012	-77.96	18.7-19.55	0.85	2	172	14	193	0.6	10	9	346	-2	0.3	4	-3	98	22	-2	-2	ACME
1013	346.57	44012	-78.29	19.55-20	0.45	5	543	71	394	0.9	35	27	706	5	0.6	4	3	12	29	-2	-2	ACME
1013	343.61	44012	-80.00	22.6-23.8	1.2	9	7204	635	4130	6.4	17	15	642	2	17.6	8	-3	8	33	-2	-2	ACME
1013	342.63	44012	-80.56	23.8-24.85	1.05	6	621	61	617	1.4	20	15	756	-2	0.8	6	-3	27	33	-2	-2	ACME
1013	340.82	44012	-81.61	26-26.85	0.85	6	453	121	1515	0.9	29	23	618	4	11.6	-3	5	13	23	-2	2	ACME
1013	339.00	44012	-82.66	28.3-28.75	0.45	9	1656	2191	1299	6.5	23	15	683	2	7.5	-3	4	20	57	2	-2	ACME
1013	338.30	44012	-83.06	28.75-29.9	1.15	24	2000	1605	14572	5.1	14	14	862	9	70.1	3	5	4	26	-2	-2	ACME
1013	337.33	44012	-83.63	29.9-31	1.1	10	1202	1667	6346	4	9	5	489	2	28.2	3	3	42	23	3	-2	ACME
1013	335.99	44012	-84.40	31-33	2	14	1827	2192	10701	6.3	20	12	643	8	45.4	7	4	25	39	-2	-2	ACME
1013	334.60	44012	-85.20	33-34.2	1.2	8	1984	2800	3838	13.3	14	8	488	4	15.9	6	5	61	690	-2	-2	ACME
1013	333.82	44012	-85.65	34.2-34.8	0.6	31	3808	13021	824	43.5	12	4	711	14	6.9	21	20	48	496	3	-2	ACME
1013	332.46	44012	-86.44	35.2-36.95	1.75	14	1540	3042	11305	13.4	14	13	583	10	47.3	4	3	16	93	-2	-2	ACME
1013	325.34	44012	-90.55	43.6-45	1.4	3	208	108	210	2.2	28	29	410	5	0.4	3	-3	23	58	3	3	ACME
1013	322.26	44012	-92.33	47.2-48.5	1.3	5	540	42	181	2.3	48	40	419	3	0.5	3	-3	17	36	5	7	ACME
1013	312.86	44012	-97.75	58.6-58.8	0.2	42	1409	21353	121050	63.3	23	22	388	28	516.8	41	10	12	397	-2	-2	ACME
1013	312.60	44012	-97.90	58.8-59.2	0.4	5	4304	708	2694	13.9	34	19	401	5	8.7	4	-3	18	188	-2	3	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
775	469.02	44120	-29.29	60.5-61.6	1.1		3300	25200	500	142									1350			Mo
775	468.27	44120	-30.36	59-60.5	1.5		1600	17400	13300	55									650			Mo
775	467.55	44120	-31.38	58-59	1		2000	4700	7300	14									150			Mo
775	466.98	44120	-32.20	57-58	1		3600	5000	23900	10									100			Mo
775	466.32	44120	-33.14	55.7-57	1.3		3500	7900	30100	11									-100			Mo
775	464.69	44120	-35.48	51.3-55.7	4.4		1600	3800	12700	11									120			Mo
775	462.13	44120	-39.12	48.4-49.7	1.3		2800	4100	10700	16									400			Mo
775	451.71	44120	-54.01	30.5-31.25	0.75		4100	200	11200	4.4									-100			Mo
775	451.15	44120	-54.81	29.3-30.5	1.2		2300	100	3900	3.5									100			Mo
775	437.17	44120	-74.77	5-6.05	1.05		2100	300	2400													Mo
775	436.57	44120	-75.63	3.95-5	1.05		900	300	1200													Mo
775	435.55	44120	-77.09	2-3.4	1.4		2600	5100	22000													Mo
775	434.86	44120	-78.07	1-2	1		1000	600	1800													Mo
775	434.29	44120	-78.89	0-1	1		1700	1700	2500													Mo
782	485.52	44120	-33.56	68.3-69	0.7		2000	4000	15600	11.1									150			Mo
782	484.03	44120	-34.90	66.45-66.85	0.4		3700	8500	65000	18.3									200			Mo
782	483.06	44120	-35.77	64.85-65.85	1		1800	4600	25500	10.1									150			Mo
782	482.32	44120	-36.44	63.85-64.85	1		2300	6700	18400	13.2									100			Mo
782	481.58	44120	-37.11	62.85-63.85	1		900	800	4700	3.3									-100			Mo
782	480.84	44120	-37.78	61.85-62.85	1		3100	8500	28800	18.5									100			Mo
782	480.09	44120	-38.45	60.85-61.85	1		2700	2900	15200	9									100			Mo
782	479.35	44120	-39.12	59.85-60.85	1		1500	2900	27100	8.2									100			Mo
782	478.61	44120	-39.79	58.85-59.85	1		2300	2200	10000	9.2									250			Mo
782	477.86	44120	-40.46	57.85-58.85	1		3900	5900	15400	15.5									150			Mo
782	449.70	44120	-65.82	19.9-21	1.1		1900	5200	12600													Mo
782	448.90	44120	-66.54	18.85-19.9	1.05		2200	4200	5600													Mo
782	440.54	44120	-74.06	7.5-8.75	1.25		2900	3600	14700													Mo
782	439.70	44120	-74.82	6.5-7.5	1		2200	500	6200													Mo
781A	485.02	44120	-21.19	76.3-77.7	1.4		3800	9300	50400	18.6									150			Mo
781A	484.13	44120	-22.21	75-76.3	1.3		300	1600	5200	6									-100			Mo
781A	477.05	44120	-30.36	64.2-65.5	1.3		6400	12500	88800	16.7									200			Mo
781A	476.23	44120	-31.30	63-64.2	1.2		3400	8200	36000	12.7									100			Mo
781A	475.60	44120	-32.02	62.3-63	0.7		3600	6500	27000	11.8									150			Mo
781A	474.95	44120	-32.77	61-62.3	1.3		3100	3500	13700	9.4									-100			Mo
781A	474.13	44120	-33.72	59.8-61	1.2		700	1600	5400	3.8									-100			Mo
781A	473.40	44120	-34.55	58.8-59.8	1		1500	1300	4500	5.5									-100			Mo
781A	472.75	44120	-35.30	57.8-58.8	1		3400	5800	18200	18									100			Mo
781A	472.29	44120	-35.83	57.4-57.8	0.4		4600	27500	50100	77.6									300			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
781A	471.70	44120	-36.51	56-57.4	1.4		5300	8900	7600	54.2									1800			Mo
781A	470.81	44120	-37.53	54.8-55.9	1.1		4500	10100	700	101									3200			Mo
781A	470.12	44120	-38.32	53.7-54.9	1.2		4200	14600	3500	77.7									2050			Mo
781A	469.34	44120	-39.22	52.5-53.7	1.2		2000	1600	9200	7.5									150			Mo
781A	459.53	44120	-50.51	37.5-38.8	1.3		1300	1500	7500	6.9									100			Mo
781A	446.80	44120	-65.15	18-19.5	1.5		2000	5700	15000	23.6									250			Mo
781A	445.98	44120	-66.09	17-18	1		500	200	900	2.6									-100			Mo
781A	445.23	44120	-66.96	15.7-17	1.3		2000	2500	6300	15.5									700			Mo
781A	439.09	44120	-74.02	6.5-7.5	1		2700	100	3400	6.8									150			Mo
781A	438.44	44120	-74.77	5.5-6.5	1		1400	600	2700	6.8									650			Mo
781A	437.78	44120	-75.53	4.5-5.5	1		1900	1900	17100	10.9									250			Mo
781A	437.12	44120	-76.28	3.5-4.5	1		2900	7900	15600	21.4									800			Mo
781A	436.47	44120	-77.04	2.5-3.5	1		2200	2700	8900	12.7									500			Mo
781A	435.81	44120	-77.79	1.5-2.5	1		900	600	6400	4.4									-100			Mo
781A	435.16	44120	-78.55	0.5-1.5	1		1100	400	6300	3.8									-100			Mo
1327	466.31	44131	-20.65	6.75-10	3.25		200	200	200	1.2									-100			Mo
1327	467.56	44131	-22.81	5-6.75	1.75		100	100	200	1.2									-100			Mo
1327	468.67	44131	-24.73	3.15-4.18	1.03	4	588	165	182	2.2	25	25	346	13	0.2	3	-3	11	40	4	4	ACME
1327	469.06	44131	-25.41	2.75-3	0.25	3	9541	22849	149	116.4	35	29	319	1032	11.8	623	-3	127	2919	3	7	ACME
1327	469.21	44131	-25.67	2.42-2.73	0.31	3	4826	7637	221	66.7	55	30	355	248	4.3	174	-3	172	1423	4	7	ACME
1327	469.48	44131	-26.13	1.66-2.42	0.76	2	11406	22680	190	141.7	56	28	351	987	13.8	1027	-3	74	4851	6	10	ACME
1327	469.77	44131	-26.64	1.25-1.66	0.41	3	2628	4012	120	33.8	32	25	443	85	2.2	92	-3	99	730	3	4	ACME
1327	470.20	44131	-27.38	0-1.2	1.2		50	200	200	0.5									-100			Mo
1322	475.83	44131	-33.37	0-1.55	1.55		1700	8700	17600	23.8									150			Mo
1322	475.73	44131	-34.52	1.55-2.3	0.75		3400	5400	19300	16.2									100			Mo
1322	475.63	44131	-35.66	2.3-3.85	1.55		1300	1100	6700	5.4									100			Mo
1322	475.52	44131	-36.93	3.85-4.85	1		200	50	200	1.6									-100			Mo
1322	475.44	44131	-37.83	4.85-5.65	0.8		3100	3400	6800	10.5									100			Mo
1322	475.35	44131	-38.93	5.65-7.05	1.4		800	1900	3500	5.9									-100			Mo
1322	475.22	44131	-40.40	7.05-8.6	1.55		100	50	800	0.2									-100			Mo
1322	475.11	44131	-41.62	8.6-9.5	0.9		1500	1500	7000	6.3									-100			Mo
1322	475.00	44131	-42.91	9.5-11.2	1.7		100	50	200	0.8									-100			Mo
1322	474.88	44131	-44.31	11.2-12.3	1.1		50	50	200	1.9									-100			Mo
1322	474.76	44131	-45.60	12.3-13.8	1.5		200	50	200	0.7									-100			Mo
1322	474.67	44131	-46.65	13.8-14.4	0.6		50	100	100	-0.1									-100			Mo
1322	474.58	44131	-47.64	14.4-15.8	1.4		50	50	200	1.1									-100			Mo
1322	474.46	44131	-49.09	15.8-17.3	1.5		50	50	200	1.7									-100			Mo
1322	474.27	44131	-51.18	17.3-20	2.7		100	100	400	2.6									-100			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1326	462.72	44132	-26.22	7.2-10	2.8		200	300	400	1.1									-100			Mo
1326	463.99	44132	-27.49	6.4-7.2	0.8		200	200	300	1.7									-100			Mo
1326	464.56	44132	-28.06	5.6-6.4	0.8		100	200	400	2									-100			Mo
1326	465.60	44132	-29.10	3.45-5.6	2.15		100	200	300	1.3									-100			Mo
1326	467.01	44132	-30.51	2.3-2.77	0.47	3	3171	6314	225	23.3	33	35	260	28	3.2	21	-3	12	177	3	6	ACME
1326	467.26	44132	-30.76	2.1-2.25	0.15	4	1669	21809	272	143.6	18	11	239	10	76.4	754	17	41	2322	4	3	ACME
1326	467.63	44132	-31.13	1.2-2.1	0.9		3000	8200	400	97									3230			Mo
1326	468.38	44132	-31.88	0-1.2	1.2		300	300	500	1.6									-100			Mo
1323	473.91	44133	-32.53	0-0.5	0.5		400	600	1800	3.2									-100			Mo
1323	473.79	44133	-32.89	0.5-0.75	0.25		200	100	200	2.1									-100			Mo
1323	473.35	44133	-34.09	0.75-3.05	2.3		1100	1600	11900	7.2									-100			Mo
1323	472.57	44133	-36.22	3.05-5.3	2.25		700	300	2300	3.2									-100			Mo
1323	471.79	44133	-38.38	5.3-7.65	2.35		2400	4000	9200	15.9									250			Mo
1323	471.48	44133	-39.22	7.08-7.65	0.57	12	3498	2297	6564	16.1	11	13	227	10	25.1	16	-3	11	590	-2	2	ACME
1323	470.88	44133	-40.87	7.65-10.6	2.95		1600	3000	12100	14.3									100			Mo
1323	470.31	44133	-42.45	10.6-11	0.4		900	3600	37700	14.6									-100			Mo
1323	470.19	44133	-42.78	11-11.3	0.3		2600	8600	16300	51									1000			Mo
1323	470.12	44133	-42.97	11.3-11.4	0.1		10900	61100	6900	282									950			Mo
1323	469.91	44133	-43.54	11.85-12.08	0.23	34	3801	3374	2968	15.3	17	26	718	8	9.6	12	4	14	421	2	4	ACME
1323	469.49	44133	-44.70	13-13.39	0.39	31	2485	20193	48484	45.6	15	18	669	2	183.4	39	3	11	253	-2	-2	ACME
1323	469.07	44133	-45.83	13.4-15.4	2		3600	4800	8900	40.6									1850			Mo
1323	468.36	44133	-47.80	16.3-16.7	0.4	1	24	39	105	-0.3	3	3	291	2	0.2	-3	-3	175	2	-2	-2	ACME
1323	468.16	44133	-48.35	17-17.15	0.15	16	25731	4028	17519	78.4	13	6	191	11	72.1	38	-3	19	2571	-2	3	ACME
1323	467.89	44133	-49.07	17.7-18	0.3	1	200	474	149	2.3	3	1	113	-2	0.4	3	-3	139	160	-2	-2	ACME
1324	472.13	44133	-33.17	0-1.2	1.2		600	1800	3800	6.3									100			Mo
1324	471.45	44133	-34.04	1.2-2.2	1		400	300	600	2.3									-100			Mo
1324	471.02	44133	-34.59	2.2-2.6	0.4		500	300	800	3.2									-100			Mo
1324	470.50	44133	-35.26	2.6-3.9	1.3		300	400	2200	2.4									-100			Mo
1324	469.99	44133	-35.91	3.9-4.25	0.35		4400	17500	47200	49.7									250			Mo
1324	469.66	44133	-36.33	4.55-4.67	0.12	4	4053	5792	479	22.6	89	16	304	5	2.9	4	20	23	252	6	3	ACME
1324	468.99	44133	-37.19	5-6.4	1.4		1600	1600	3400	13.1									100			Mo
1324	468.50	44133	-37.82	6.44-6.55	0.11	6	1264	22983	252	135.3	18	7	229	19	27.1	152	10	148	3811	1	-1	ACME
1324	468.43	44133	-37.91	6.5-6.72	0.22	4	6922	22494	439	141.1	144	40	376	-2	11.9	62	4	48	3684	7	8	ACME
1324	468.16	44133	-38.26	6.8-7.3	0.5		1100	400	1700	4.1									-100			Mo
1324	467.42	44133	-39.20	7.3-9.2	1.9		2000	2100	11400	6.1									-100			Mo
1324	465.97	44133	-41.05	9.2-12	2.8		200	100	500	1.1									-100			Mo
1324	464.34	44133	-43.14	12-14.5	2.5		400	700	1700	2.6									-100			Mo
1324	463.37	44133	-44.39	14.7-14.96	0.26	12	3040	21941	32319	40.7	14	10	350	16	121.5	60	-3	13	251	2	3	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1324	462.91	44133	-44.97	15.45-15.7	0.25	11	1539	6091	15638	17.4	19	14	457	16	53.5	18	-3	16	175	3	4	ACME
1324	462.65	44133	-45.31	15.7-16.3	0.6	14	2023	7117	13840	13.2	13	12	185	19	53.4	39	-3	19	647	1	2	ACME
1324	461.54	44133	-46.73	17.6-18	0.4	8	287	290	715	2.4	27	20	490	10	1.9	-3	-3	14	68	2	1	ACME
1321	478.07	44134	-33.40	0-1.6	1.6		2100	12800	46800	34.1									300			Mo
1321	478.11	44134	-33.87	1.12-1.43	0.31	43	623	20510	98868	36.5	21	15	690	4	422.1	35	-3	5	264	-2	2	ACME
1321	478.18	44134	-34.70	1.95-2.26	0.31	21	3687	6803	20940	18.2	20	8	775	6	83.5	10	-3	11	282	2	-2	ACME
1321	478.24	44134	-35.31	2.45-3	0.55		1600	900	5700	5.3									-100			Mo
1321	478.30	44134	-36.04	3-3.9	0.9		800	1300	4200	2.9									-100			Mo
1321	478.35	44134	-36.58	3.9-4.1	0.2	18	1694	8213	18547	13.8	15	13	640	5	65	9	-3	14	162	2	2	ACME
1321	478.37	44134	-36.79	4.1-4.32	0.22	50	2898	22849	91644	66.5	30	9	656	3	339.3	43	11	12	407	4	4	ACME
1321	478.39	44134	-37.10	4.32-4.72	0.4	15	1402	5241	10894	9	20	16	403	9	37.1	9	-3	9	162	-2	-2	ACME
1321	478.43	44134	-37.48	4.8-5	0.2		2200	7600	14500	16.6									150			Mo
1321	478.48	44134	-38.08	5-6	1		500	500	2300	1.6									-100			Mo
1321	478.55	44134	-38.88	6-6.6	0.6		5000	2100	28100	15.1									200			Mo
1321	478.70	44134	-40.62	6.6-9.5	2.9		800	2100	600	53.5									2750			Mo
1321	478.85	44134	-42.34	9.5-10.05	0.55		900	600	1500	2.6									-100			Mo
1321	478.89	44134	-42.81	10.05-10.45	0.4		400	1200	2200	2.5									-100			Mo
1321	478.92	44134	-43.06	10.45-10.55	0.1		2600	2800	24700	12.6									-100			Mo
1321	479.00	44134	-44.08	10.55-12.5	1.95		200	400	1100	1.5									-100			Mo
1321	479.11	44134	-45.30	12.5-13	0.5		100	300	300	0.4									-100			Mo
1321	479.26	44134	-46.95	13-15.8	2.8		100	300	500	1.7									-100			Mo
1321	479.41	44134	-48.71	15.8-16.55	0.85		800	2600	7000	9.2									-100			Mo
1321	479.53	44134	-50.06	16.55-18.5	1.95		100	300	300	1.1									-100			Mo
1321	479.68	44134	-51.78	18.5-20	1.5		100	300	300	0.4									-100			Mo
1325	468.07	44134	-32.45	0-0.9	0.9		5500	13900	30600	21.9									150			Mo
1325	467.25	44134	-32.73	0.9-1.75	0.85		8700	29800	110800	43.5									150			Mo
1325	465.90	44134	-33.20	1.75-3.75	2		3600	19400	20700	33.4									100			Mo
1325	463.80	44134	-33.92	3.75-6.2	2.45		2600	4100	10900	9.7									-100			Mo
1325	462.31	44134	-34.43	6.2-6.9	0.7		400	300	2000	2.6									-100			Mo
1325	461.36	44134	-34.76	6.9-8.2	1.3		800	1100	5800	4.6									-100			Mo
1325	459.90	44134	-35.26	8.2-10	1.8		600	1200	2700	5.8									-100			Mo
1328	479.49	44134	-32.29	0-0.6	0.6		1500	5200	45200	13.2									100			Mo
1328	480.20	44134	-32.51	0.6-1.5	0.9		1400	700	2900	2.7									-100			Mo
1328	480.87	44134	-32.71	1.5-2	0.5	42	26734	4916	75317	41.2	28	10	652	12	256.4	15	4	21	3607	1	3	ACME
1328	481.26	44134	-32.83	2-2.3	0.3	19	18535	2681	34653	27.2	21	8	621	7	115.4	8	-3	9	327	1	2	ACME
1328	481.88	44134	-33.02	2.3-3.3	1	6	177	77	397	0.6	9	3	260	3	1.2	-3	-3	474	9	1	1	ACME
1328	482.92	44134	-33.34	3.8-3.97	0.17	4	117	61	212	0.6	4	2	299	3	0.6	-3	-3	84	6	1	2	ACME
1328	484.24	44134	-33.74	4.25-6.3	2.05		200	300	200	1.1									-100			Mo

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
1328	485.30	44134	-34.06	6.3-6.45	0.15		300	3500	200	12.2									180			Mo
1328	486.30	44134	-34.37	6.45-8.4	1.95		300	3900	600	12.3									-100			Mo
1328	488.19	44134	-34.95	8.4-10.4	2		100	200	200	0.5									-100			Mo
1328	490.01	44134	-35.50	10.4-12.2	1.8		50	200	200	0.6									-100			Mo
1328	491.44	44134	-35.94	12.2-13.4	1.2		100	200	400	0.8									-100			Mo
1328	493.45	44134	-36.56	13.4-16.4	3		50	200	200	0.2									-100			Mo
1328	496.39	44134	-37.46	16.4-19.55	3.15		50	200	200	0.1									-100			Mo
1003	536.06	44193	12.99	136-138.45	2.45	3	110	8	140	0.3	24	23	426	2	-0.2	-3	3	11	19	-2	4	ACME
1003	519.07	44193	-2.85	113-115	2	4	127	35	182	0.5	25	26	343	3	0.2	-3	-3	8	5	-2	6	ACME
1003	515.42	44193	-6.26	108-110	2	4	97	18	114	0.3	27	31	379	3	-0.2	-3	3	7	14	-2	4	ACME
1003	513.21	44193	-8.33	105-106.95	1.95	22	979	3607	9327	14.6	25	23	912	11	39.7	4	-3	9	231	3	3	ACME
1003	511.82	44193	-9.62	103.15-105	1.85	11	1033	1656	4585	10.6	14	12	725	4	18.5	4	-3	16	103	2	-2	ACME
1003	510.74	44193	-10.63	102.2-103	0.8	22	1831	5813	11580	19.3	28	20	646	14	53.3	5	3	10	96	2	2	ACME
1003	506.79	44193	-14.31	96.7-97.7	1	2	89	35	117	0.5	17	18	377	-2	0.2	-3	-3	34	13	-2	3	ACME
1003	505.80	44193	-15.23	95-96.7	1.7	12	1192	5639	10803	15.3	18	24	702	13	49.3	6	3	13	152	5	4	ACME
1003	504.56	44193	-16.39	93.3-95	1.7	10	695	2316	4859	5.6	15	19	582	10	20.9	3	-3	9	93	2	3	ACME
1003	503.19	44193	-17.67	91.25-93.3	2.05	9	741	935	1775	3.1	23	18	738	2	6.8	-3	-3	14	23	6	3	ACME
1003	502.00	44193	-18.78	90.05-91.25	1.2	8	408	1424	4483	5.2	12	12	388	3	19.2	3	-3	29	33	-2	-2	ACME
1003	482.10	44193	-37.33	62.9-64	1.1	7	364	704	2616	2	9	3	316	-2	11.9	-3	-3	293	9	-2	-2	ACME
1003	481.30	44193	-38.08	61.8-62.9	1.1	23	3842	8066	17948	13.8	17	12	526	19	82.5	-3	-3	13	99	2	2	ACME
1003	480.24	44193	-39.07	60-61.8	1.8	26	2025	6565	18725	16.6	19	15	851	18	85.7	3	-3	9	322	2	3	ACME
1003	478.85	44193	-40.36	58-60	2	20	2419	3712	13017	13.3	17	11	864	12	62.2	3	-3	7	384	-2	2	ACME
1003	477.44	44193	-41.67	56.6-57.55	0.95	27	3033	8680	22513	25.1	18	15	771	20	111.9	10	3	9	204	3	3	ACME
1003	476.73	44193	-42.34	55.95-56.25	0.3	14	23037	17710	20858	112.9	36	-1	624	46	101.7	36	18	16	3989	-2	3	ACME
1003	466.60	44193	-51.79	41.5-43	1.5	4	597	1051	1904	12.3	10	8	463	-2	8.3	5	-3	45	103	-2	-2	ACME
1003	465.47	44193	-52.84	39.9-41.5	1.6	9	1238	686	3406	4.4	20	22	607	-2	13.6	-3	-3	14	42	2	-2	ACME
1003	464.48	44193	-53.76	38.8-39.9	1.1	2	1627	47	7936	4.2	12	36	1075	14	55.9	-3	-3	27	58	3	-2	ACME
1003	462.43	44193	-55.67	36-37.1	1.1	17	1877	3994	8123	18.2	14	12	453	6	43.1	9	5	33	193	-2	-2	ACME
1003	459.62	44193	-58.30	32-33.4	1.4	10	1070	764	2565	5.9	11	9	484	2	15.7	-3	3	55	59	3	2	ACME
1003	454.11	44193	-63.43	24.35-26	1.65	4	63	28	117	0.8	7	4	315	-2	0.3	-3	-3	87	4	2	3	ACME
1003	449.23	44193	-67.98	18-19	1	6	815	1010	2573	6	7	11	333	-2	13.5	-3	-3	41	100	-2	-2	ACME
1003	446.12	44193	-70.88	14-14.5	0.5	16	958	10876	56580	19.9	23	13	233	11	249.3	10	14	12	72	-2	-2	ACME
1003	445.70	44193	-71.27	13.35-14	0.65	3	1190	83	2925	4.2	18	14	709	6	10	-3	3	27	63	-2	-2	ACME
1003	444.42	44193	-72.47	10.95-12.9	1.95	8	2052	31	2000	5.4	22	22	671	11	10	6	-3	24	70	-2	-2	ACME
1003	441.83	44193	-74.89	7.3-9.45	2.15	18	2294	272	8423	11.2	25	31	483	7	40.6	4	-3	12	281	5	3	ACME
1003	437.20	44193	-79.20	1.5-2.6	1.1	5	713	53	1098	2.3	18	24	628	5	2.6	4	-3	33	87	-2	2	ACME
1003	436.12	44193	-80.21	0-1.15	1.15	3	2178	37	989	5.2	13	13	521	5	2.4	4	-3	27	89	-2	2	ACME
512	399.20	44244	-71.63	0-1.65	1.65	13	2483	3649	8352	6.5	20	4	429	3	41	5	5	81	27	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
512	399.20	44244	-72.73	1.65-2.2	0.55	3	1232	46	266	1.1	93	50	811	3	-0.2	-3	-3	15	17	4	3	ACME
512	399.20	44244	-73.55	2.2-3.3	1.1	5	79	105	97	0.5	7	1	75	3	0.2	-3	-3	190	2	-2	-2	ACME
512	399.20	44244	-77.45	6-7.3	1.3	6	873	1046	4385	2.6	19	26	587	4	18.5	7	3	32	82	2	3	ACME
512	399.20	44244	-78.38	7.3-7.85	0.55	4	175	32	137	0.5	122	40	448	2	-0.2	3	-3	55	21	2	8	ACME
512	399.20	44244	-79.18	7.85-8.9	1.05	2	176	38	205	0.8	98	37	505	-2	0.3	3	-3	46	24	4	7	ACME
512	399.20	44244	-80.33	8.9-10.15	1.25	9	7659	839	14573	5.2	27	11	645	-2	68.3	4	6	18	255	4	3	ACME
512	399.20	44244	-81.55	10.4-11.1	0.7	9	6948	1089	35251	5.2	54	23	652	5	199.6	-3	-3	12	113	2	3	ACME
512	399.20	44244	-82.85	11.1-13	1.9	11	1145	2705	6096	3.5	39	22	545	3	29.7	-3	5	34	29	4	5	ACME
512	399.20	44244	-84.78	13-14.95	1.95	32	5378	4755	30031	9.9	24	10	363	8	152	10	6	14	128	2	-2	ACME
512	399.20	44244	-87.18	14.95-17.8	2.85	6	725	1773	1544	4.9	41	22	470	-2	7.7	4	-3	39	127	-2	2	ACME
512	399.20	44244	-98.18	26.75-28	1.25	6	550	135	1064	1.1	16	21	440	-2	4.9	-3	-3	11	16	3	4	ACME
512	399.20	44244	-108.05	36.8-37.7	0.9	2	74	14	39	-0.3	86	17	365	-2	0.2	-3	-3	346	4	3	5	ACME
504	424.90	44346	-66.98	0-1.35	1.35	4	145	14	97	0.3	37	30	526	-2	0.4	-3	-3	43	18	-2	6	ACME
504	424.90	44346	-71.30	4.25-5.75	1.5	1	233	47	659	0.4	17	17	453	3	0.7	-3	-3	80	8	3	-2	ACME
504	424.90	44346	-72.65	5.75-6.95	1.2	5	249	159	926	0.9	57	25	472	-2	2.9	3	-3	39	43	3	-2	ACME
504	424.90	44346	-74.50	7.4-9	1.6	2	126	17	127	0.6	60	35	448	3	0.2	4	4	26	16	-2	5	ACME
504	424.90	44346	-75.85	9-10.1	1.1	7	10	9	58	-0.3	9	3	226	2	-0.2	3	-3	163	2	7	-2	ACME
504	424.90	44346	-77.73	10.1-12.75	2.65	2	251	18	164	0.8	25	28	366	-2	-0.2	4	5	23	14	3	2	ACME
504	424.90	44346	-79.48	12.75-13.6	0.85	3	1438	42	2635	1.6	26	28	498	4	13.3	4	-3	26	34	6	3	ACME
504	424.90	44346	-80.18	13.6-14.15	0.55	4	938	58	3193	0.8	9	6	435	-2	19.3	-3	-3	53	20	3	7	ACME
504	424.90	44346	-80.78	14.15-14.8	0.65	22	3020	2962	28764	4.2	30	30	666	14	165.2	6	-3	19	23	-2	-2	ACME
504	424.90	44346	-81.90	14.8-16.4	1.6	19	2230	3819	24705	6.2	23	20	443	11	124.2	-3	8	20	79	-2	-2	ACME
504	424.90	44346	-83.20	16.4-17.4	1	4	3865	327	5810	3.1	26	11	610	-2	24.9	-3	-3	22	36	7	3	ACME
504	424.90	44346	-84.55	17.4-19.1	1.7	12	3858	3777	18421	5.9	15	14	458	4	93.9	5	6	22	135	2	2	ACME
504	424.90	44346	-85.80	19.1-19.9	0.8	6	558	74	328	0.3	8	4	176	3	0.3	-3	-3	372	11	3	2	ACME
504	424.90	44346	-86.68	19.9-20.85	0.95	25	7861	13764	47911	18.8	15	13	502	19	212.3	13	9	19	400	-2	-2	ACME
504	424.90	44346	-88.80	20.85-24.15	3.3	5	50	80	163	0.4	7	4	371	2	0.6	-3	-3	127	-2	5	2	ACME
504	424.90	44346	-91.68	24.15-26.6	2.45	3	347	100	347	1.9	30	26	438	3	0.9	6	-3	33	-2	2	2	ACME
504	424.90	44346	-98.15	30.8-32.9	2.1	4	105	8	88	-0.3	13	14	523	-2	-0.2	-3	-3	208	5	-2	2	ACME
504	424.90	44346	-101.38	34.15-36	1.85	2	163	13	169	-0.3	18	23	388	-2	0.3	-3	3	15	4	2	-2	ACME
499	407.74	44348	-66.77	0-2.35	2.35	2	121	12	108	0.7	23	27	383	4	0.3	5	3	17	5	-2	4	ACME
499	405.83	44348	-68.11	2.35-4.65	2.3	24	751	1192	4162	16.5	30	17	437	9	16.1	9	6	12	371	-2	-2	ACME
499	404.09	44348	-69.33	4.65-6.6	1.95	20	897	2460	5762	22.3	32	19	455	6	23.6	10	5	16	239	-2	4	ACME
499	402.88	44348	-70.17	6.6-7.6	1	32	797	2041	4363	21.1	33	20	514	5	15.7	7	-3	13	128	-2	3	ACME
499	401.90	44348	-70.86	7.6-9	1.4	2	633	129	634	2.5	23	24	457	3	1.3	5	-3	15	70	-2	-2	ACME
499	400.67	44348	-71.72	9-10.6	1.6	9	423	426	1242	1.7	17	17	435	3	6.7	4	3	12	17	-2	-2	ACME
499	399.03	44348	-72.87	10.6-13	2.4	5	1564	1578	3157	4.1	34	31	477	2	17.4	-3	5	10	74	-2	-2	ACME
499	397.03	44348	-74.27	13.5-15	1.5	13	2157	3473	9152	13.5	31	22	549	6	40.3	4	4	12	160	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
499	395.80	44348	-75.13	15-16.5	1.5	9	2003	2134	4554	9.1	33	25	457	5	22.2	3	8	12	78	3	3	ACME
499	394.57	44348	-75.99	16.5-18	1.5	5	434	115	2960	1.6	27	22	475	-2	13.7	-3	-3	14	29	2	2	ACME
499	392.89	44348	-77.17	18.6-20	1.4	3	209	41	236	0.5	19	24	509	4	0.3	-3	-3	19	30	3	-2	ACME
499	388.55	44348	-80.21	23.45-25.75	2.3	5	179	11	120	-0.3	36	32	547	-2	-0.2	-3	5	18	11	3	3	ACME
499	381.30	44348	-85.29	32.5-34.4	1.9	2	96	14	92	0.3	61	34	547	-2	-0.2	-3	-3	53	15	6	4	ACME
7603	482.50	44398	-24.30	213-215	2	2	151	22	179	-0.3	19	23	466	-2	0.2	-3	-3	96	5	2	4	ACME
7603	482.50	44398	-25.95	215-216.3	1.3	2	126	33	158	-0.3	21	24	396	-2	0.2	-3	-3	221	5	-2	6	ACME
7603	482.50	44398	-26.95	216.3-217	0.7	3	134	17	202	0.4	17	22	313	-2	0.4	-3	-3	28	18	-2	4	ACME
7603	482.50	44398	-27.80	217-218	1	3	116	27	191	0.3	15	22	297	-2	-0.2	-3	-3	22	29	3	4	ACME
7603	482.50	44398	-28.95	218-219.3	1.3	6	268	613	470	1.2	12	19	518	5	4.7	-3	-3	45	28	-2	3	ACME
7603	482.50	44398	-29.75	219.3-219.6	0.3	11	1599	5022	10812	13	7	9	385	4	53	4	-3	48	71	2	4	ACME
7603	482.50	44398	-30.40	219.6-220.6	1	6	330	1036	2813	2.3	3	6	378	-2	11.1	4	-3	111	19	-2	-2	ACME
7603	482.50	44398	-31.35	220.6-221.5	0.9	4	215	229	594	0.9	5	9	645	-2	1.5	-3	-3	396	4	-2	-2	ACME
7603	482.50	44398	-63.30	252.4-253.6	1.2	13	3262	152	22677	6.8	17	18	842	4	130.6	-3	-3	39	74	2	-2	ACME
7603	482.50	44398	-97.90	287-288.2	1.2	3	130	17	157	-0.3	14	25	319	-2	-0.2	-3	-3	23	4	4	-2	ACME
7604	467.39	44398	16.96	173-173.8	0.8	3	11	-3	50	0.5	-1	3	243	-2	-0.2	-3	-3	74	-2	2	-2	ACME
7604	467.35	44398	16.49	173.8-173.95	0.15	6	7	-3	18	0.3	2	1	53	2	-0.2	-3	-3	14	-2	3	3	ACME
7604	467.32	44398	16.21	174-174.3	0.3	4	2	-3	49	1.1	1	3	1221	6	-0.2	-3	-3	13	-2	-2	2	ACME
7604	466.25	44398	3.96	186-186.9	0.9	3	62	-3	83	-0.3	11	36	352	2	-0.2	-3	-3	38	4	2	4	ACME
7604	466.20	44398	3.36	186.9-187.2	0.3	4	69	-3	97	-0.3	2	19	463	-2	0.2	-3	-3	18	7	6	6	ACME
7604	466.16	44398	2.91	187.2-187.8	0.6	3	143	-3	88	-0.3	10	40	282	-2	-0.2	-3	-3	34	6	3	5	ACME
7604	464.15	44398	-20.07	210.15-211	0.85	6	31	-3	113	0.4	8	13	233	9	-0.2	-3	3	48	4	5	3	ACME
7604	464.08	44398	-20.85	211-211.7	0.7	35	80	4	154	0.7	25	23	245	10	-0.2	5	-3	56	6	5	5	ACME
7604	463.61	44398	-26.25	216-217.55	1.55	4	99	4	153	0.3	14	23	455	2	-0.2	3	-3	71	4	3	2	ACME
7604	463.49	44398	-27.55	217.55-218.6	1.05	3	124	-3	168	0.4	33	34	497	3	-0.2	-3	-3	30	4	6	3	ACME
7604	463.41	44398	-28.52	218.6-219.5	0.9	4	164	-3	192	0.5	17	23	388	2	-0.2	3	-3	25	13	5	6	ACME
7604	463.30	44398	-29.79	219.65-221	1.35	5	81	4	115	0.3	16	22	472	2	-0.2	-3	-3	47	9	5	5	ACME
7604	463.17	44398	-31.26	221-222.6	1.6	3	143	-3	82	-0.3	22	32	503	-2	-0.2	-3	3	85	9	7	6	ACME
7604	463.05	44398	-32.60	222.6-223.7	1.1	4	95	10	142	0.8	14	25	315	-2	-0.2	-3	-3	19	14	6	6	ACME
7604	462.98	44398	-33.45	223.7-224.3	0.6	12	641	2460	5247	7.2	13	9	247	2	21.8	7	-3	22	32	5	3	ACME
7604	462.93	44398	-34.00	224.3-224.8	0.5	13	1169	6343	15080	12.4	13	14	780	3	71.8	5	-3	40	75	9	7	ACME
7604	462.86	44398	-34.84	224.8-226	1.2	3	39	53	188	0.4	1	3	289	-2	0.4	3	-3	174	13	2	-2	ACME
7604	461.55	44398	-49.82	239.9-240.96	1.06	5	606	1411	3586	5.7	13	15	649	8	14.9	3	-3	51	73	2	2	ACME
7604	461.43	44398	-51.09	240.96-242.45	1.49	14	566	986	2656	4.1	31	38	615	15	10.5	3	-3	14	44	3	3	ACME
7604	461.30	44398	-52.60	242.45-244	1.55	5	263	337	1245	4.3	15	22	592	2	4.5	-3	-3	74	25	3	2	ACME
7604	461.01	44398	-55.94	246-247.15	1.15	22	1361	5733	15916	51.3	19	17	627	14	73.1	101	-3	16	1060	2	4	ACME
7604	460.66	44398	-59.90	250.4-250.7	0.3	14	4653	4016	23037	11.8	11	6	770	4	109.7	10	-3	33	100	2	5	ACME
7604	460.51	44398	-61.59	251.75-252.75	1	19	1411	896	8932	4.7	14	17	500	-2	41	4	-3	22	57	-2	-2	ACME

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
7604	460.40	44398	-62.96	253-254.25	1.25	13	3974	1881	29314	11.3	19	17	1028	9	165.6	-3	-3	31	125	2	5	ACME
7604	460.32	44398	-63.83	254.25-254.75	0.5	32	2971	21311	131731	17.5	21	24	726	23	562.4	20	-3	24	294	2	-2	ACME
7604	460.23	44398	-64.85	254.75-256.3	1.55	9	4652	2325	11714	17.4	19	23	859	-2	62.2	-3	-3	32	755	2	4	ACME
7604	460.08	44398	-66.55	256.7-257.75	1.05	13	1853	975	14264	5.6	30	37	670	4	75.2	-3	-3	28	57	5	4	ACME
7604	459.98	44398	-67.69	257.75-259	1.25	4	1095	96	616	2.6	18	25	411	-2	1.6	-3	-3	56	147	2	4	ACME
7604	459.84	44398	-69.31	259-261	2	4	200	56	442	0.5	25	27	494	-2	1.4	-3	-3	113	23	2	4	ACME
7604	459.69	44398	-71.05	261-262.5	1.5	3	596	17	241	1.7	21	25	449	-2	-0.2	-3	-3	35	35	3	6	ACME
7604	459.60	44398	-72.10	262.5-263.1	0.6	4	2137	36	4155	5.3	19	53	629	3	16.4	-3	-3	27	77	8	4	ACME
7604	459.48	44398	-73.40	263.1-265.1	2	6	284	438	3240	2.5	11	19	439	4	12.7	3	-3	38	24	2	-2	ACME
7604	459.35	44398	-74.94	265.1-266.2	1.1	5	1366	46	6670	3.6	15	18	645	-2	31.7	-3	-3	24	61	3	2	ACME
7604	459.26	44398	-75.89	266.2-267	0.8	4	250	27	316	1.2	31	28	564	-2	0.7	-3	-3	40	25	5	-2	ACME
7604	459.17	44398	-76.93	267-268.3	1.3	9	1248	498	8791	4.4	13	17	596	-2	49.1	-3	4	22	44	-2	-2	ACME
7604	459.09	44398	-77.93	268.3-269	0.7	22	771	1439	11175	7.9	6	9	321	5	55.9	3	-3	32	60	-2	-2	ACME
7501	422.40	44404	-64.10	265.7-267.5	1.8	3	152	202	620	1.1	22	27	432	4	2.3	-3	3	13	12	2	-2	ACME
7501	422.40	44404	-66.00	267.5-269.5	2	4	174	15	118	0.6	24	27	389	-2	-0.2	-3	-3	18	17	9	4	ACME
7501	422.40	44404	-68.00	269.5-271.5	2	3	316	18	224	0.7	25	30	407	6	0.5	4	3	17	12	7	2	ACME
7501	422.40	44404	-76.85	278.6-280.1	1.5	4	154	6	58	0.5	19	26	553	-2	-0.2	-3	-3	168	17	-2	3	ACME
7501	422.40	44404	-77.93	280.1-280.75	0.65	3	192	45	169	1.7	28	25	510	7	-0.2	-3	-3	28	37	4	-2	ACME
7501	422.40	44404	-78.48	280.75-281.2	0.45	11	1657	6847	13593	17.9	25	17	404	12	66.2	12	6	24	158	4	4	ACME
7501	422.40	44404	-79.70	281.2-283.2	2	6	714	748	2730	3.1	31	27	471	5	11.1	5	-3	20	44	-2	-2	ACME
7501	422.40	44404	-81.70	283.2-285.2	2	5	359	72	342	1.7	21	19	414	4	0.5	5	-3	24	27	-2	-2	ACME
7501	422.40	44404	-83.70	285.2-287.2	2	2	247	31	169	0.7	27	20	375	-2	0.2	-3	-3	32	16	3	4	ACME
7501	422.40	44404	-85.75	287.2-289.3	2.1	5	111	18	165	0.7	21	24	379	6	0.3	4	-3	24	17	-2	2	ACME
7501	422.40	44404	-90.50	292-294	2	7	253	892	5649	1.5	31	20	349	2	31.3	4	-3	32	17	-2	-2	ACME
7501	422.40	44404	-94.83	296.3-298.35	2.05	5	364	62	912	1.3	37	17	396	3	1	3	-3	46	32	2	2	ACME
7501	422.40	44404	-101.95	303-305.9	2.9	3	342	77	1224	1	20	22	394	-2	8.4	-3	-3	72	19	-2	-2	ACME
7501	422.40	44404	-106.63	308.3-309.95	1.65	7	243	24	149	0.6	18	20	335	-2	-0.2	-3	-3	13	16	3	-2	ACME
631	461.96	44570	-50.37	45.7-46.7	1	4	93	12	146	-0.3	21	30	296	-2	-0.2	-3	-3	8	6	-2	3	ACME
631	461.70	44570	-51.34	44.7-45.7	1	5	182	21	166	0.6	27	29	361	-2	-0.2	3	-3	11	13	4	3	ACME
631	461.41	44570	-52.40	43.5-44.7	1.2	3	132	13	159	-0.3	23	26	340	-2	-0.2	-3	-3	10	9	4	5	ACME
631	461.13	44570	-53.47	42.5-43.5	1	5	135	19	173	-0.3	23	24	310	-2	-0.2	-3	-3	11	6	3	4	ACME
631	460.87	44570	-54.43	41.5-42.5	1	4	118	12	171	-0.3	20	24	366	2	-0.2	-3	-3	10	5	-2	-2	ACME
631	458.96	44570	-61.57	34.43-34.78	0.35	4	121	43	124	0.7	119	41	313	-2	0.5	-3	-3	37	15	5	3	ACME
631	458.80	44570	-62.15	33.91-34.1	0.19	3	142	29	60	0.9	212	45	223	-2	0.3	-3	-3	24	8	6	8	ACME
631	455.42	44570	-74.76	20.33-21.58	1.25	8	725	1713	12346	2.5	19	25	825	6	53.3	-3	-3	24	6	-1	1	ACME
631	455.14	44570	-75.81	19.82-19.92	0.1	5	523	137	2711	1.2	10	44	1248	7	1.8	-3	-3	23	18	2	2	ACME
631	451.90	44570	-87.90	7-7.7	0.7	7	4655	377	8696	7.3	22	16	694	6	39	3	-3	12	79	2	1	ACME
631	451.90	44570	-87.90	7-7.7	0.7	8	4584	374	8583	5.3	22	17	685	7	38.2	-3	-3	12	78	3	4	ACME

[illegible]

DDH	X	Y	Z	Interval	Length	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	As	Cd	Sb	Bi	Ba	Au	Pt	Pd	Lab.
8004	524.00	45270	-81.50	270-273	3					0.1									-100			Mo
8004	524.00	45270	-84.00	273-275	2					0.4									100			Mo
8004	524.00	45270	-86.25	275-277.5	2.5					0.5									100			Mo
8004	524.00	45270	-88.83	277.5-280.15	2.65		1600	6200	19000	18.8									200			Mo
8004	524.00	45270	-90.63	280.15-281.1	0.95		600	2500	5200	18.8									400			Mo
8004	524.00	45270	-91.85	281.1-282.6	1.5		2200	6300	15800	22.9									900			Mo
8004	524.00	45270	-92.70	282.6-282.8	0.2		1400	6200	51000	20.8									200			Mo
8004	524.00	45270	-93.05	282.8-283.3	0.5		1100	4000	8100	18.1									500			Mo
8004	524.00	45270	-93.73	283.3-284.15	0.85					0.1									-100			Mo
8004	524.00	45270	-95.90	284.7-287.1	2.4					0.5									-100			Mo
8004	524.00	45270	-102.08	290-294.15	4.15					0.7									-100			Mo
8004	524.00	45270	-104.43	294.15-294.7	0.55		2400	3400	11600	11.8									100			Mo
8004	524.00	45270	-104.80	294.7-294.9	0.2					2.5									100			Mo
8004	524.00	45270	-107.55	297.1-298	0.9		1100	2900	8600	10.7									100			Mo
8004	524.00	45270	-108.73	298-299.45	1.45		100	100	500	0.5									-100			Mo
8004	524.00	45270	-110.35	299.45-301.25	1.8		900	3400	7700	11.4									100			Mo
8004	524.00	45270	-111.63	301.25-302	0.75				7900	7.6									300			Mo
8004	524.00	45270	-113.50	302-305	3					0.5									-100			Mo
8004	524.00	45270	-115.95	305-306.9	1.9					1.5									100			Mo
8004	524.00	45270	-117.15	306.9-307.4	0.5		1200	2200	9600	8.3												Mo
8004	524.00	45270	-117.98	307.4-308.55	1.15					2.3									100			Mo
8004	524.00	45270	-119.28	308.55-310	1.45					-0.1									-100			Mo
8004	524.00	45270	-121.50	310-313	3					0.8									-100			Mo
8306	322.50	45274	-99.79	303.5-306	2.5					0.4									-100			Mo
8306	322.22	45274	-102.27	306-308.5	2.5					0.2									-100			Mo
8306	321.94	45274	-104.76	308.5-311	2.5					0.1									-100			Mo
8306	321.68	45274	-106.99	311-313	2					0.2									-100			Mo
8306	321.45	45274	-108.98	313-315	2					2.2									100			Mo
8306	321.26	45274	-110.72	315-316.5	1.5		300	300	400	2.5									200			Mo
8306	321.10	45274	-112.06	316.5-317.7	1.2		1600	6100	20800	15									300			Mo
8306	320.95	45274	-113.40	317.7-319.2	1.5		400	100	600	0.9									-100			Mo
8306	320.78	45274	-114.92	319.2-320.75	1.55					1.9									-100			Mo
8306	320.55	45274	-116.95	320.75-323.3	2.55					0.1									-100			Mo
8306	320.26	45274	-119.46	323.3-325.8	2.5					0.6									-100			Mo

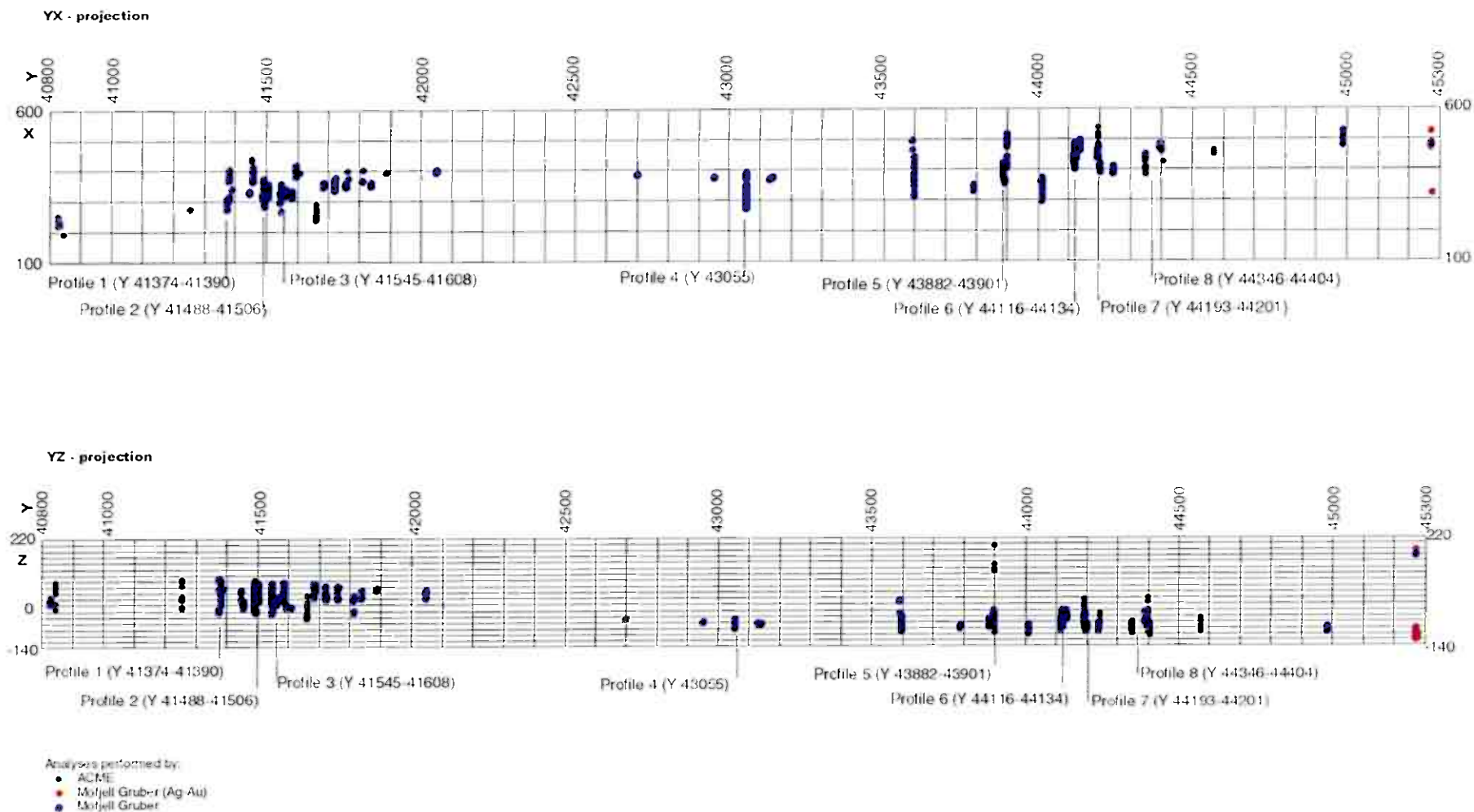


Figure A1: East-West projections (horizontal – YX, vertical – YZ) showing locations of drill holes used in N-S profiles (Figures A2-A9 a-d).

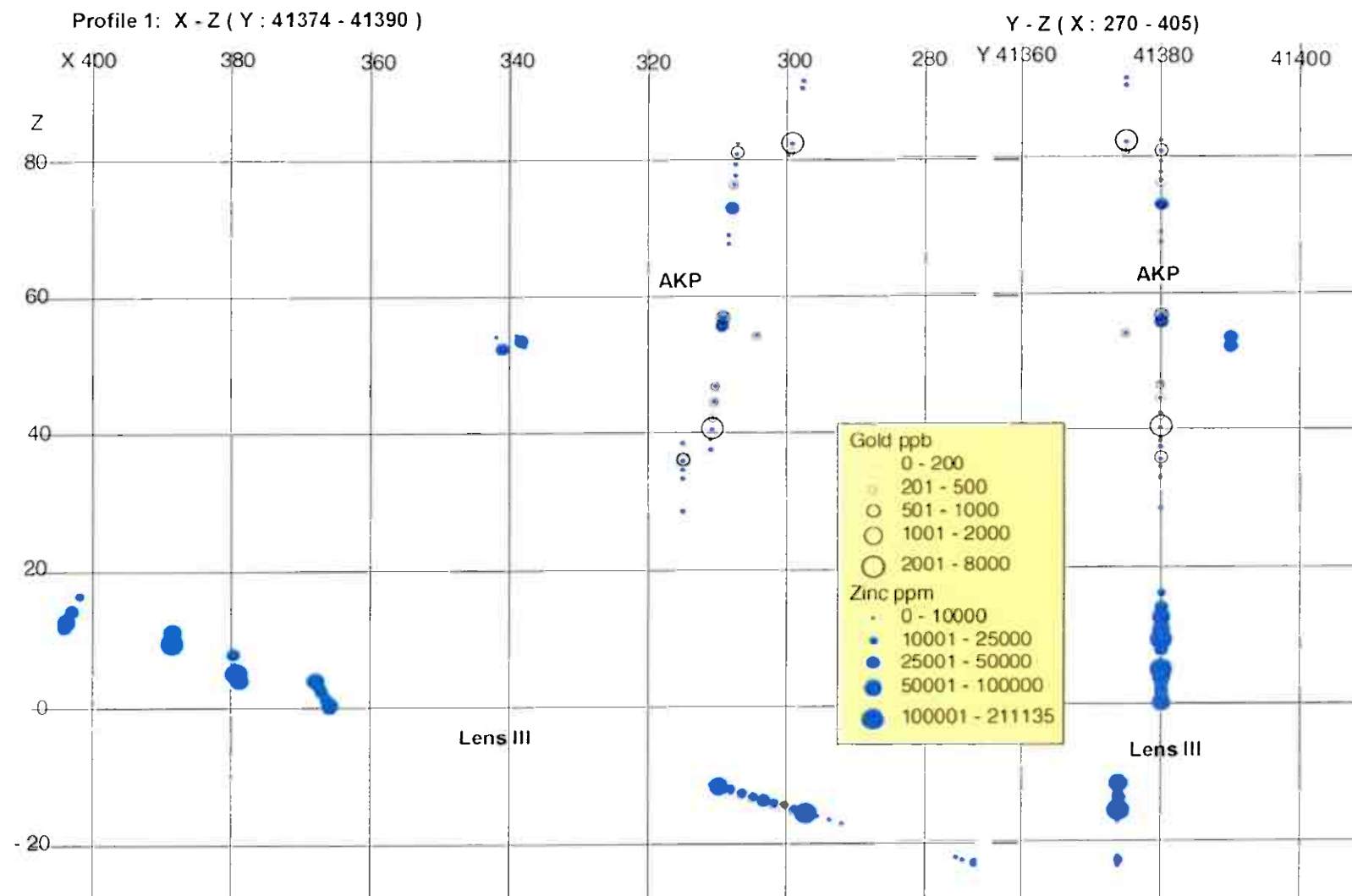


Figure A2a

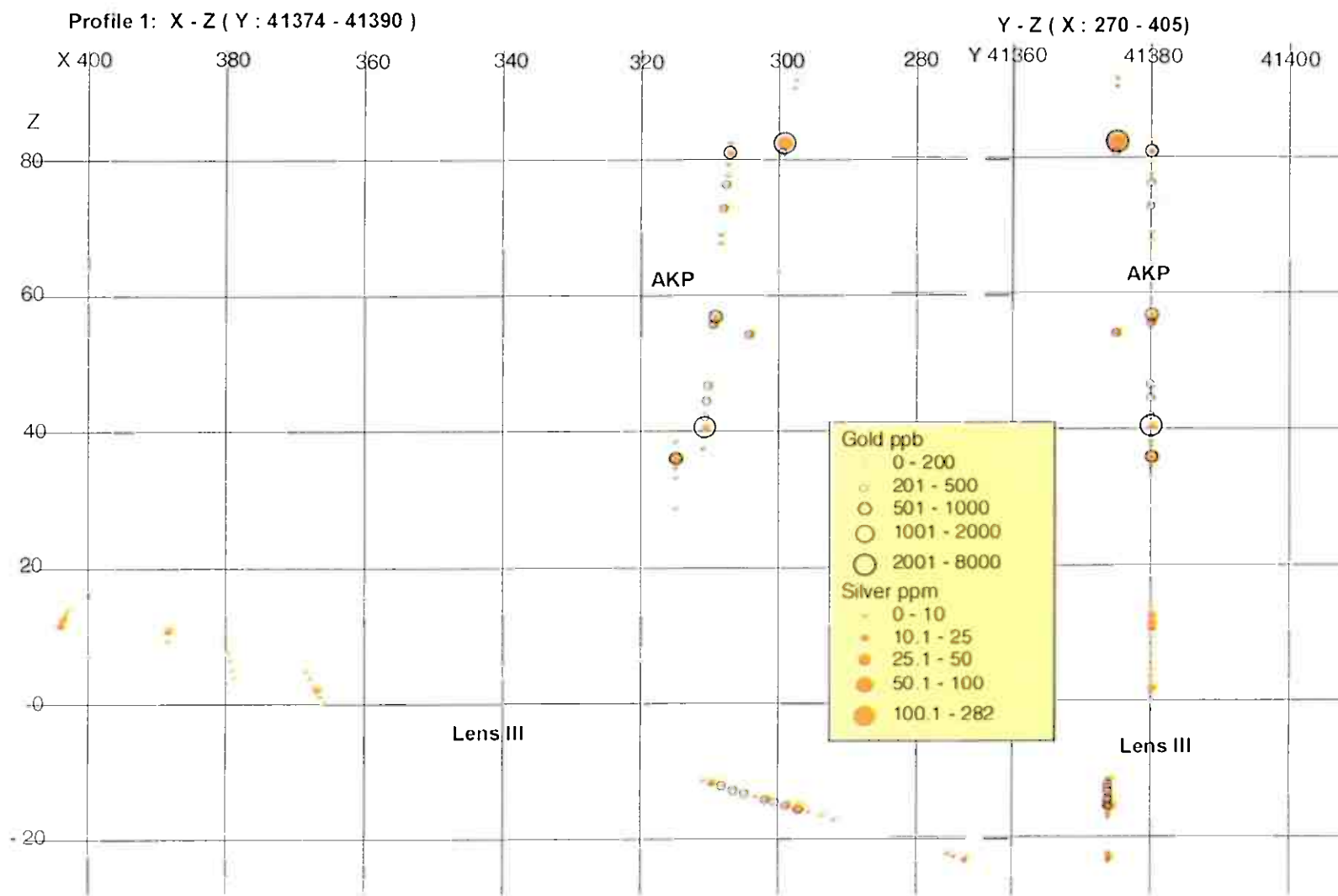


Figure A2b

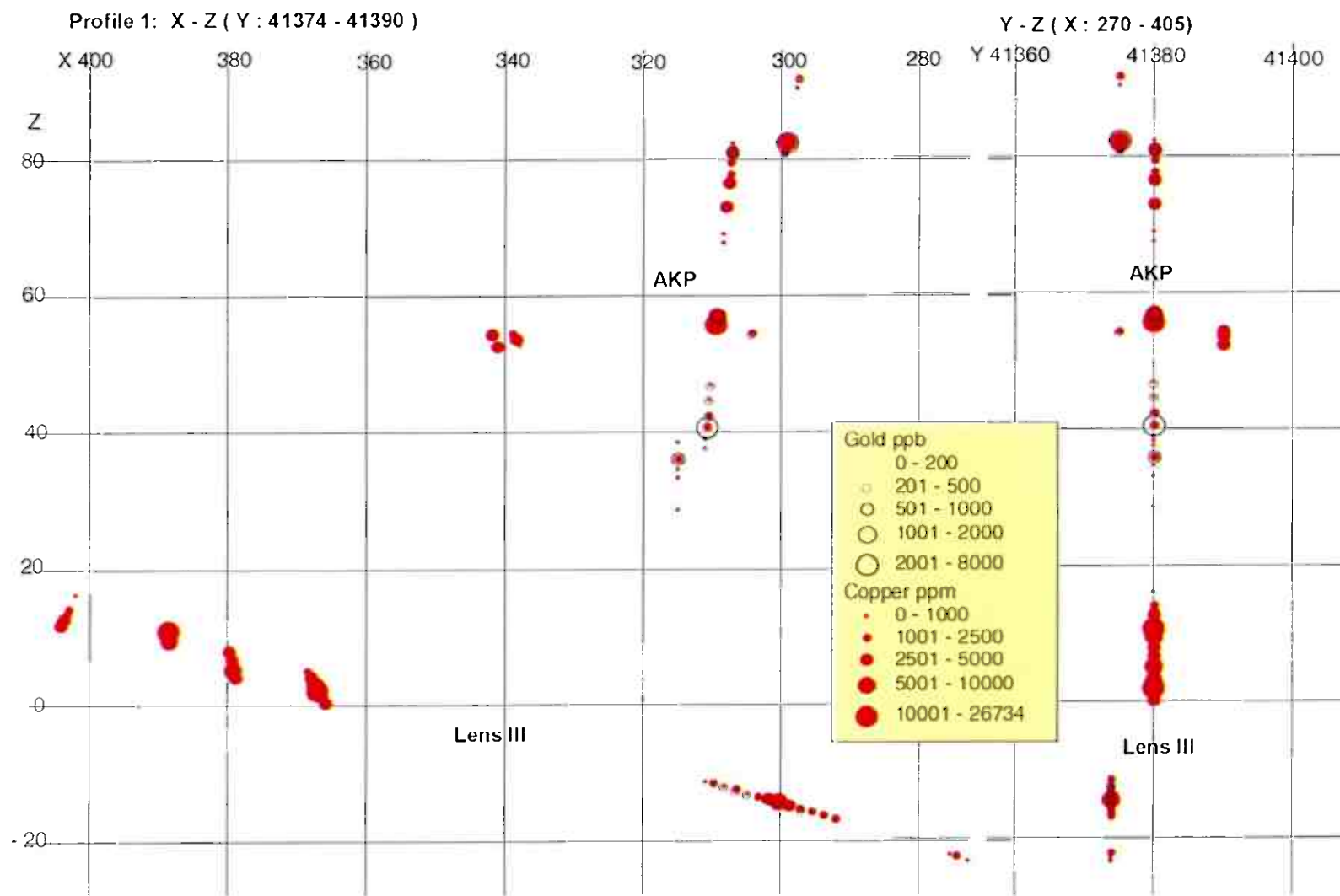


Figure A2c

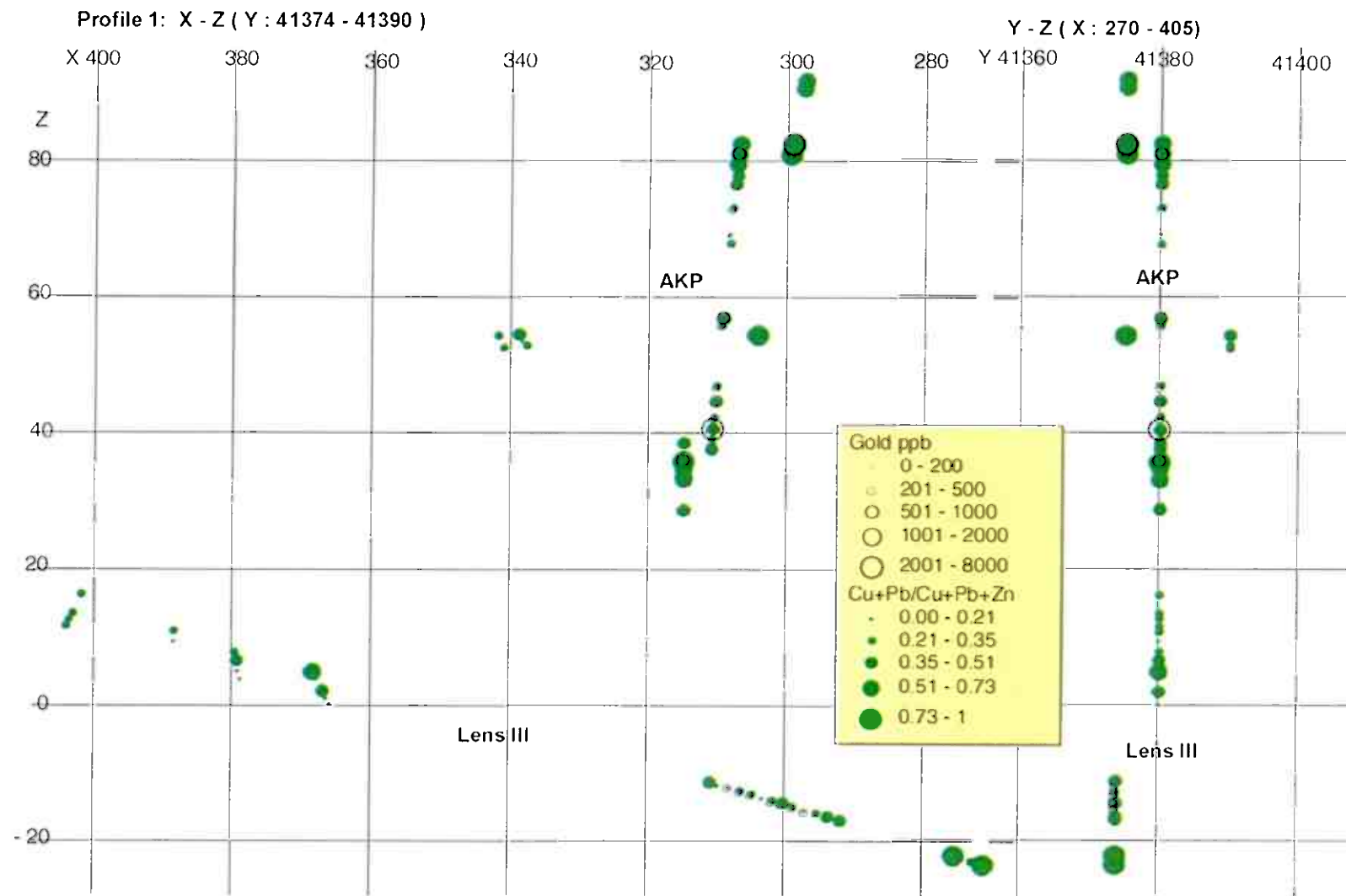


Figure A2d

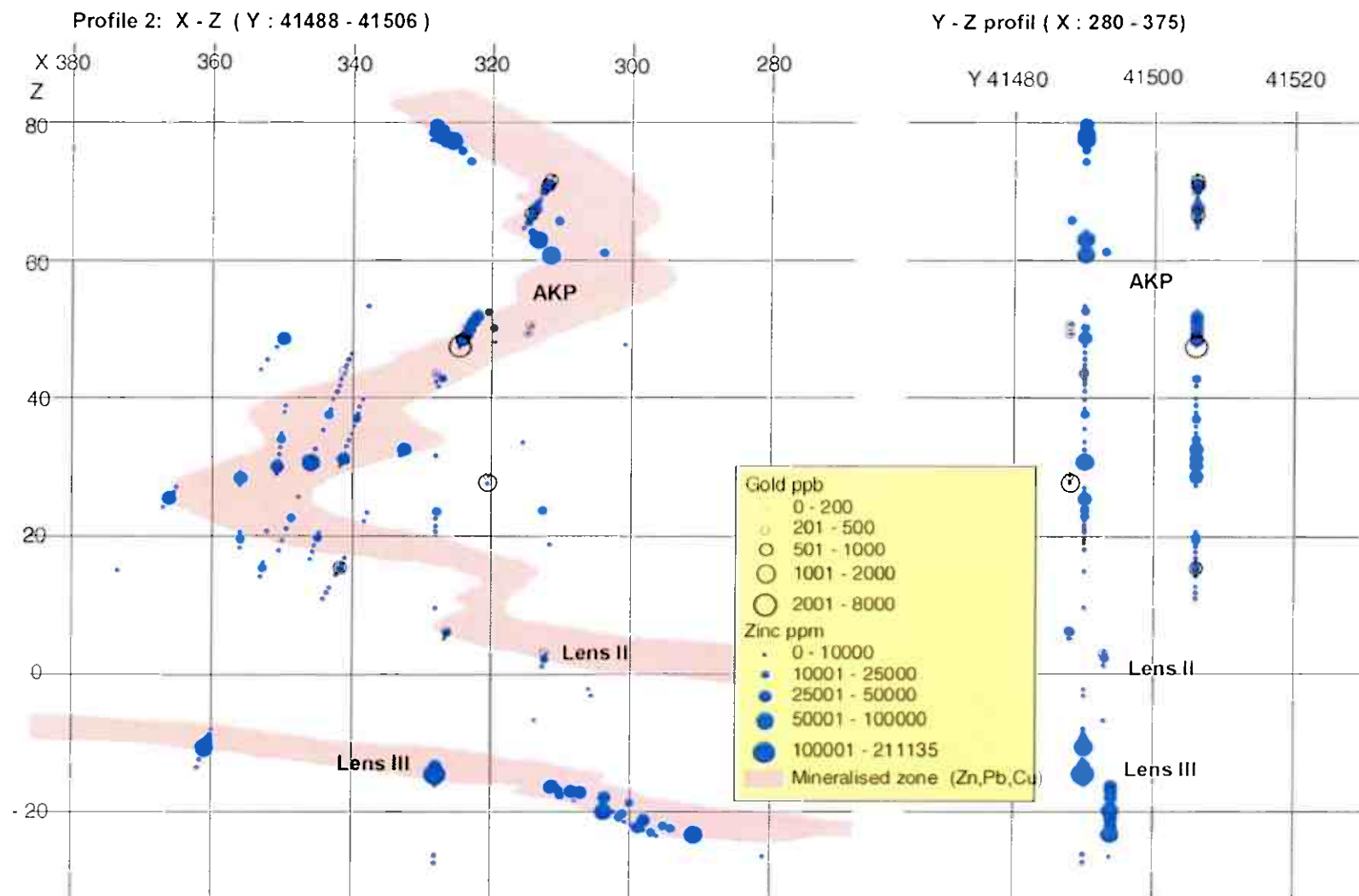


Figure A3a

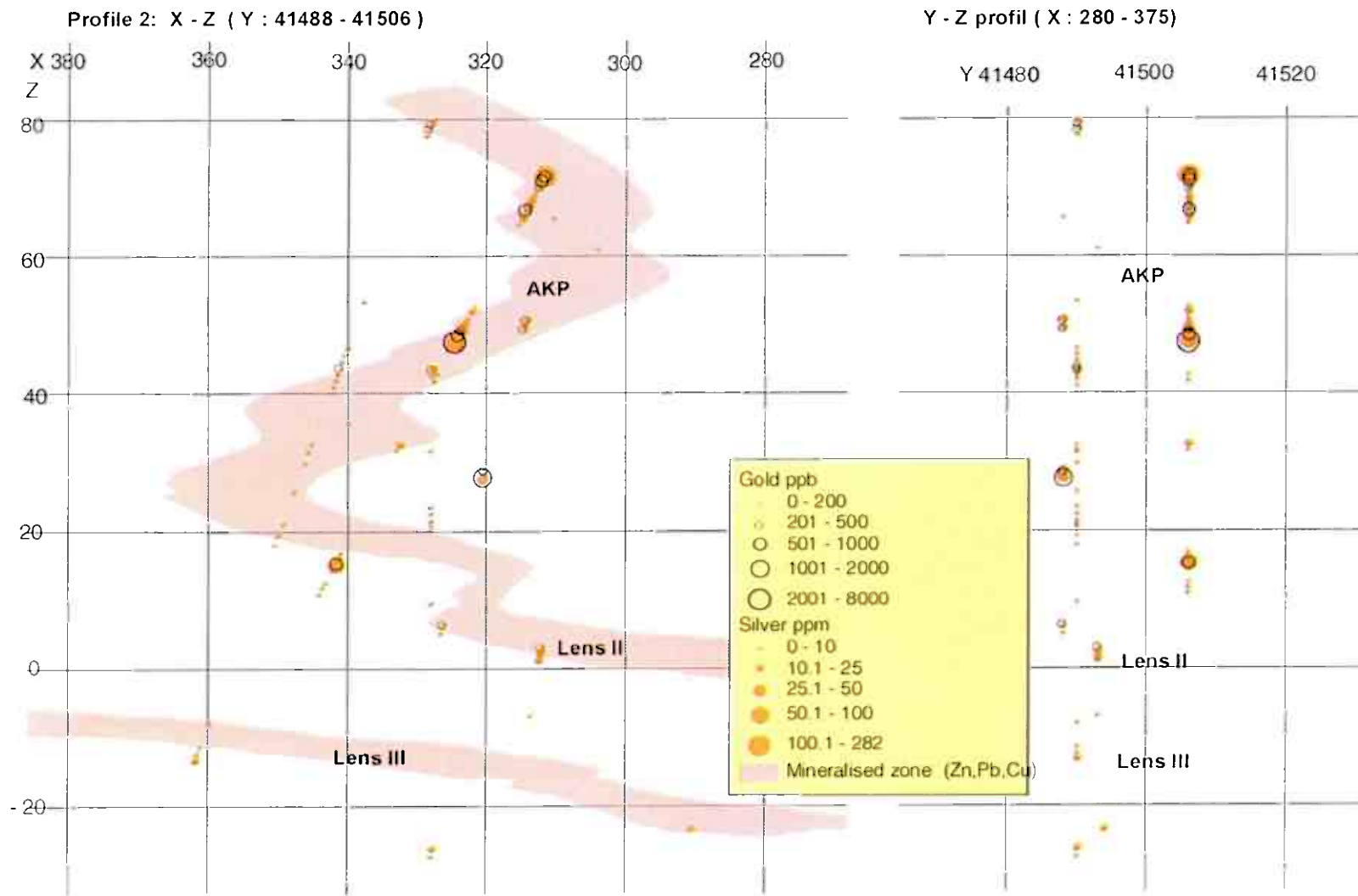


Figure A3b

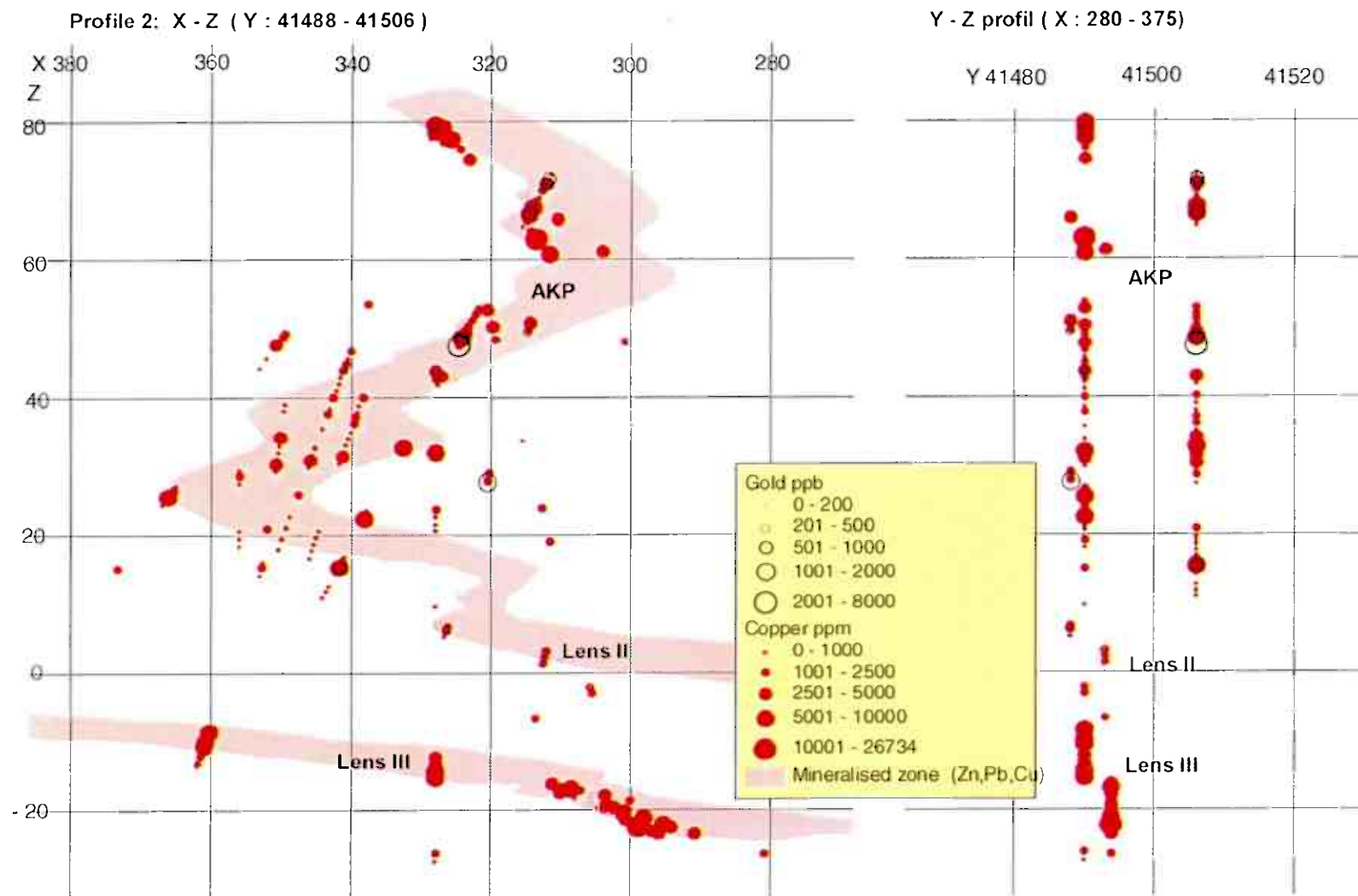


Figure A3c

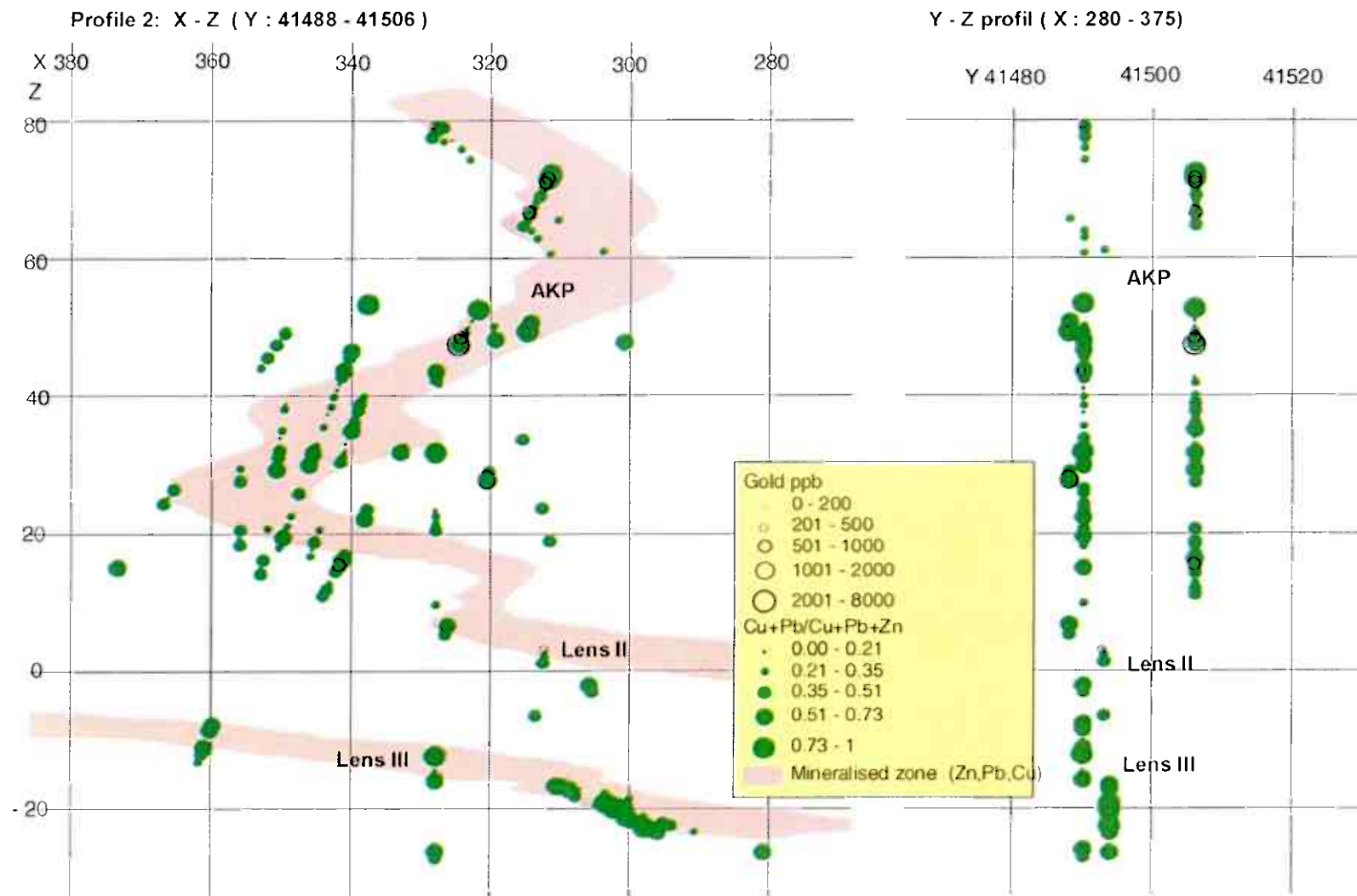


Figure A3d

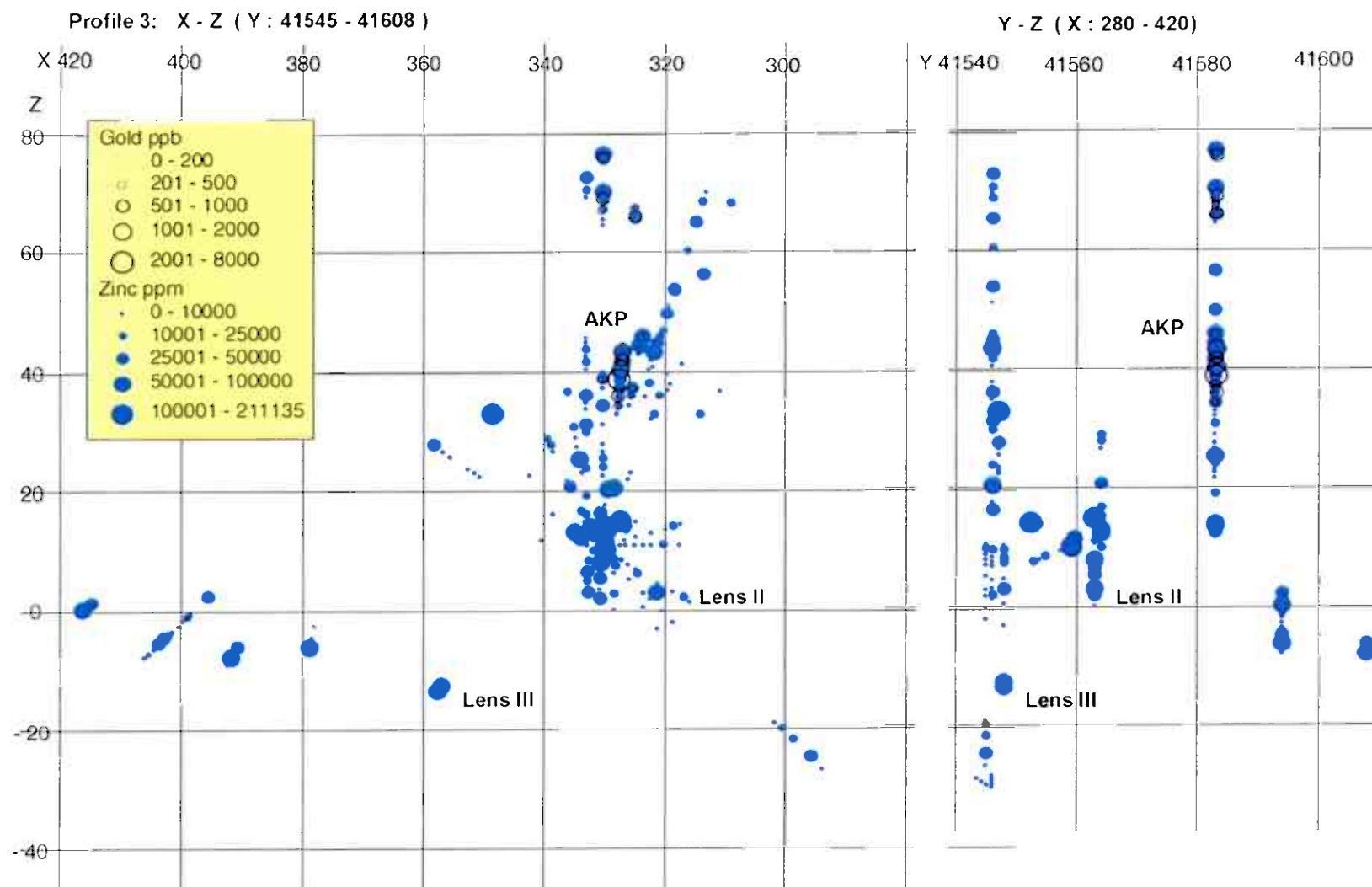


Figure A4a

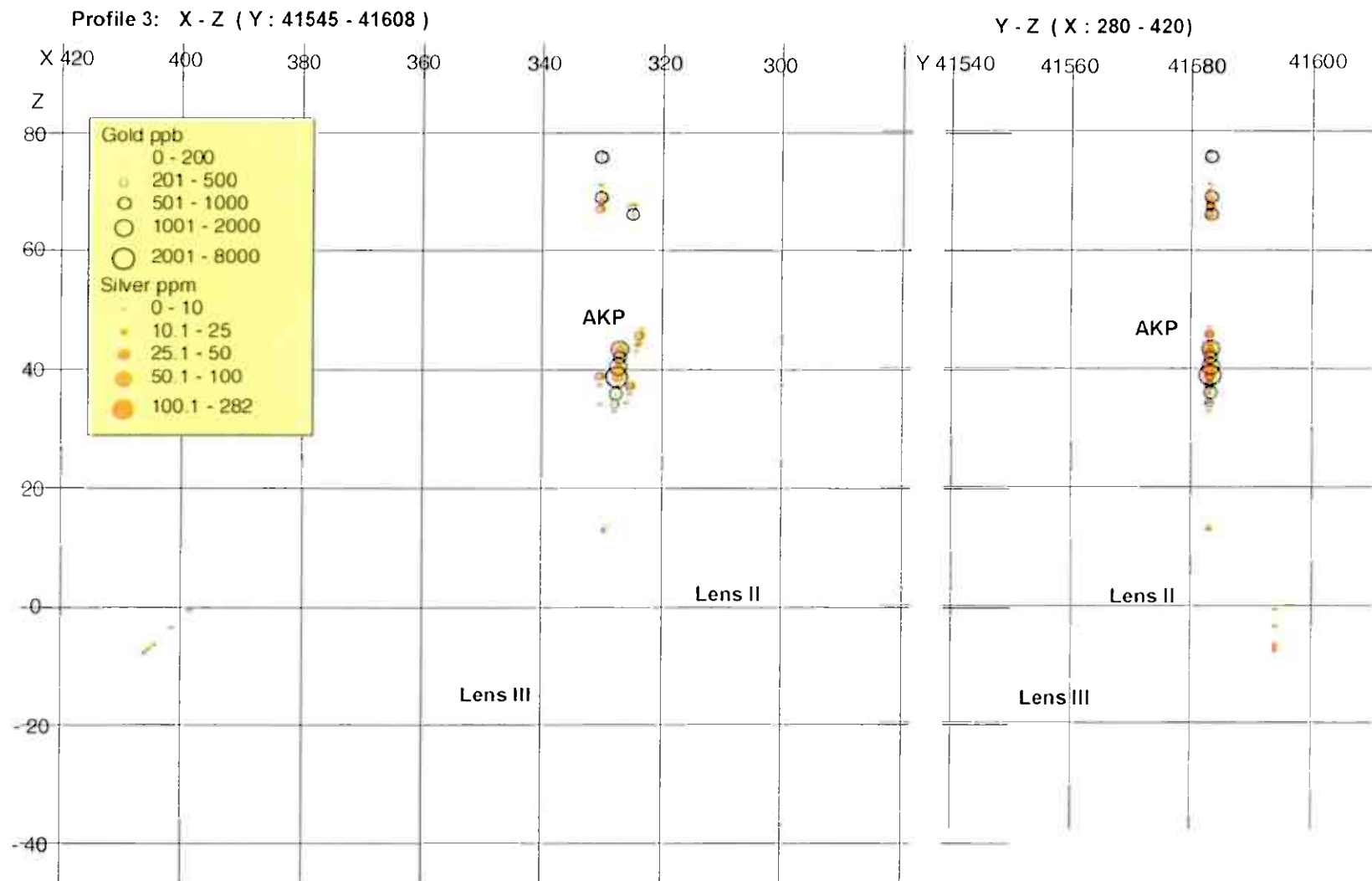


Figure A4b

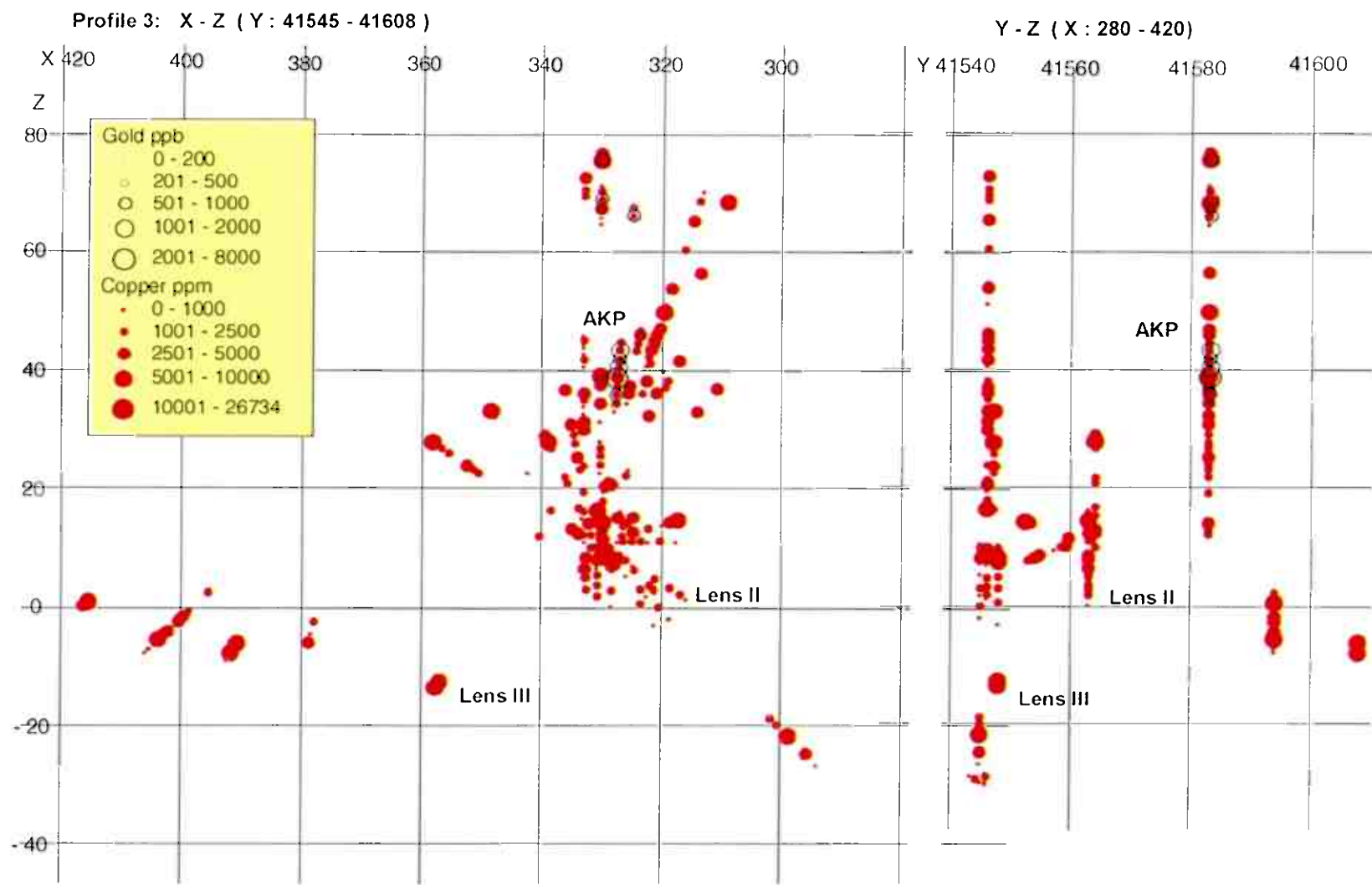


Figure A4c

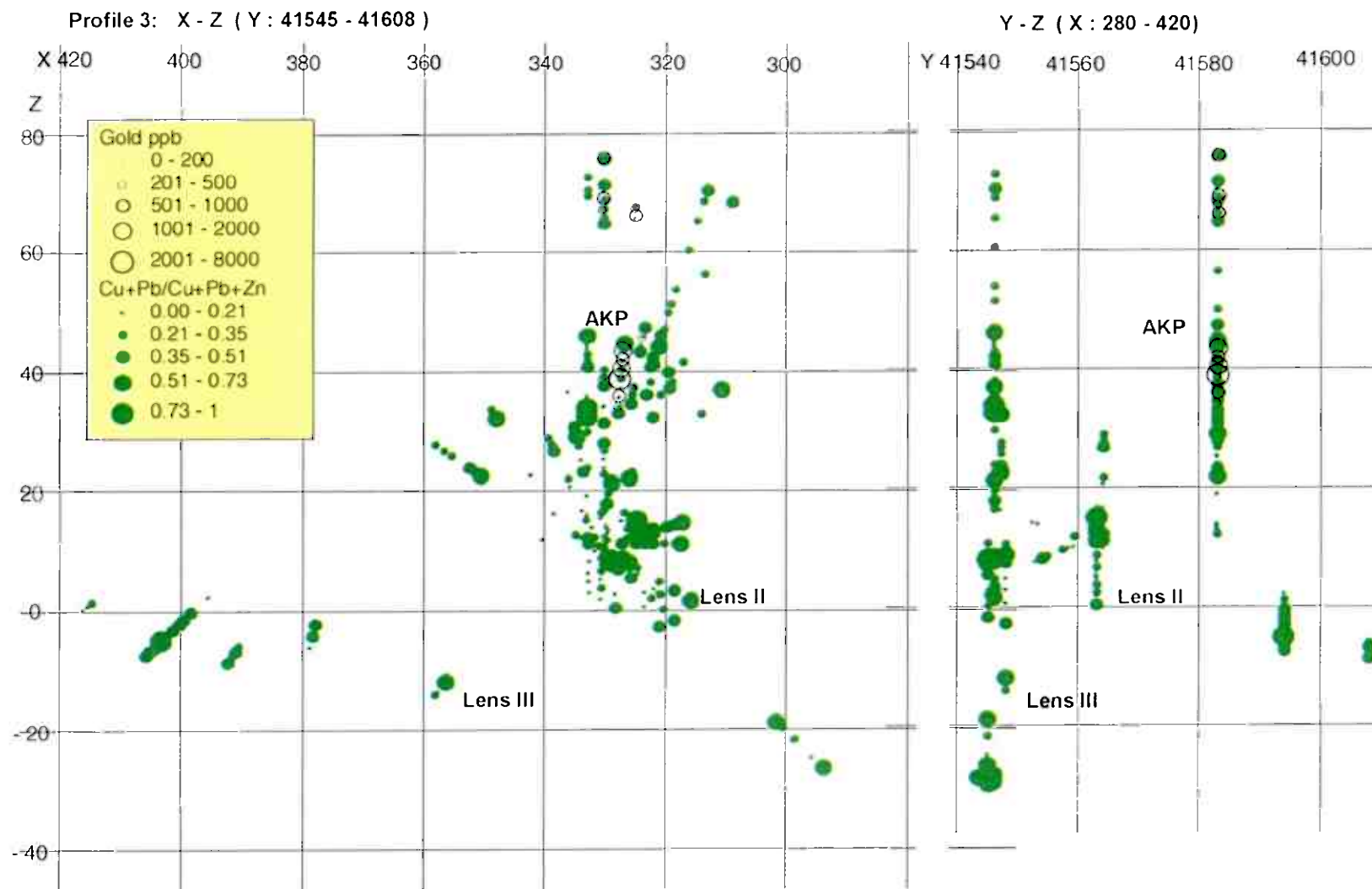


Figure A4d

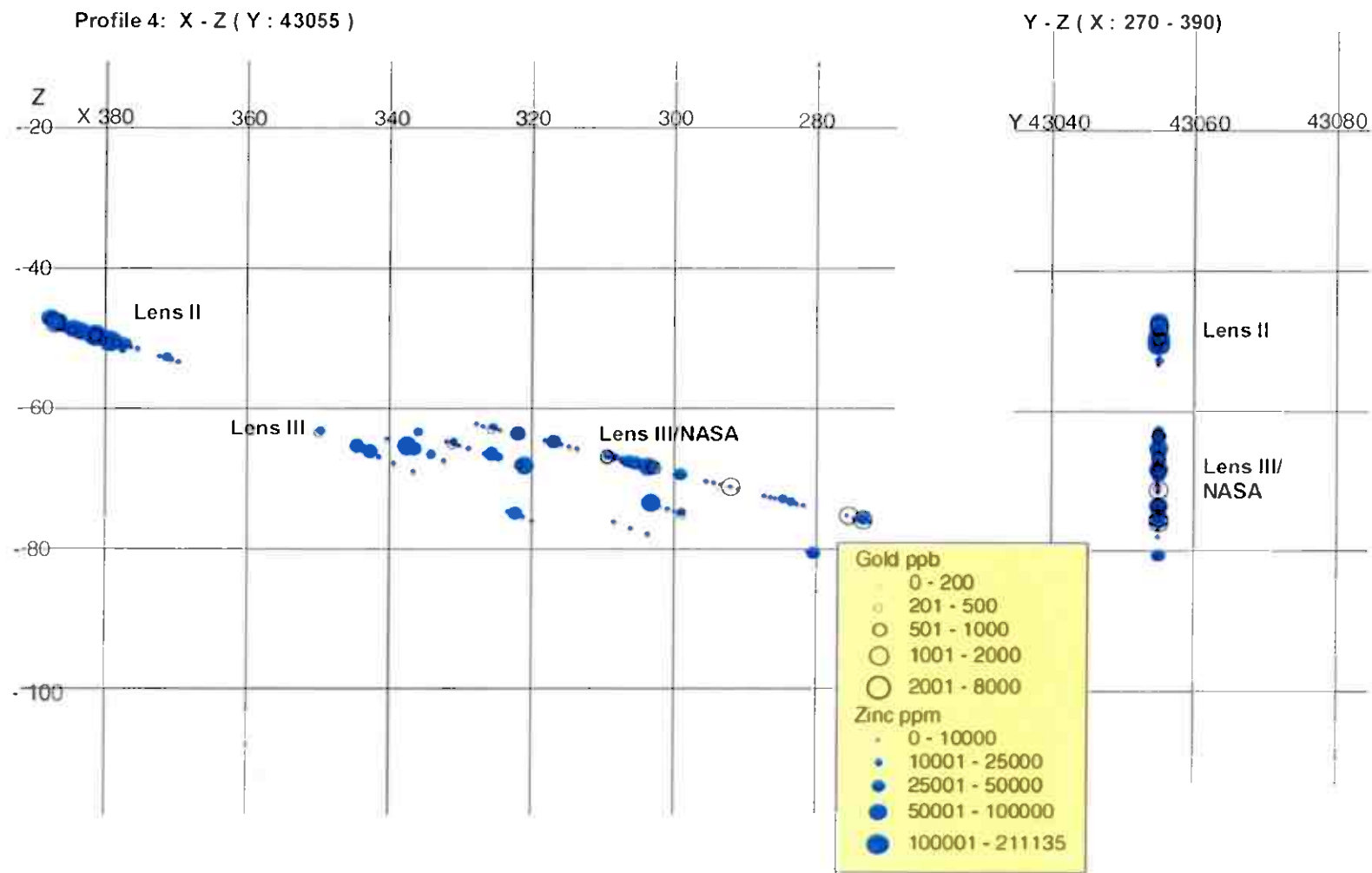


Figure A5a

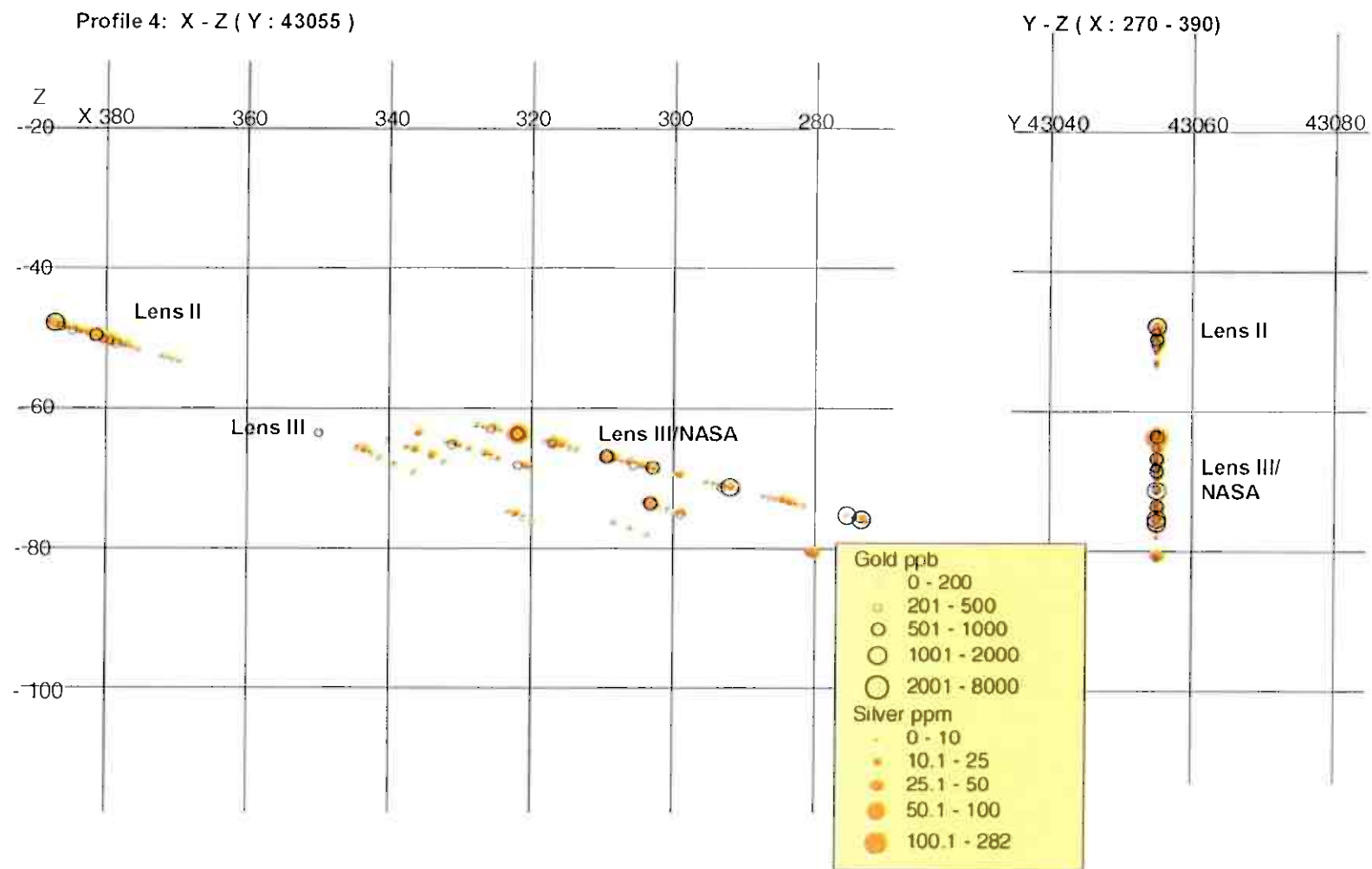


Figure A5b

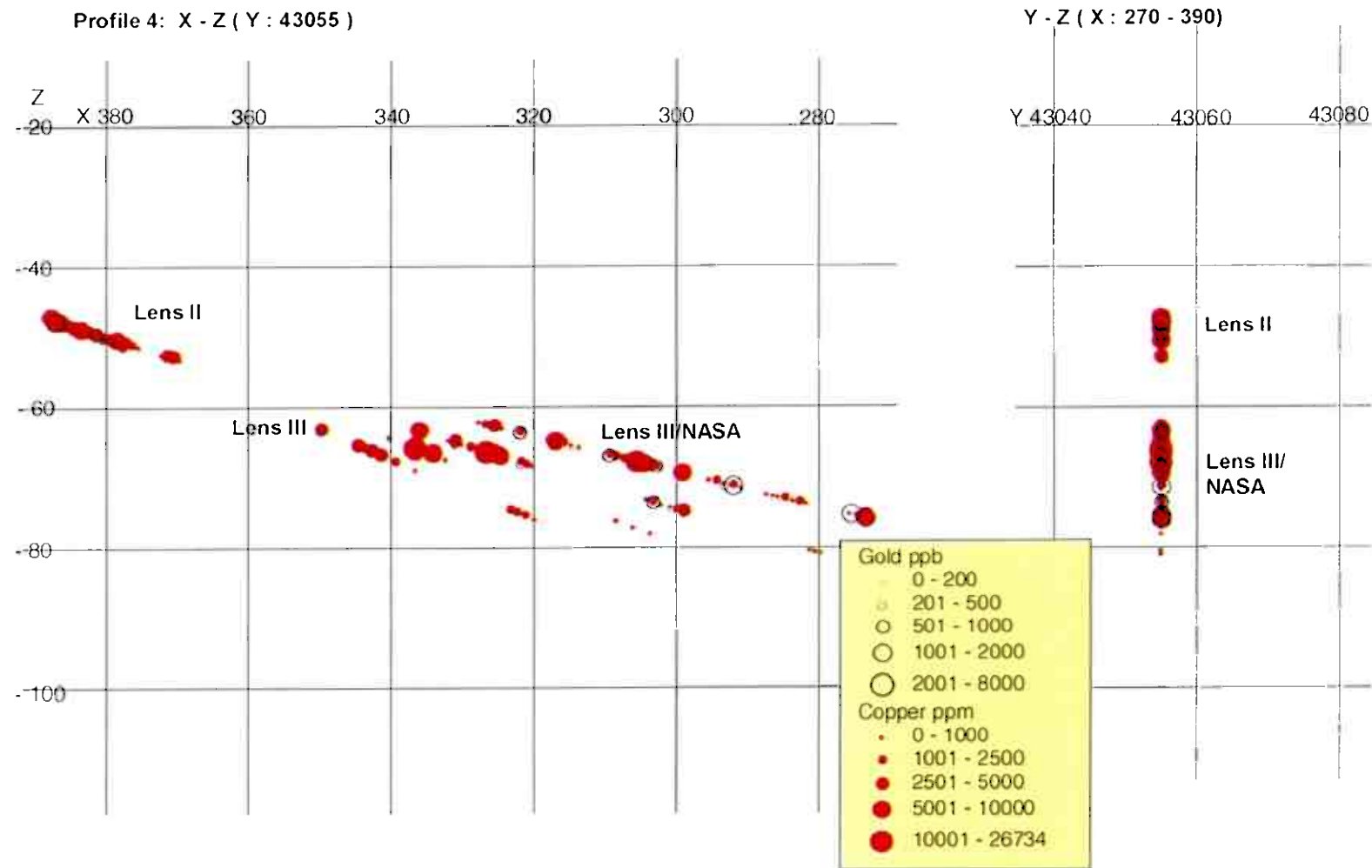


Figure A5c

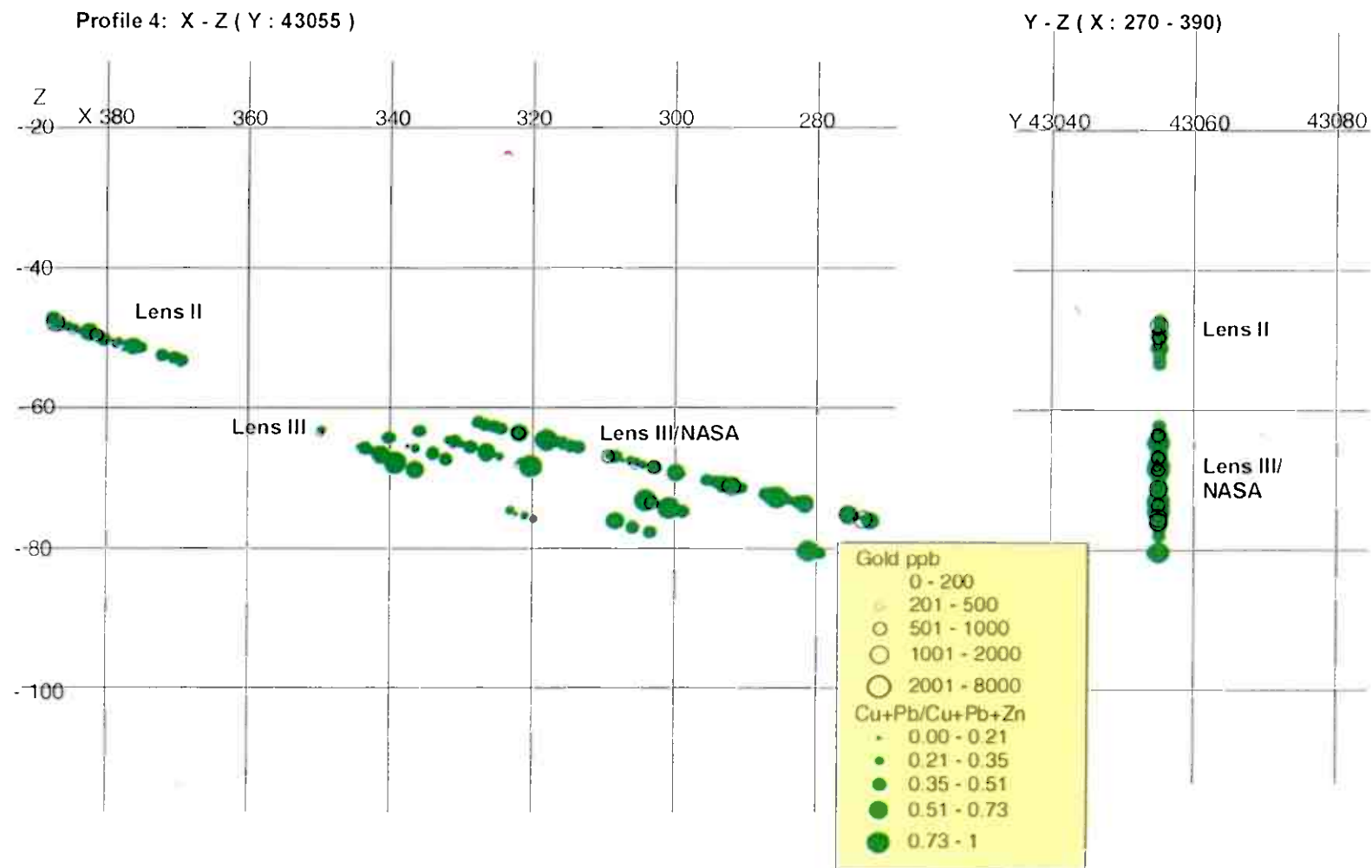


Figure A5d

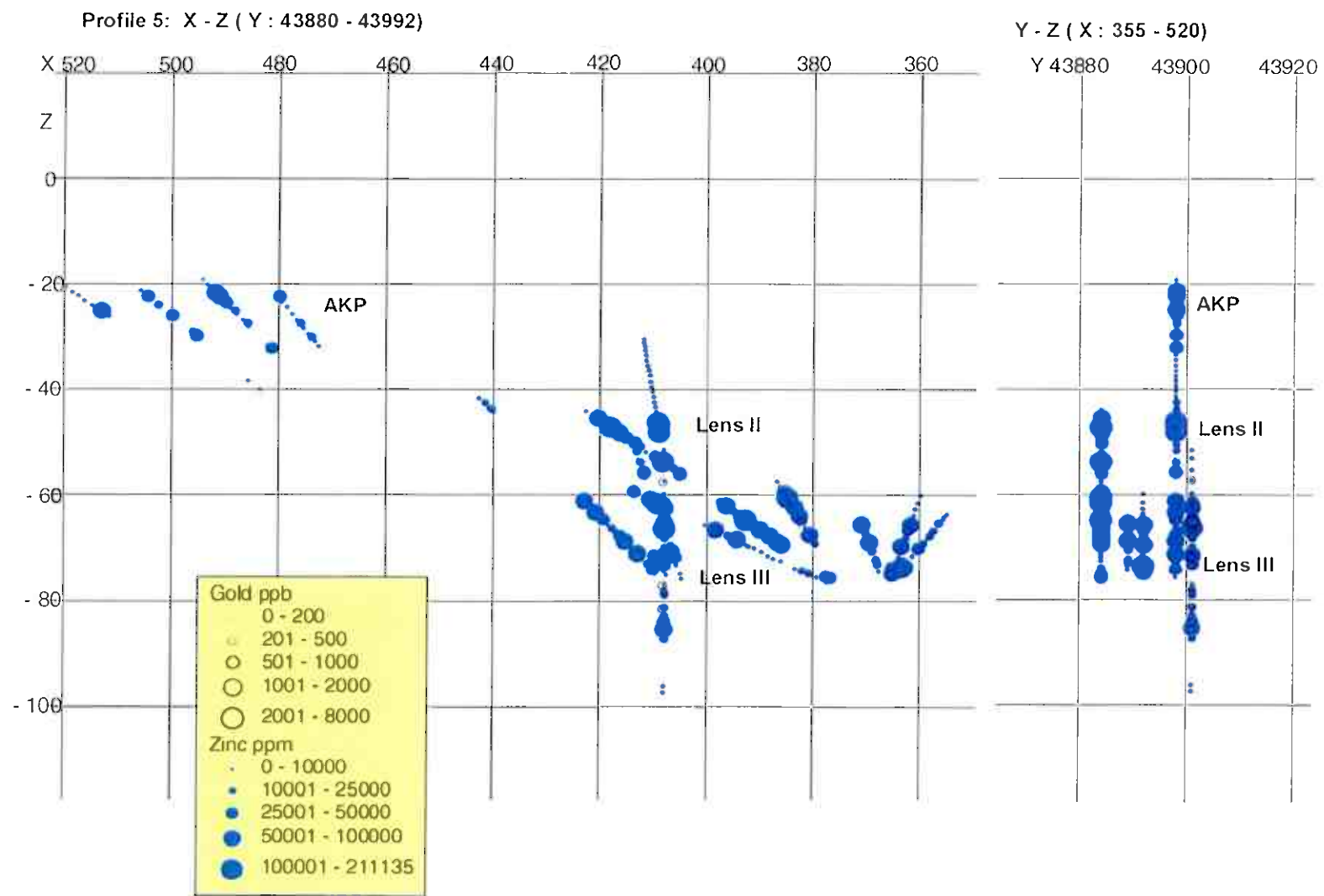


Figure A6a

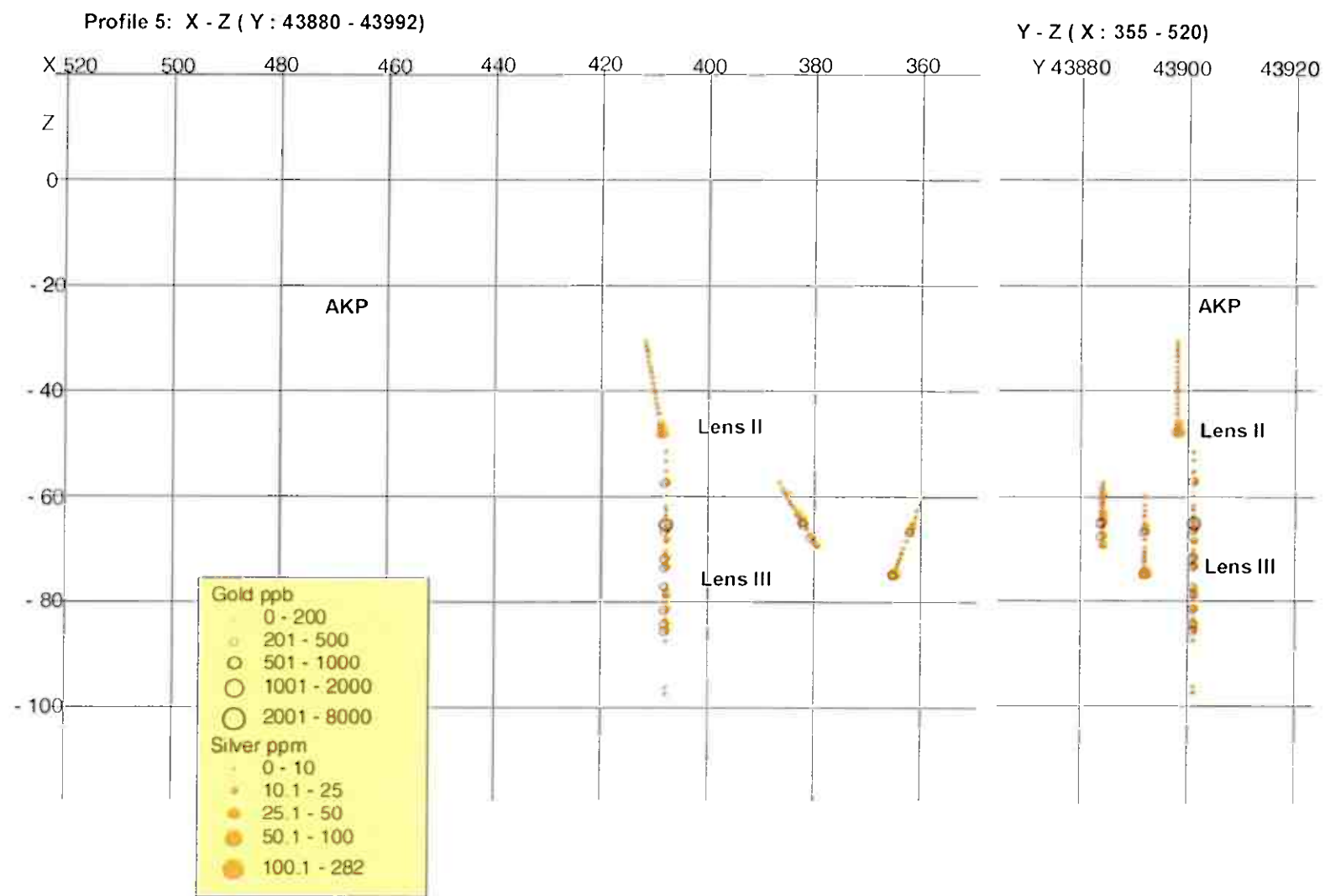


Figure A6b

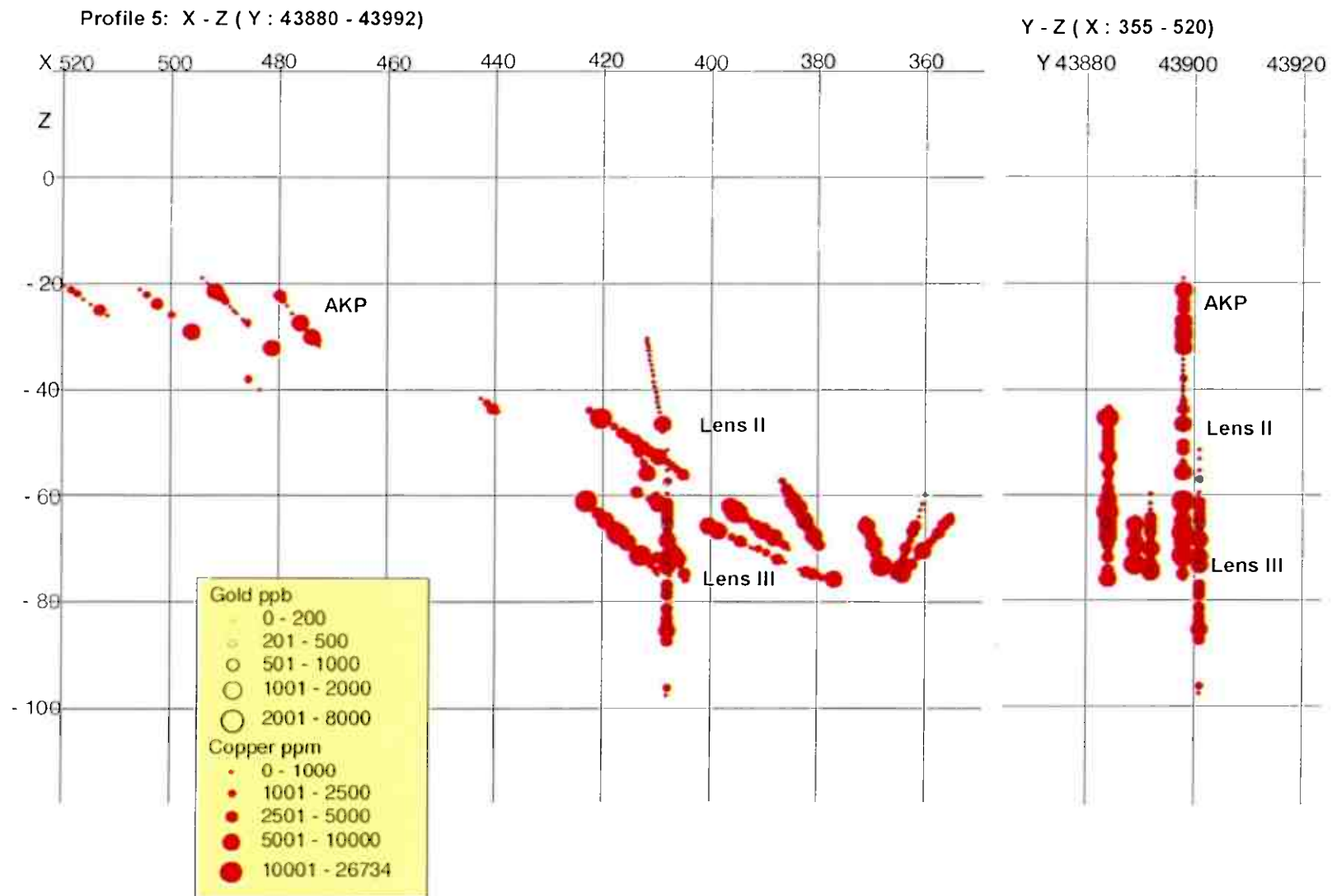


Figure A6c

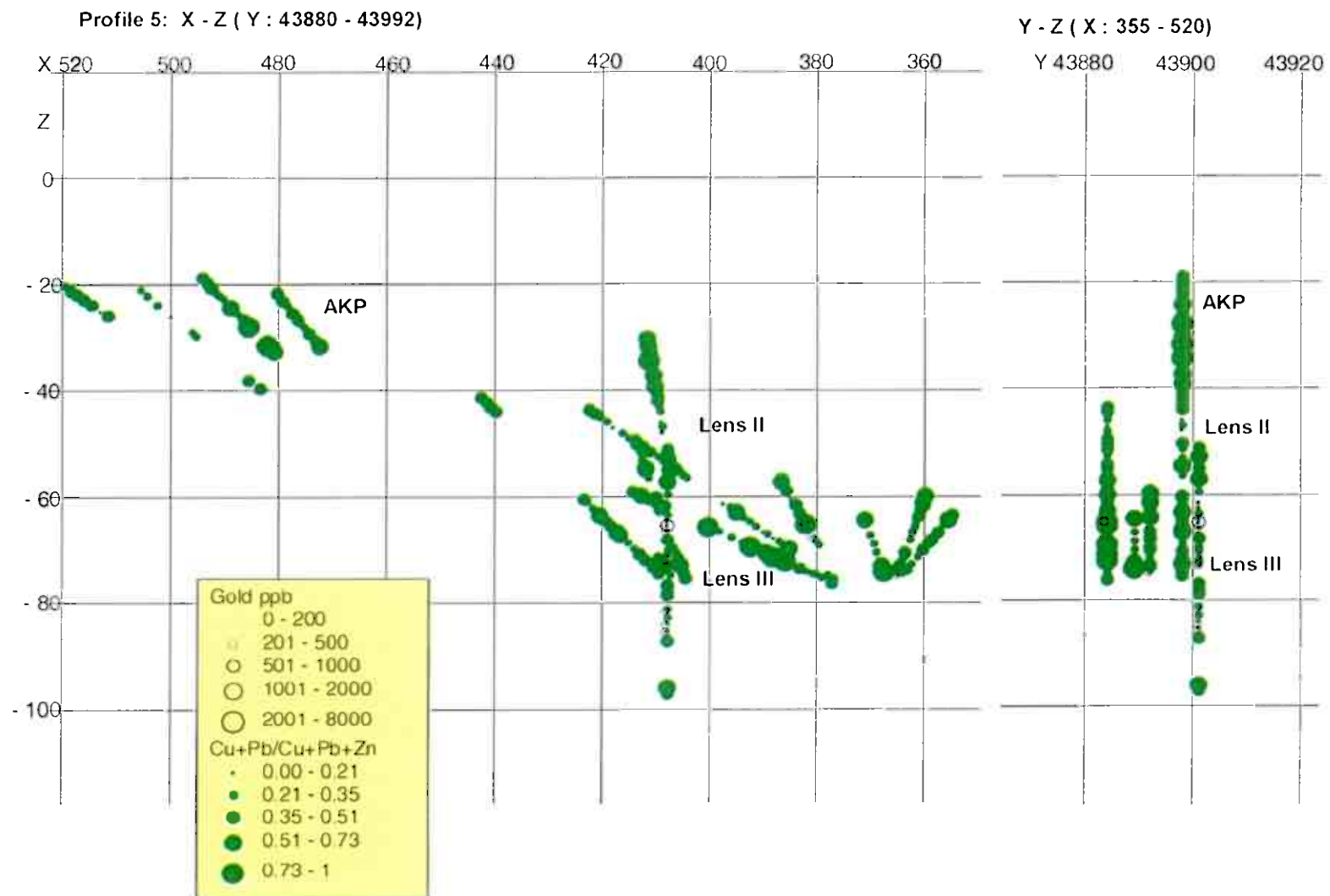


Figure A6d

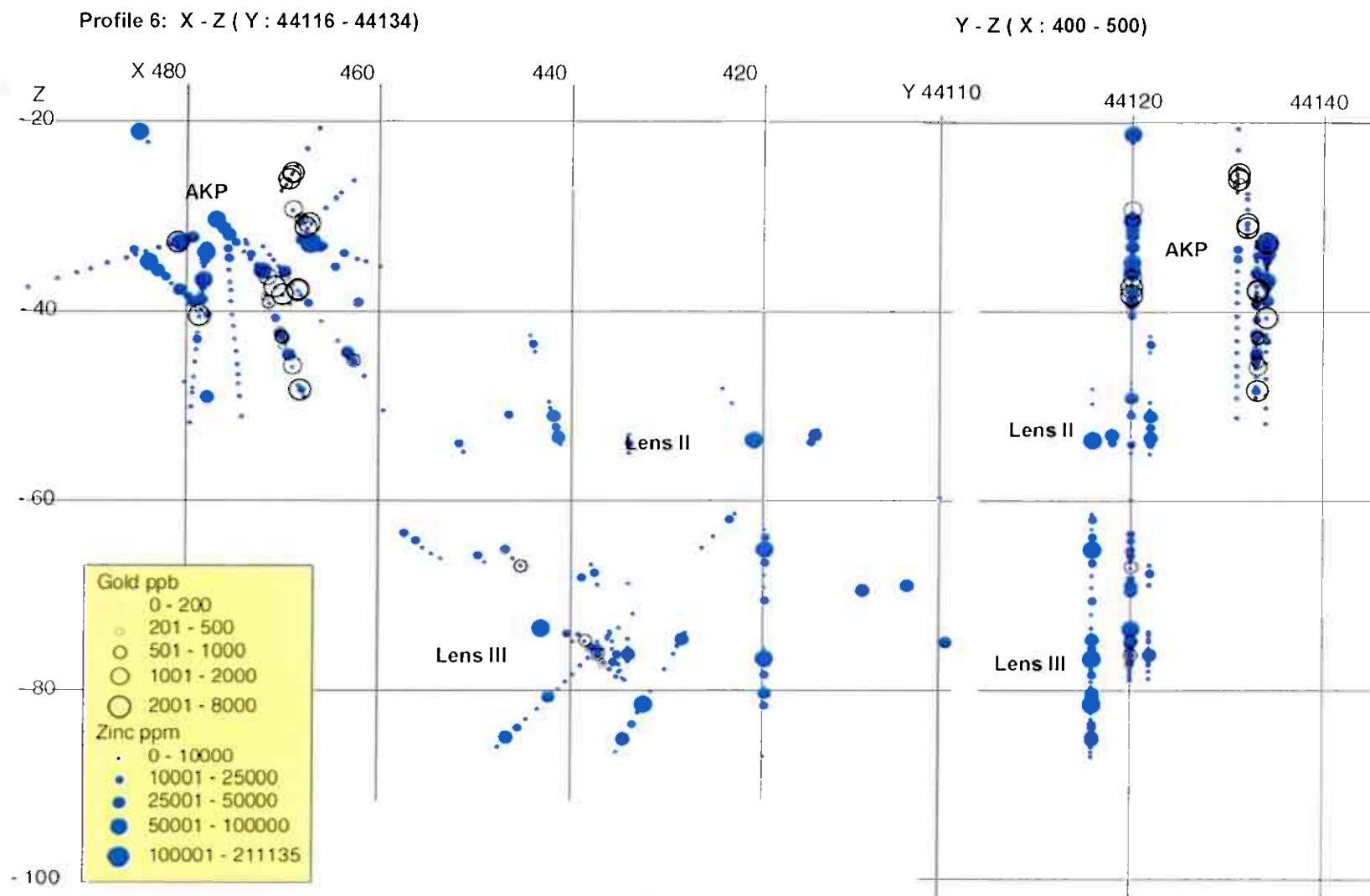


Figure A7a

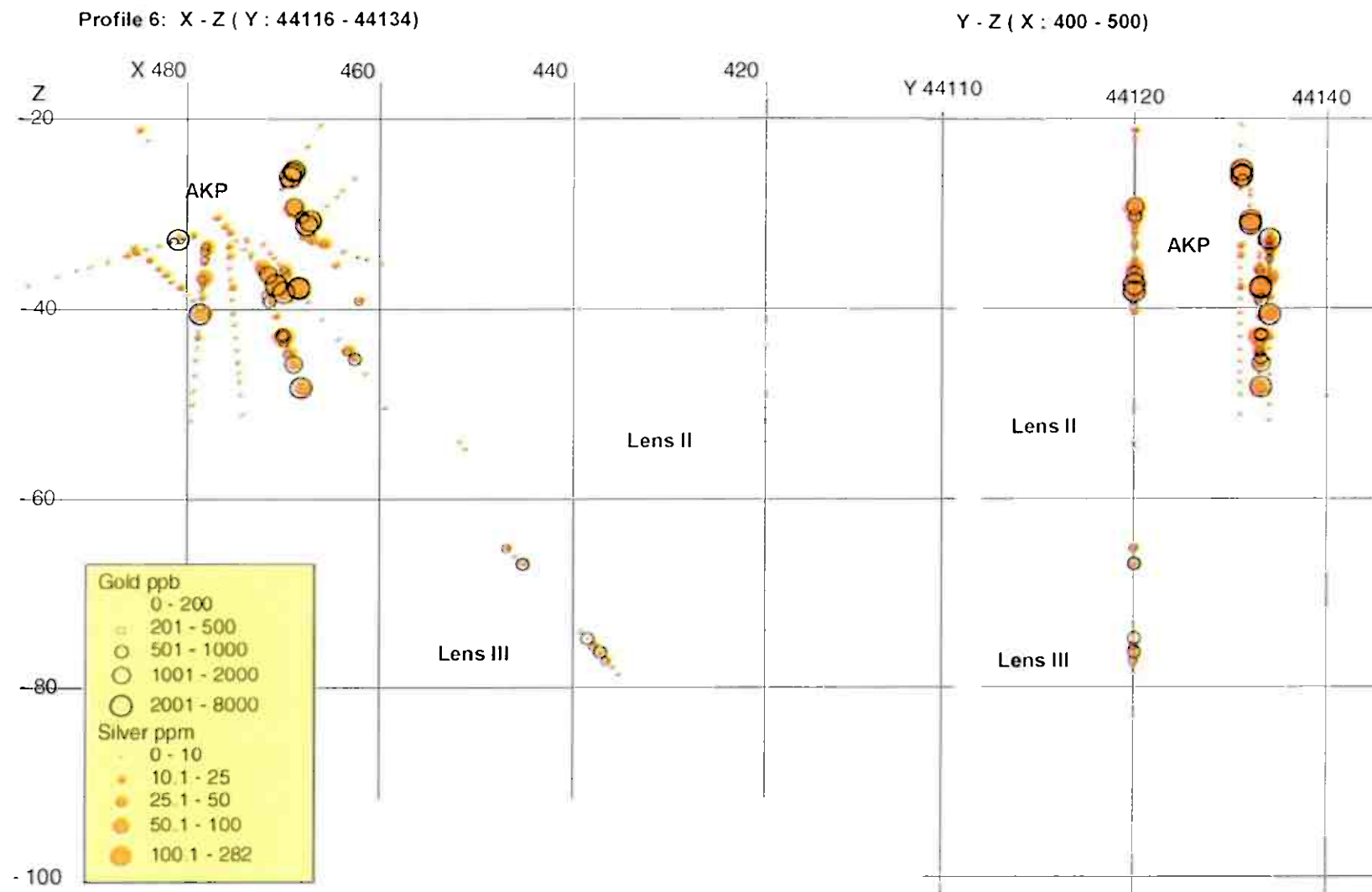


Figure A7b

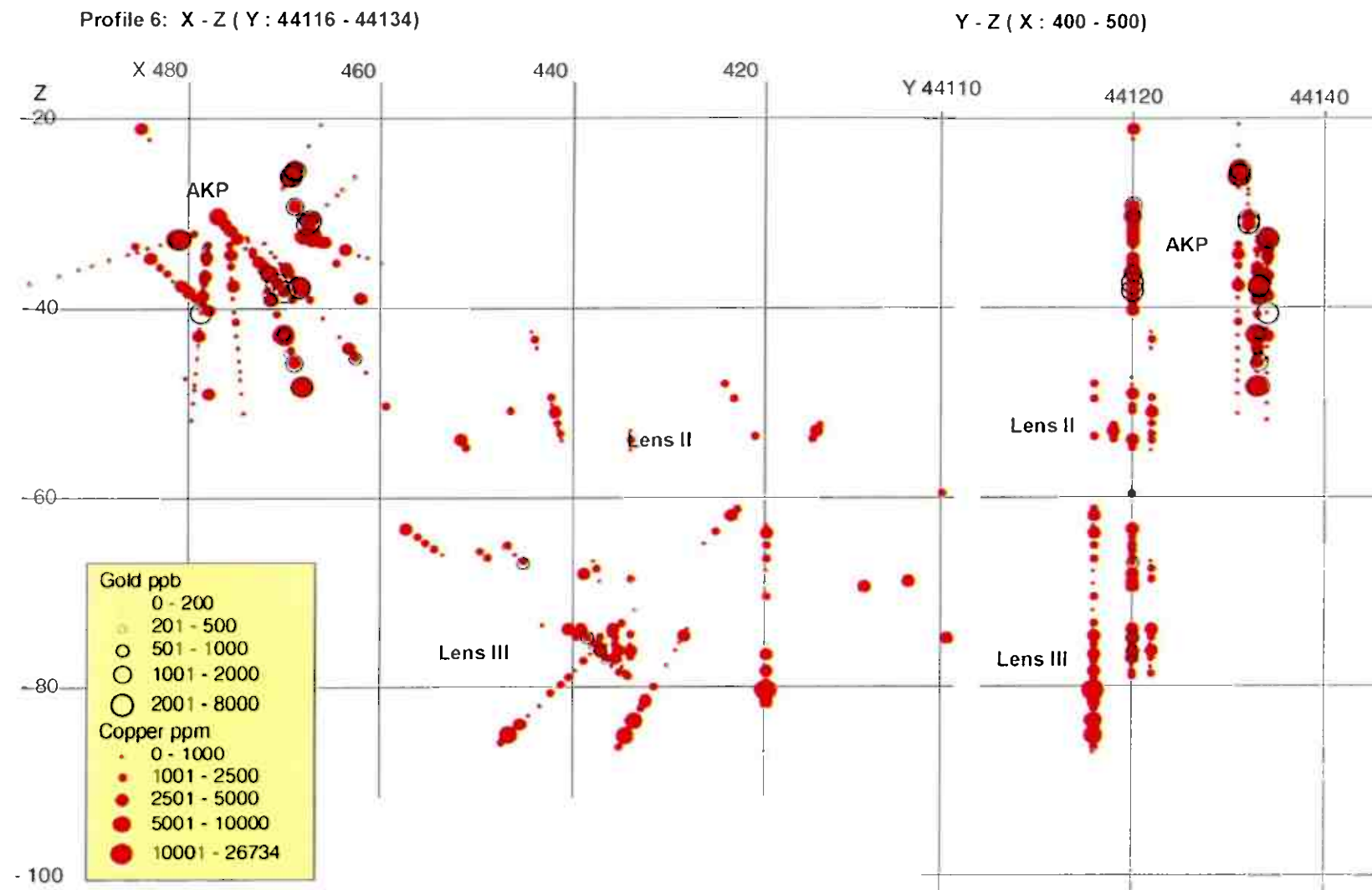


Figure A7c

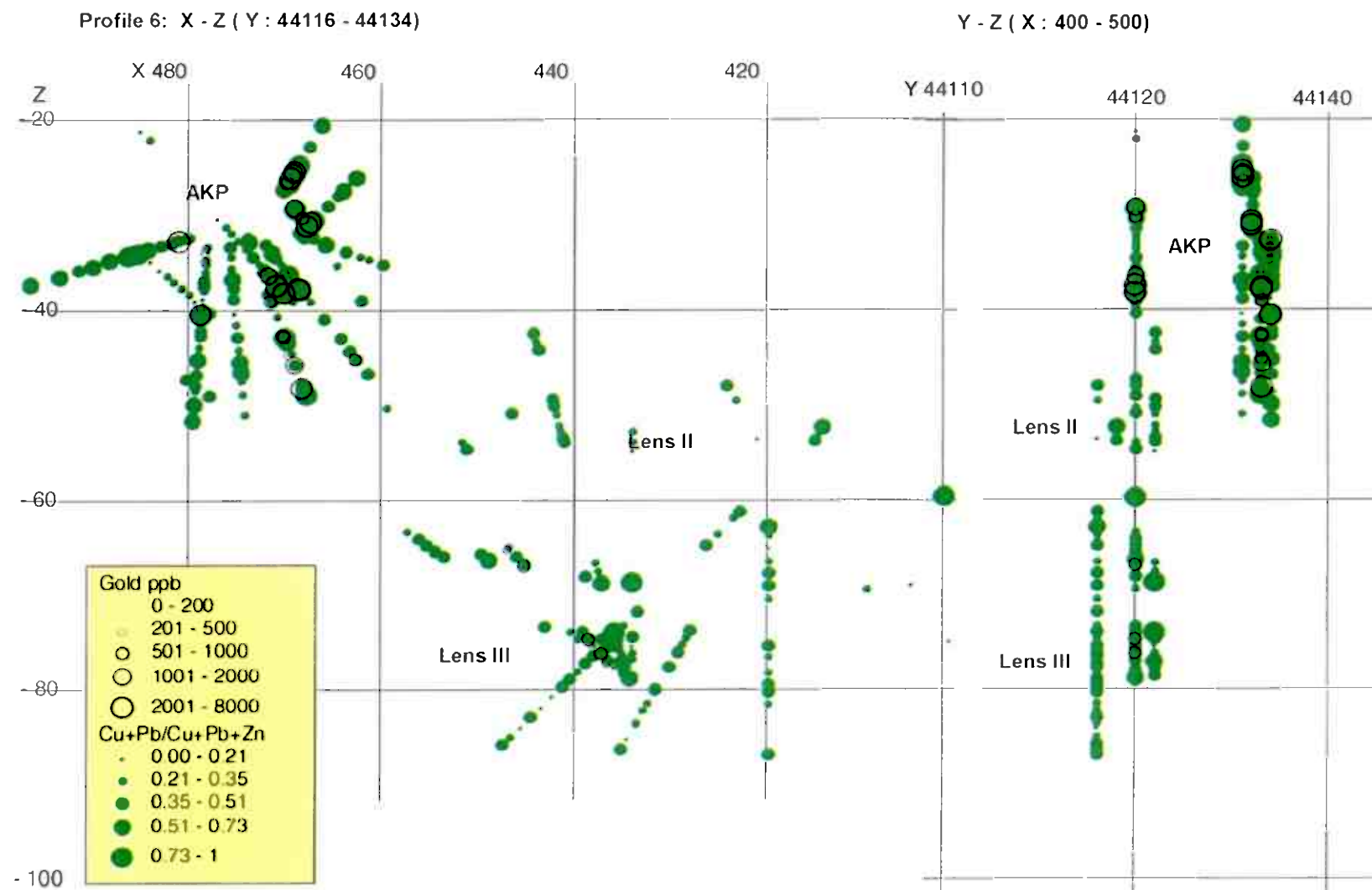


Figure A7d

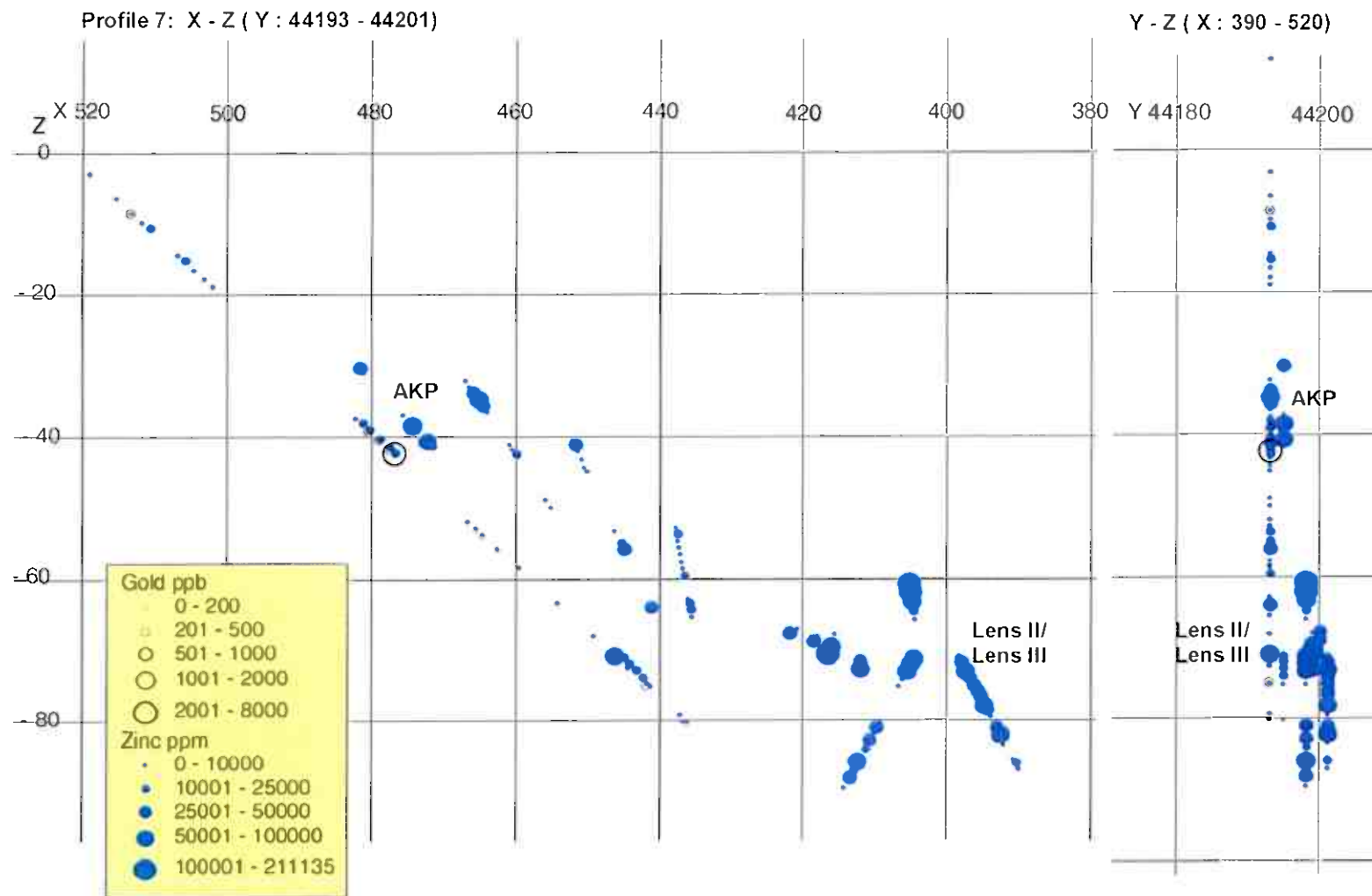


Figure A8a

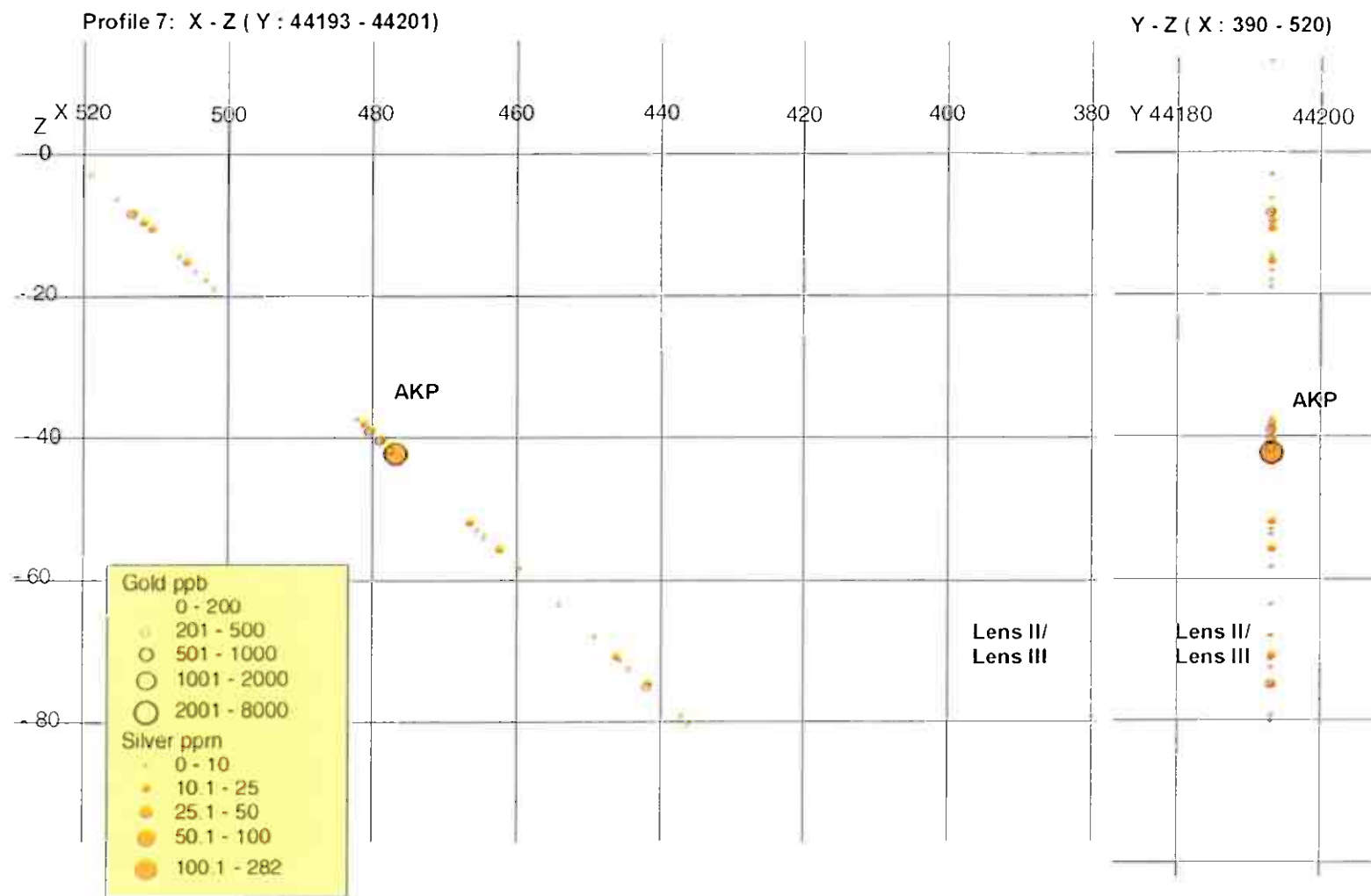


Figure ASb

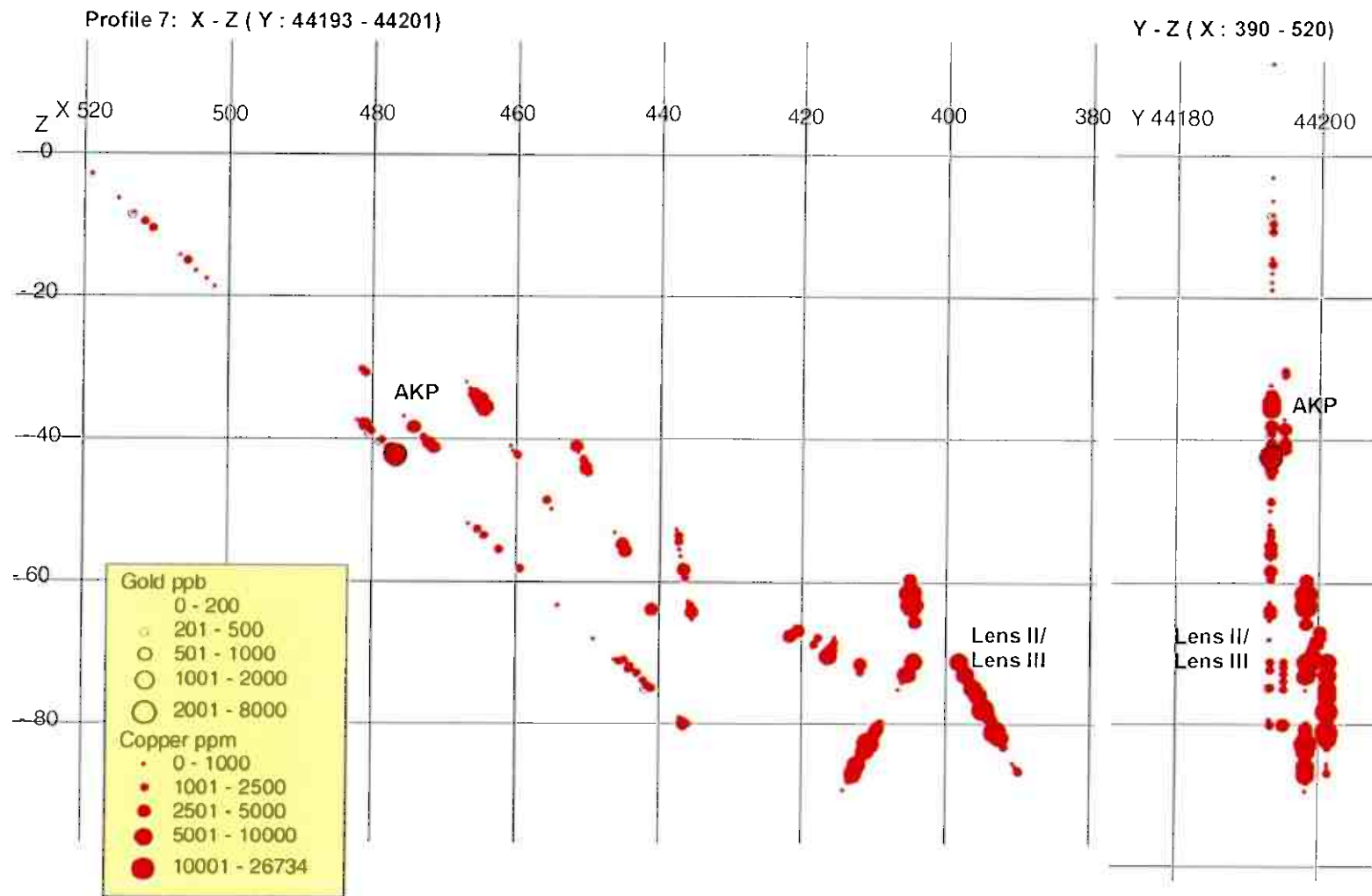


Figure A8c

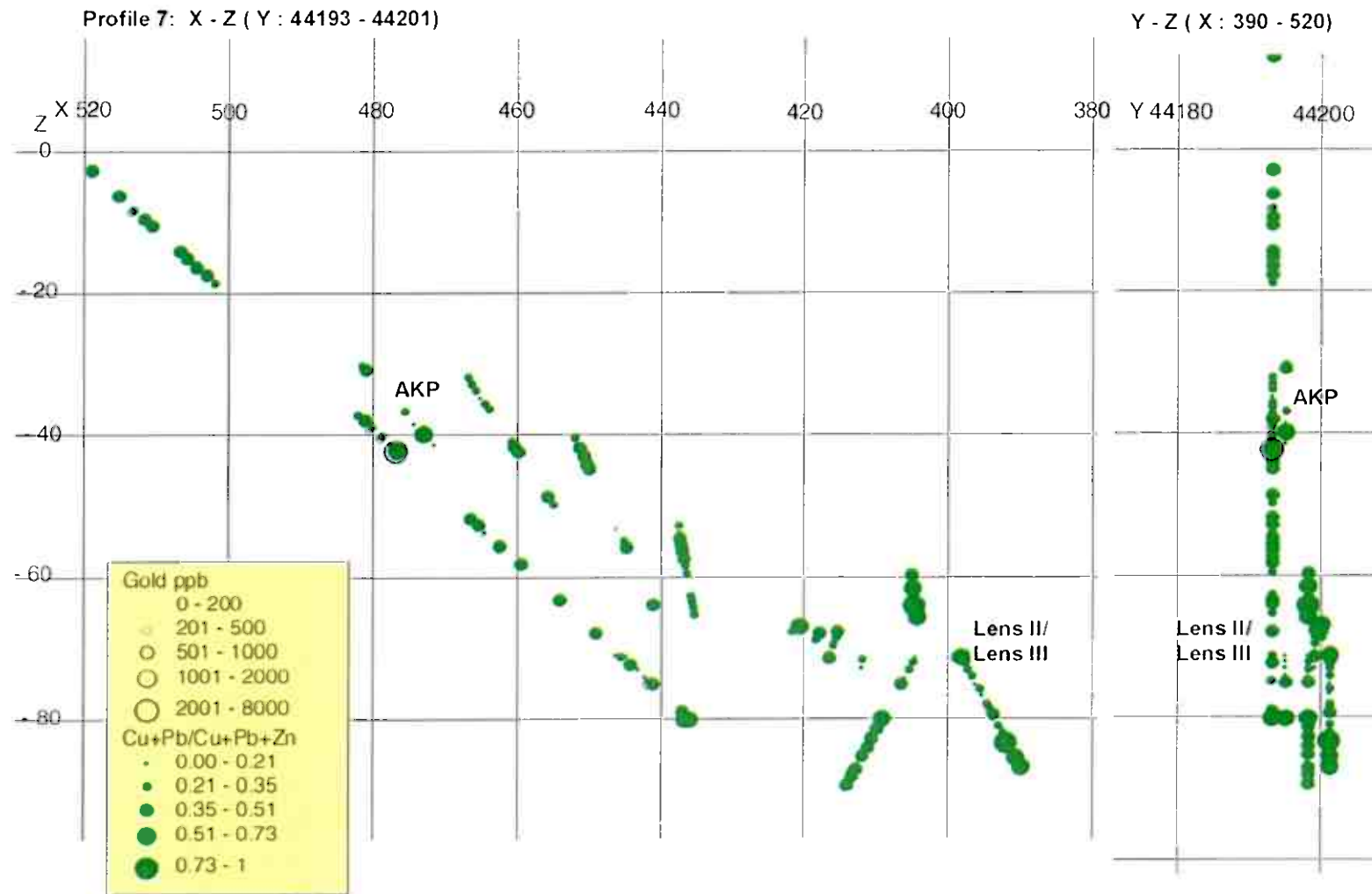


Figure A8d

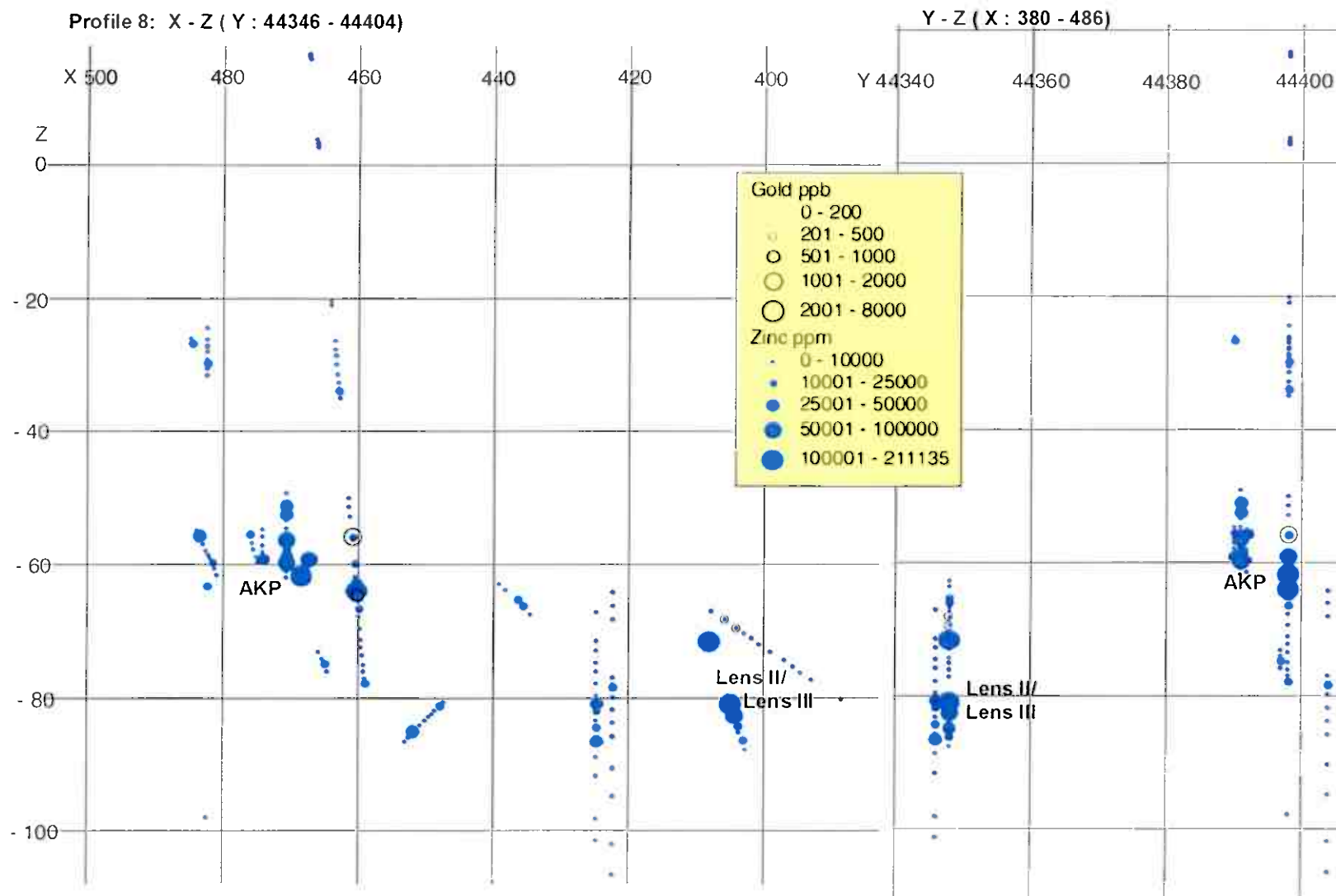


Figure A9a

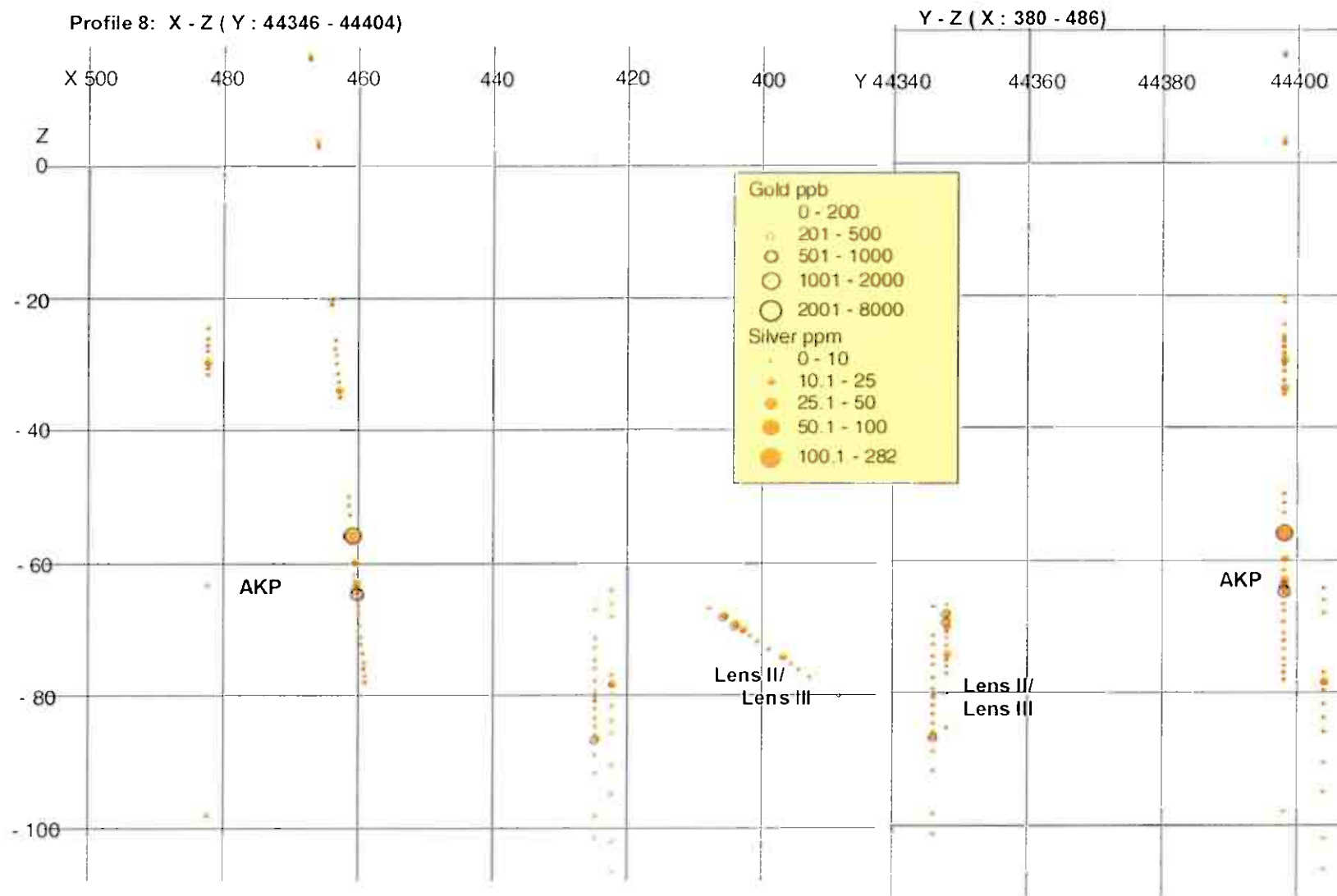


Figure A9b

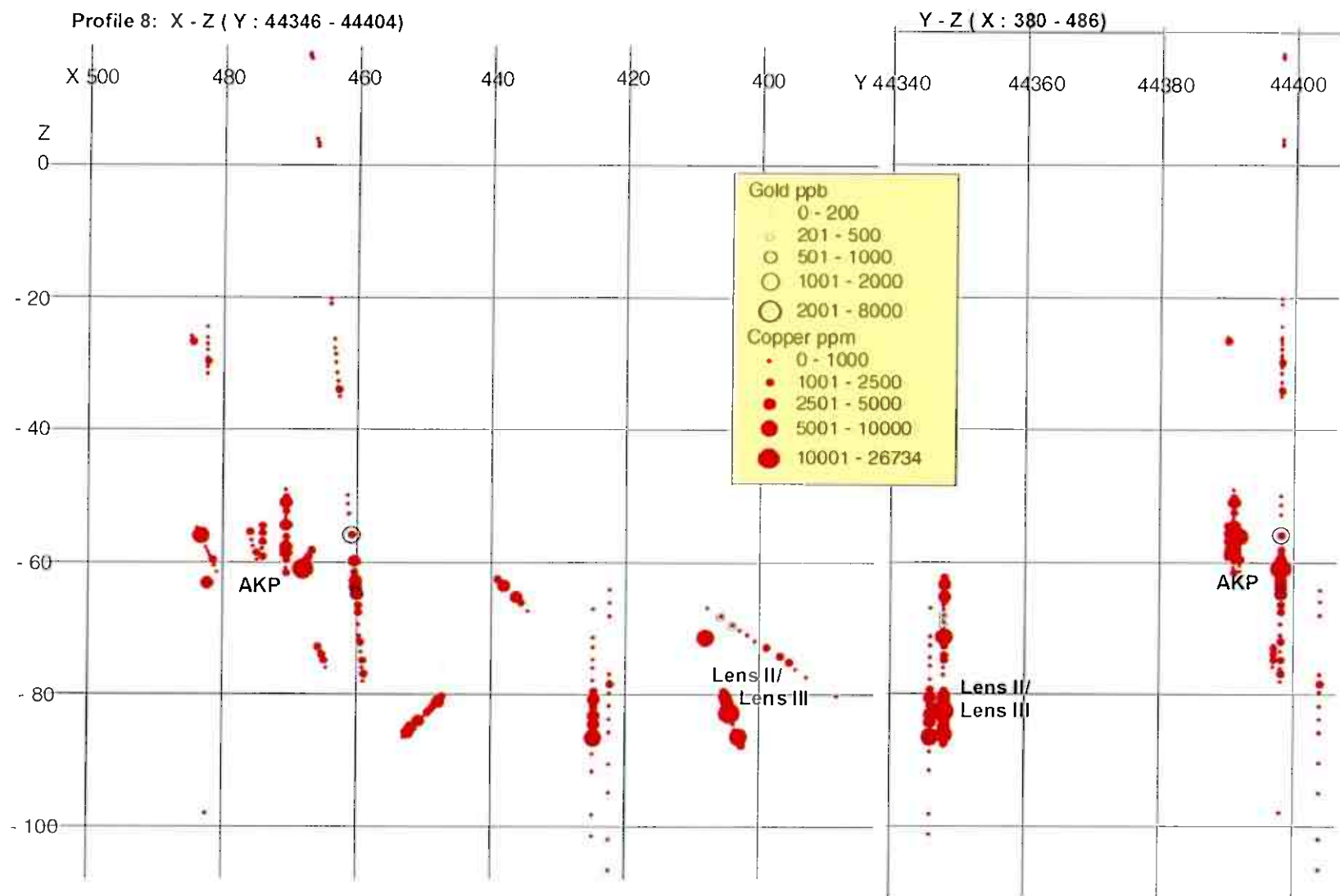


Figure A9c

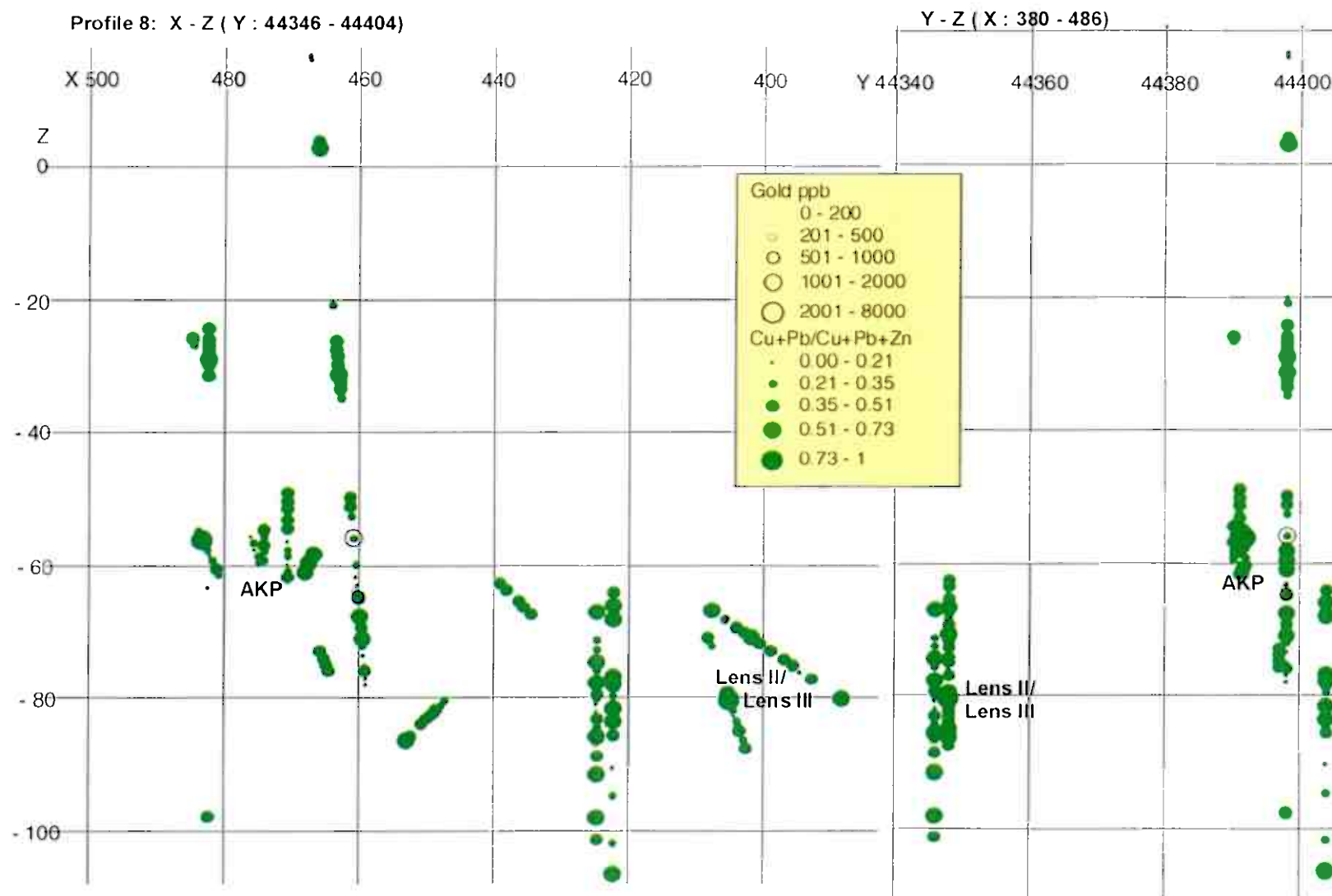
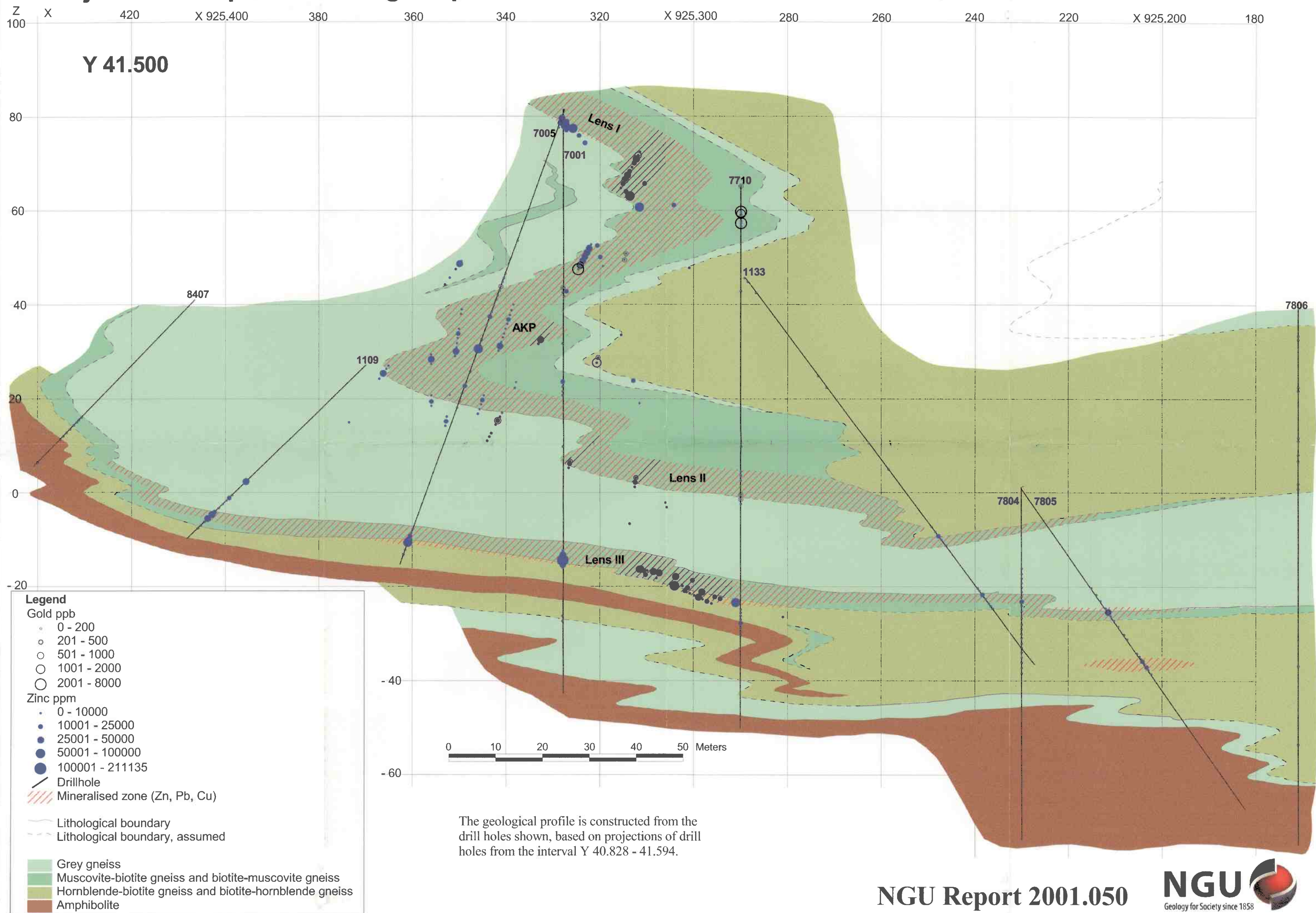


Figure A9d

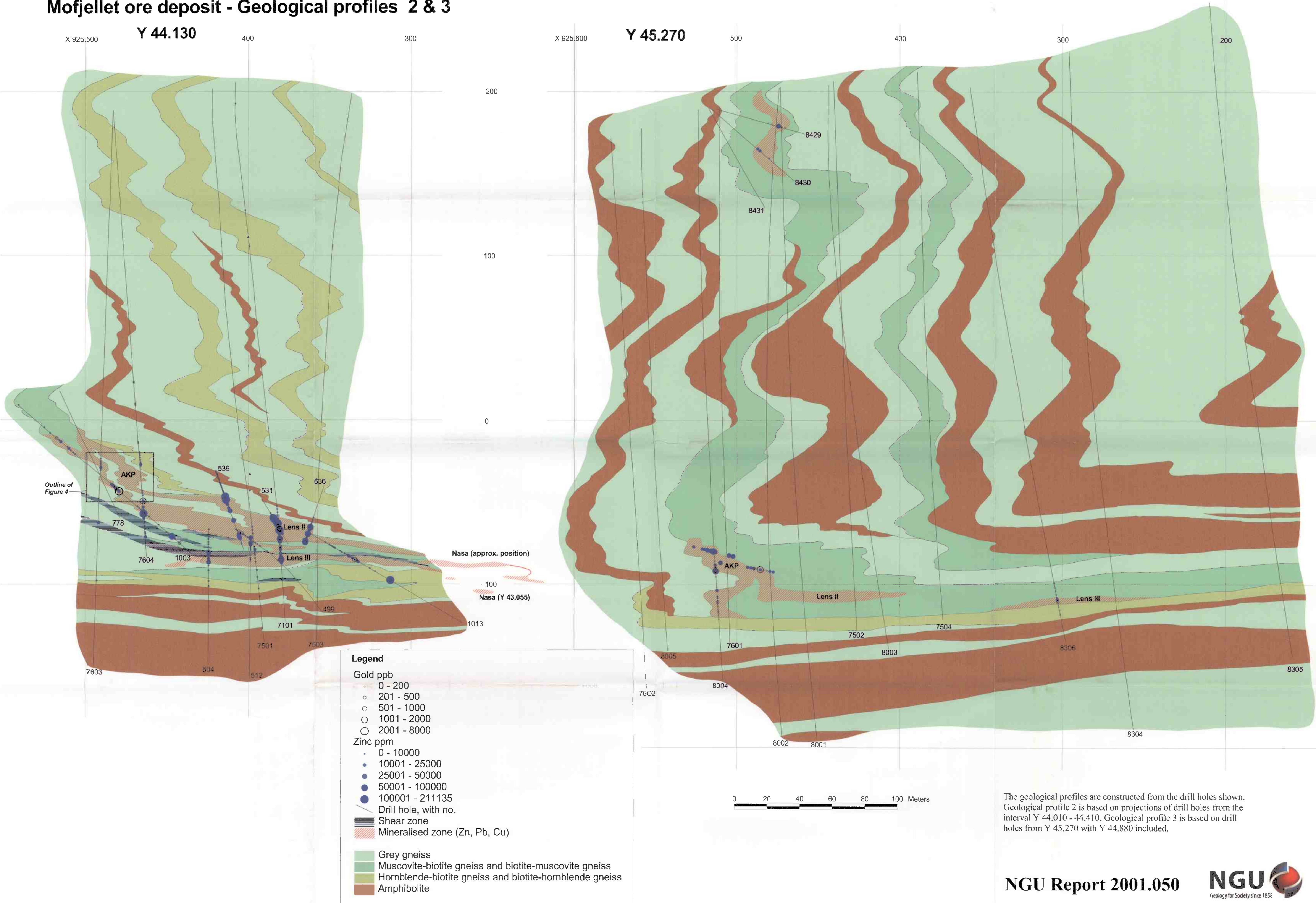
Mofjellet ore deposit - Geological profile 1



Mofjellet ore deposit - Geological profiles 2 & 3

Y 44.130

Y 45.270



The geological profiles are constructed from the drill holes shown. Geological profile 2 is based on projections of drill holes from the interval Y 44.010 - 44.410. Geological profile 3 is based on drill holes from Y 45.270 with Y 44.880 included.