EXPLORATION REPORT

on an

MMI SOIL SAMPLING SURVEY

over the

BEE LAKE GRID

within the

LLEWELLYN PROPERTY

TAGISH LAKE, ENGINEER MINE AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA

PROPERTY LOCATION:	On Tagish Lake 40 km west of the village of Atlin, British Columbia 59° 38' N Latitude, 133° 28' W Longitude Mineral Titles Maps: M104.049, '50, '59, '60 '67 to '69, '77, '78 N.T.S. - 104M/8,9, and 10
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MMI Histograms – at Back

	Cu, Au, Ag, Co, Zn	**Cu, Cd, Ce, Ni, Pb**
Line 598900N	H1A	H1B
Line 599000N	H2A	H2B
Line 599100N	H3A	H3B
Line 599200N	H4A	H4B
Line 599300N	H5A	H5B
Line 599400N	H6A	H6B
Line 599500N	H7A	H7B
Line 599600N	H8A	H8B
Line 599700N	H9A	H9B
Line 599800N	H10A	H10B
Line 599900N	H11A	H11B
Line 600000N	H12A	H12B
Line 600100N	H13A	H13B

MMI Plan Maps – at Back	**Map/Fig#**
Silver	GC-1
Arsenic	GC-2
Gold	GC-3
Calcium	GC-4
Cadmium	GC-5
Cerium	GC-6
Cobalt	GC-7
Copper	GC-8

Potassium		GC-9
Lithium	1:20,000	GC-10
Nickel	1:20,000	GC-11
Lead	1:20,000	GC-12
Thorium	1:20,000	GC-13
Thorium-Potassium Ratio	1:20,000	GC-14
Titanium	1:20,000	GC-15
Zinc	1:20,000	GC-16

*The maps may be reduced to fit within the report.

SUMMARY

Grid emplacement and MMI soil sampling were carried out on the Llewellyn Property operated by Momentum Minerals Inc in the 2011 exploration season. This property is located on Tagish Lake 40 km west of the village of Atlin within the northwest corner of BC within the Atlin Mining Division.

The main purpose of the geophysical surveys was to locate gold/silver mineralization, perhaps similar to the nearby Engineer Mine, which is presently being explored for by BC Gold Corp. Here, gold mineralization occurs within, associated with quartz, along two shear zones that are splays off the Llewellyn Fault.

The MMI sampling consisted of 262 samples taken along nine lines for a total survey length of 6,350 meters. The 2011 MMI sampling consisted of 819 samples taken along thirteen lines for a total survey length of 21,550 meters. The total sampling was 1,081 samples along twenty-two lines over 27,900 meters. The samples were picked up every 25 meters where a picket was placed with the grid coordinates marked on an aluminum tag. The samples were sent to SGS labs in Toronto and tested for 46 elements.

CONCLUSIONS

1. The MMI soil sampling revealed three anomalies labeled by the upper case letters BA to BC, inclusive. Two of these, labeled BA and BB, are significant copper-molybdenum-zinc anomalies located at the southern end of the main survey area that is to the west of Tagish Lake. These two anomalies are very likely reflecting base metal sulphide mineralization.
2. Anomaly BC is a gold-zinc-arsenic-cobalt-silver anomaly and anomaly BD is a gold-silver anomaly.
3. All anomalies are associated with high nickel and cerium values, either directly or adjacent to, indicating the mineralization may be associated with probable basic intrusives
4. The magnetic survey revealed magnetic highs that are associated with the copper-molybdenum-zinc BA and BB anomalies also suggesting the correlation with basic rock-types.

RECOMMENDATIONS

The MMI sampling has shown this area to have strong exploration potential, especially in the area of anomalies BA and BB... It is thus recommended to continue the MMI soil sampling as follows:

(1) to the east to encompass Bee Lake in order to delineate anomaly BA,
(2) to the north to determine the extent of anomalies BA(?) and BC, and
(3) to the west up to Tagish Lake in order to continue exploration in this direction for possible additional anomalous zones as well as the possible extension to anomaly BB.

In depth prospecting as well as ground geophysical work including magnetics, VLF-EM, and induced polarization (IP), should be done at the same time.

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INTRODUCTION AND GENERAL REMARKS

This report discusses survey procedure, compilation of data, interpretation methods, and the results of MMI soil sampling carried out over the Bee Lake Grid within the Llewellyn Property, which is located 40 km west of the village of Atlin, BC, and is operated by Momentum Minerals Inc.

The purpose of the exploration program on this property is to look for gold mineralization, possibly associated with silver and copper values, and possibly similar to the nearby Engineer Mine, which occurs 2.4 km south of the Llewellyn Property and which is being explored by BC Gold Corp. The Engineer Mine mineralization consists of gold associated with quartz that occurs along two shear zones that are splays off of the Llewellyn Fault, which runs northwesterly through the Llewellyn Property. The secondary purpose is to look for porphyry copper-moly type mineralization since there is some evidence of this occurring on the property.

The specific purpose of emplacing the Bee Lake Grid along with the MMI sampling is to determine the extent of mineralization on and around the location of three grab samples taken in 1981 from three outcrops, respectively, each a few hundred meters apart and each containing significant amounts of gold, (Ashton, 1982) ranging from 0.9 to 5.21 grams/tonne gold. This historical reporting was recently discovered by Garry Payie, P.Geo, who wrote the 43-101 report. He named this area the Bee Lake Showing.

MMI stands for mobile metal ions and describes ions, which have moved in the weathering zone and that are weakly or loosely attached to surface soil particles. MMI, which requires special sampling and testing techniques, are particularly useful in responding to mineralization at depth probably in excess of 700 meters (The best depth for gold so far has been 300 meters.). It is also not affected by glacial till, while standard soil sample techniques

are. MMI is characterized in having a high signal to noise ratio and therefore can provide accurate drill targets. However, it may also move along fault lines and therefore could show the causative source to be laterally moved from where it actually is.

PROPERTY AND OWNERSHIP

The Llewellyn Property is comprised of 3 contiguous tenures that comprise an area of 10,580.9 ha and occurs within the Atlin Mining Division in the northwest reaches of the province of British Columbia, Canada (Figure 1 and 2; Table 1). These tenures are located on 1:50,000 scale NTS mapsheets 104M/08, 09, 10 and on 1:20,000 scale map sheets 104M049, 050, 059, 060, 067, 068, 069, 077 and 078. The property is owned by Nash Meghji and is being optioned to Momentum Minerals Inc, both of Vancouver, British Columbia.

Table 1

Tenure Number	Claim Name	Good To Date	Area
570299	TAG LINE	2013/jan/25	98.1221
948198	TAGISH BLOCK	2013/jan/25	9184.8212
948199	TAGISH LAKE	2013/jan/25	1297.9615
		TOTAL AREA	10,580.9048

The expiry date shown assumes that the work discussed within this report is accepted as submitted for assessment credits.

LOCATION AND ACCESS

The claim group stretches almost 40 kilometres southeast from Teepee Peak. This mountain is found about 20 km east of Fraser, British Columbia, which is located on the Klondike highway, a paved highway that links Whitehorse, in the Yukon Territory, to the deep water port of Skagway, Alaska. The claims cross Tagish Lake about 22 km southeast of Teepee Peak. The centre of the property is at approximately 59° 37' 10" N latitude, 134° 22' 39" W longitude.

The Llewellyn property claim tenures are located 27 km west from Atlin, British Columbia at their closest point and 57 km northwest at their farthest. Whitehorse, located 200 km north of Atlin, is the closest major city to the Llewellyn property. Whitehorse and Atlin have mining and mineral exploration driven economies and are sources of supplies, equipment and personnel for mining and exploration projects.

While the Klondike highway is only 14 kilometres from the northwest part of the Llewellyn property there are no roads that offer direct access. Access is from Atlin or from Whitehorse by helicopter or float plane to one of the lakes. One can also travel by an hour long boat ride from Atlin, across Atlin Lake, up Atlin River, along Graham Inlet, and to the main part of Tagish Lake. Boats and barges are also able to navigate the waterways from either Carcross or Tagish Bridge in Yukon.

PHYSIOGRAPHY AND VEGETATION

The Llewellyn Property is found within the Tagish Highland, which is part of the Yukon Plateau, which itself is a physiographic unit of the Interior Plateau System. The Tagish Highland is characterized by areas of relatively smooth, gently rolling upland surface lying, for most part between 1,500 and 2,000 meters, with local peaks rising above. The area is incised to an elevation of about 670 meters by tributary rivers of Atlin and Tagish Lakes. The valleys are wide and U-shaped and many to the west of Atlin, i.e., the Llewellyn Property area, are occupied by lakes. The relief in the Tagish Highland within the property area is about 1100 meters.

Elevations on the property vary from less than 700 meters on Tagish Lake to over 1900 meters on the mountain at the west end of the property. Slopes vary from being gentle to steep. Glaciers occupied the Tagish Highland and thus much of the claim area is covered by glacial drift. For the most part it is not thick, but can be when closer to the larger lakes.

The main water sources on the property are the lakes, the main one being Tagish Lake.

Tree line is at about 1400 meters (4600 feet) on north-facing slopes and 1500 meters (4900 feet) on south-facing slopes. Above the tree line, the property is mostly covered in alpine vegetation, which is predominantly heather and sedges, as well as stunted buck brush. Below the tree line it is covered with light to medium forest consisting of lodge-pole pine, black spruce, aspen, and scrub birch. The underbrush is generally light but can be thick in areas around streams.

The temperatures can reach 30°C in the summer months, with an average of 20° C whereas in winter they can drop down to –35°C with an average of –15°C. Snowfall in winter months is moderate. Depending on the elevation, mining exploration can be carried out from May until the end of October. On a good year this can extend well into November, though this cannot be relied on.

Habitation is reported to include a trailer camp and dock at the Engineer mine on the east shore of Tagish Lake and two cabins in the lower Wann River area.

HISTORY OF PREVIOUS WORK

Historical work is broken down by specific areas of the Llewellyn Property and reported on under their own section heading. For further details on the historical work discussed below refer to the section titled Mineralization.

a) Llewellyn Property - Northwest Area

In 1988, (Durfeld, 1989), 1989 (Cuttle, 1989) and in 1990 (Cuttle, 1990) Cyprus Gold (Canada) Ltd conducted assessment programs on their Teepee property (TP, Fill claims) which included the Crine (104M 081) and TP-Main (104M 048) prospects (Figure 3, Table 2). They also conducted prospecting and sampling surveys over significant areas now held as the Llewellyn Property.

Cuttle (1990) reported that a large amount of anomalous float samples and outcrop samples had been found over a two kilometre area along 'Grissly' Creek, an area that occurs on the northwestern-most section of the Llewellyn property. Cyprus Gold isolated a particularly prospective area called the 'Key Showing' adjacent 'Grissly' Creek on its Fill 4 and 6 claims (Figure 3). During 1990, assays of mineralized float (sample JC-90-R-15) in this area yielded up to 17.1 oz/t Ag, 5.1% Pb and 10.6% zinc. Other rock samples from this area indicated a significant enrichment in gold, silver, arsenic, lead, zinc, some of which show "excellent banded quartz growth within highly brecciated schist". The textures were reported to be characteristic of a high level portion of a mineralizing vein structure.

Several mineralized rock samples were found in the vicinity of the 'Key showing'. Cuttle (1990) stated that "there is a large variety of style of mineralization in these samples of outcrop and float and there remains additional prospecting to locate the source of this vein type material. This area may have under gone a similar mineralizing event to that of the Crine Vein". Significant samples with descriptions and assays are taken in whole from Cuttle (1990):

Table 2

	Gold ppb	**Silver** ppm	**Arsenic** ppm	**Cadmium** ppm	**Copper** ppm	**Lead** ppm	**Zinc** ppm	**Antimony** ppm
JC-90-R-15 Massive sulphide vein material, float	9	584.6	133	554.2	3.0 %	5.1%	10.6%	1.1%
JC-90-R-18 Brecciated and silicified phyllite beside dyke, outcrop	1300	7.2	1180	11.7	41	311	74	49
JC-90-R-19 Highly weathered quartz vein, sub-outcrop	468	2.4	335	5.6	44	53	21	31
MC-90-R-08 Quartzite? Or quartz vein with pyrrhotite and pyrite	1000	3.2	1217	18.2	13	161	69	23
AS-90-R-13 Rusty shear in schist with minor pyrite	422	2.6	4055	59.8	20	367	101	38

JC-90-R-15 - float on Grissly Cr 100m below snow pack of 1% chalcopyrite, 4% sphalerite 8% arsenopyrite with disseminated galena. Fairly large float sample and approx 5cms thick. Has not been transported very far.

JC-90-R-18 - Outcrop of highly brecciated and pervasively silicified phyllite beside east trending aplite dyke. Approx 20% coarse and very fine disseminated pyrite with traces of needles of stibnite.

JC-90-R-19 - float in scree pile of highly weathered qtz vein(?) material with abundant boxwork and fresh disseminated pyrite.

90-MC-R-8 - on Grissly Creek. Quartzite with pyrite and pyrrhotite. Probably float. (gp)

90-AS-R-13 - on Grissly ck. small rusty shear in schist. Brecciated in places with vuggy quartz graphite and trace pyrite. Appears to trend east-west.

Cuttle (1990) reports that found above the areas of mineralized float at the headwaters on 'Grissly' Creek is an area where large zones of quartz breccia had been found during the 1989 season. While no mineralization was yet found associated with these breccias there was reason to believe that they might possibly "represent the upper end of a mineralizing system". They were "commonly healed breccias with open cavity quartz growth and epithermal style banded quartz layering. The boulders have been found up to 6 square meters in size and there are large quantities approximately 1.0 kilometer east and below Iceberg Lake.

Sampling by Cyprus Gold also occurred along the ridge to the immediate west of Grissly Creek and along the ridge in the northwest corner of the property where in 2006 sampling by resulted in the discovery of the Tagish Top (MINFILE 104M 094) showing.

Further sampling by Cyprus Gold occurred to the east of Grissly Creek in the 'Silty Lake' drainage area where the creek draining the lake was found to be anomalous in Au, Ag, As and Sb. At the time this suggested to the Cyprus Gold staff a geochemical signature similar to that of the UM vein found approximately 4 kilometers to the south (MINFILE 104M 084). The UM is an ultramafic hosted, listwanite associated mesothermal gold-quartz vein system.

Cuttle (1990) expressed the opinion that

'with the amount of anomalous float samples and outcrop samples found over a two kilometer area along Grissly Creek it's a matter of time until mineralized material is found in outcrop. This will require a concentrated prospecting and rock sampling program. A small geochemical grid may prove helpful stretching from the ridge southeast of 'Grissly' Creek down to the creek itself and over to the northwest. One must keep in mind though that overburden cover and glacial debris in the valley may create false anomalies from lengthy mineralized boulder trains trailing down from the head waters of 'Grissly' Creek or beyond'.

2006

On behalf of XO Gold Resources Inc in 2006, limited prospecting and sampling was carried out by Garry Payie over two days in the Grissly Creek area of the Llewellyn

property, at its northwestern most reaches. The area of the 2006 program was based on the targeting, prospecting and prospecting of Landsat 7 anomalies that displayed significant areas of iron oxide and hydroxyl (clay) alteration. The area visited is largely underlain by Devonian to Middle Triassic phyllitic metasediments and Tertiary granites. The program resulted in the collection of 8 rock, 10 soil and 4 stream samples that were subsequently remitted to ALS Chemex Lab for analysis.

On August 24, 2006 geologists Garry Payie and George Owsiacki flew by helicopter to investigate radar satellite images that revealed iron oxide targets on the Llewellyn property. Several large limonitic quartz veins, found projecting out of the largely overburden-covered hillside, may be attached to near surface country rock which is less resistant to erosion. Quartz vein chip and rock samples were taken as well as were soil samples and stream samples. Very little outcrop was observed. What little outcrop was noted consisted of dark grey-black foliated to phyllitic metasediments that was locally limonitic. Two stream samples are considered significantly anomalous. These were collected above the confluence of two branches of 'Grissly' Creek. These are sample 06G0W018: 67 ppb gold, 0.6 ppm silver, 164 ppm arsenic, 53 ppm copper, 30 ppm lead and 134 ppm zinc; and sample 06GPA010: 26 ppb gold, 0.8 ppm silver, 173 ppm arsenic, 47 ppm copper, 29 ppm lead and 135 ppm zinc.

On August 29th, 2006 Gary Payie and an assistant made a brief helicopter stop on the ridge northwest of the 'Grissly' Creek area on August 24th. The ridge occurs in the northwest corner of the Tagish property and was also targeted in order to investigate a very high iron oxide radar satellite image. The ridge is very gossanous and three rocks were collected. One intrusive rock sample (06GPA018) was highly anomalous in arsenic (5,000 ppm), molybdenum (211 ppm), lead (906 ppm), and zinc (183 ppm) with gold (29 ppb) and silver (8.5 ppm) also being elevated. This sampled area became known as the Tagish Top showing (MINFILE 104M 094). Complete documentation of the 2006 program work program, including assay sheets of all samples collected can be found in the Assessment Report (28929) by Burjoski (2007).

b) Llewellyn Property – Central Area

2007

A program of line cutting, MMI soil sampling and a small amount of magnetic surveying (on the MMI lines) were carried out on behalf of XO Gold in 2007.

The following 2007 MMI and ground magnetometer survey section paragraphs were taken in whole or in part from the 2008 BC government assessment report (29966) by the author (2008), wherein documentation of the complete 2007 program work program, including assay certificates can be found on Figure 3a.

The MMI survey has shown metal zoning indicative of mineralization. Continuation of the MMI soil sampling and magnetic surveying to further define the limits of the very strong copper, molybdenum, and zinc zone designated Anomaly A and B in Mark (2008)

above is recommended. Sampling should continue at 25 metre intervals along east-west lines spaced 100 metres apart. If results warrant, IP/Resistivity surveying should follow in order to determine the depth of any target anomaly.

c) Llewellyn Property East of Tagish Lake (Bee Lake Showing)

1981

A review of the literature has revealed a new area of prospective mineralization first reported in 1982 but not recognized in the government mineral occurrence database (MINFILE). This area is on the Llewellyn property about 800 to 1500 metres east of Tagish Lake, just west of a small lake known locally as Bee Lake. Refer to Assessment Report 10511 by Ashton (1982) for complete details of the documentation.

In 1981, claims on the east side of Tagish Lake were under option to Nomad Resources Ltd and Tagish Resources Ltd. Limited prospecting was done at the time and several samples were collected. The 1981 claims covered some of the same ground that are presently held as part of the Llewellyn Property.

The following results (designated Samples 2, 5 and 6) are taken from a prospecting report signed by Roy Carlson and contained within Assessment Report 10511, by Ashton (1982). The approximate sample locations, taken from Ashton, are plotted on a more legible map than that found in his report. Carlson describes a low erratic greywacke outcrop about 500 metres west of Bee Lake where two greywacke samples (5 and 6) were taken in 1981. These samples are about 400 metres apart (north-south). Sample 2 was taken about 500 metres west of Sample 5 from greywacke outcrop in an area where outcrop was reported as scarce. Two other samples, about 350 metres north of Sample 2 and 500 meters south proved not to be anomalous.

Sample 2) greywacke outcrop 0.026 oz/ton gold (0.9 g/t gold)
Sample 5) greywacke loose, minor pyrite, 0 082 oz/ton gold (2.81 g/t gold)
Sample 6) greywacke, silicified, pyritized, loose, 0.152 oz/ton gold (5.21 g/t gold)

Assays certificates showing the results for these samples are in found in Ashton (1982). A.S. Ashton, P.Eng, who authored the assessment report (10511) documenting the 1981 sampling program.

2011

A program of grid emplacement and MMI soil sampling was carried out on behalf of Momentum Minerals by the author in 2011. The purpose of the work was to determine the response to the three gold-mineralized outcrops, mentioned above, and whether the mineralization may extend and possibly be connected to each other. The result of this work is discussed in this report.

d) Llewellyn Property – Southeast Area (Glean Showing)

Golden Bee Minerals Inc. staked the Golden Bee claims east of Tagish Lake and conducted work in 1989 and 1990. Some of the ground held at that time is presently covered by Llewellyn Property tenures. Work by Golden Bee consisted of sampling, mapping, prospecting and geochemical and geophysical surveys (Thompson, G.R., 1990a and 1990b; Lunn and Thompson, 1990a and 1990b). This work led to the discovery of the Glean showing (MINFILE 104M 078), which is, in part, on the Llewellyn tenures, and the Golden Bee 2 showing (MINFILE 104M 076), located just off the Llewellyn tenures, both indicated on Figure 4. At the Glean, mineralization occurs in several silicified shears, 1 to 8 metres wide, displaying parallel, stacked and en echelon zoning and consists of disseminations of pyrite, arsenopyrite, chalcopyrite, galena and pyrrhotite.

e) Llewellyn Property – Airborne Survey

2007

In 2007, a detailed high-resolution helicopter-borne magnetic and gamma ray spectrometric (radiometric) survey was flown over the Llewellyn property while under option to XO Gold Resources Inc. The following section was taken in whole or in part from Shirvani and Gebauer (2008). Further details including survey maps can be found in this report. Portions of the radiometric part of the survey were not completed due to equipment malfunction.

On behalf of XO Gold Resources Ltd and adjacent tenure holders (on their independent properties), McPhar Geosurveys Ltd. conducted a detailed high-resolution helicopterborne magnetic and gamma ray spectrometric survey over the Atlin Region, BC, Canada during the period September 20, 2007 to October 9, 2007 The purpose of the survey was to acquire high resolution gamma ray spectrometric and magnetic data to be used as aids in identifying magnetic and radiometric anomalies and the geophysical characteristics of the geology and structure. Such data were to be applied in an effort to gain insight into geologic and geophysical settings and ultimately to help locate potentially economic uranium mineralization.

The Llewellyn property survey area, for purposes of efficiently mobilizing equipment and personnel, was combined with similar surveys of two other nearby blocks of mineral tenures. Traverse lines in the Tagish Top tenures were oriented at N45°E at 100 m line spacing and tie lines were perpendicular to the traverse lines at 1000 m line spacing.

The geophysical system was mounted on A-Star 350B helicopter, with Canadian registration C-GTNV, supplied by Trans North Turbo Air Ltd., Whitehorse, Yukon for Eagle Plains Resources Ltd and Nash Meghji – XO blocks (Llewellyn Property). Data acquisition utilized precision differential GPS positioning. A high sensitivity magnetometer was installed in a towed bird. A Pico-Envirotec GRS-10 multi channel gamma-ray spectrometer with 16.8 litres “downward looking” and 4.2 litres “upward looking” NaI(Tl) sensor was mounted inside the helicopter. Ancillary equipment included

a GPS navigation system, a radar altimeter and a base station magnetometer. Pre-survey test and calibration flights were completed during the survey, and the data acquisition was completed on August 14, 2007. The mobilization of the helicopter equipment and personnel to Atlin, B.C. was completed on September 20, 2007. The last production flight was on October 9, 2007, and project was terminated by client due to bad weather. Demobilization was completed on October 10, 2007. Final data processing, map compilation and report preparation was completed by McPhar at its Markham, Ontario office and was revised by TERRACAD Geoscience Services Ltd. to comply with standards of reporting work as defined by the Ministry of Energy and Mines of British Columbia. The complete report of this survey is presented in Shirvani and Gebauer (2008) (Assessment Report 30379).

Subsequent to the report by Shirvani and Gebauer (2008), a report on the airborne survey results was prepared by TerraNotes Ltd of Edmonton, Alberta for XO Gold. The report entitled *Integration of Geological & Geophysical Analysis, Llewellyn Property* is included in Brown and Higgs (2008) (Appendix IV of Assessment Report 30365B). Excerpts below referring to TerraNotes are sourced from this report. While the TerraNotes website (www.terranotes.com/) states that TerraNotes is a member of APEGGA (Alberta Professional Engineers, Geologists and Geophysicists Association) no specific staff authorship is given in the report. Terranotes provided its own disclaimer in the report as follows:

> *"This document has not been reviewed or endorsed by a registered member of the Association of Professional Engineers, Geologists, and Geophysicists of Alberta. RECIPIENT agrees to consult directly with such professionals"*

Airborne Radiometrics

The following excerpt from the TerraNotes report provides a useful synopsis of theory with respect to geological interpretation of the airborne radiometric data

> *"Gamma-Ray Spectrometry (GRS) provides a direct measurement of the surface of the earth with depth of penetration (~ 30 cm). This near surface data allows us to reliably relate the measured radioelement contrasts to mapped bedrock and surficial geology, and alteration associated with mineral deposits. A gamma-ray spectrometer is designed to detect gamma rays associated with surficial radioactive elements and to accurately sort the detected gamma rays by their respective energies. It is this sorting ability that distinguishes the spectrometer from instruments that measure only total radioactivity. Potassium (K), Uranium (U) and Thorium (Th) are the three most abundant, naturally occurring radioactive elements at the earth's surface. Potassium is a major constituent of most rocks and is a common alteration element in certain types of mineral deposits. Uranium and Thorium are present in trace amounts as mobile and relatively immobile elements, respectively. As the concentration of these different radioactive elements varies between different rock types, we can use the information provided by a gamma-ray spectrometer to map geological boundaries. Where the background*

radioactive element signature of a host rock is altered by a mineralizing system, the corresponding radioactive element anomaly will provide direct exploration guidance. Depending on the complexity of the geology, subtle variations in K, U and/or Th may not be readily apparent. For these reasons, the proper interpretation of gamma-ray spectrometry data requires the examination of all the measured variables and associated derived ratios. Ratio maps can enhance or reinforce subtle variations in the measured variables. This can be particularly relevant, especially when dealing with varying intensities of alteration associated with a mineralizing process. Airborne radiometric data offer a three-element geochemical image of the prospective area and may reflect later deformation episodes than magnetic data. Apart from magnetic mineralogy, the radioelement concentration may also be changed during hydrothermal alteration. Within the Llewellyn property, distribution of gold is closely connected to hydrothermally altered zones of bedrock. These zones are commonly controlled by both large scale and local structural and tectonic features. By estimating the mean groundlevel abundances of K, U and Th content for bedrock, it is possible to evaluate changes in the altered zones. Alteration of K generally produces the most prominent effects, since K is the most abundant of the three radio elements in bedrock."

The abundance ratios, U/Th, U/K and Th/K, are considered more diagnostic of changes in rock types, alteration, or depositional environment than the values of the radioisotope abundances themselves. Anomalous ratio values have proven useful in locating zones of alteration that may be indicative of precious and base metal mineralization. In case histories, alteration associated with mineralization produces potassium anomalies which can be distinguished from normal lithologic potassium variation by characteristic eTh/K ratio lows.

Shives et al. (1997) conclude in their article, *The detection of potassic alteration by gamma ray spectrometry - recognition of alteration related to mineralization,* "The ability of gamma ray spectrometry to map potassium, uranium and thorium enrichment or depletion provides powerful exploration guidance in a wide variety of geological settings. The case histories presented highlight the use of gamma ray spectrometry to measure and map potassium enrichment related to volcanic hosted massive sulphide, polymetallic and porphyry mineralization. Potassium enrichment in these, and many other geological settings, is characterized by anomalously low eTh/K ratios relative to normal lithological signatures, thus providing significant exploration vectors."

Airborne Geophysical Survey Results Summary

This paragraph is summarized from TerraNotes. The results of the aeromagnetic survey showed anomalies on the western part of the Llewellyn Property coincided with known parts of the Llewellyn Fault system and some magnetic lows and highs were coincident with mapped geological formations. Low magnetic trends were observed at the locations of the creeks. Formation boundaries and small scale faults were also recognizable, especially at the eastern part. Magnetic lineaments were found to occur in all orientations

and where intersecting are considered zones of interest. The western part of the survey area is more interesting in that there is higher occurrence of faulting and abrupt changes in the magnetic field from high to low. There were also splays of the Llewellyn fault yielding many intersection zones. The lack of radiometric coverage on the western portion of the property blocked efforts at defining zones of interest for follow-up.

Terranotes reported five regions of interest based on radiometric and aeromagnetic anomalies. These are indicated on report figures as R3-1, R3-2, R3-3, R3-4 and R3-5. R3-1 and R3-2 are located at the eastern shore of Tagish Lake, the other regions are located at the western shore. Black ellipses represent high K/eTh anomalies, the grey ellipse represents a low K/eTh anomaly. For full details of all available data please refer to Farshad and Gabauer (2008) and Brown and Higgs (2008) (with TerraNotes (2008).

GEOLOGY

The following regional geology was taken from a summary by Owsiacki (2007) who used Mihalynuk (1999, 2003), Casselman (2005) and Cuttle (1989, 1990) as his sources. Property scale mapping has not been done; the property description is derived from mapping done by Mihalynuk et al. (1996) and displayed on Ministry of Energy and Mines website – MapPlace.

a) Regional

The property area occurs at the contact between the Coast Belt and the western margin of the Intermontane Belt. The Coast Belt is comprised predominantly of Late Cretaceous and Tertiary magmatic rocks, while the Intermontane Belt at this latitude is composed of Mesozoic arc volcanic and arc-derived sedimentary rocks.

According to Wheeler et al. (1991) the architecture of the area is a product of Late Triassic to Early Jurassic amalgamation of the following terranes (from east to west): mainly Paleozoic and lesser early Mesozoic oceanic crustal and supracrustal rocks of the Cache Creek Terrane; early Mesozoic arc volcanic and related sedimentary rocks of the Stuhini Group, at this latitude representing Stikine Terrane; and possibly Late Proterozoic to Paleozoic metamorphosed epicontinental rocks of the Nisling Terrane. These terranes are overlapped by Lower to Middle Jurassic basinal turbidites of the Laberge Group that form part of the Inklin overlap assemblage. Laberge strata are succeeded by late Mesozoic and Tertiary mainly felsic volcanic strata of the Windy-Table and Montana Mountain complexes and the Sloko Group. Intrusive roots to the several volcanic episodes postdating Laberge deposition include the granitoids of the Whitehorse Trough and Coast Belt (Figure 4).

Current data indicate that both the Laberge Group and the Stuhini Group strata (which at this latitude represent Stikine Terrane) together constitute an overlap assemblage which is termed the Whitehorse Trough overlap assemblage. The nature of the Nisling rocks is in question; it is not certain that they really constitute a separate terrane. However, to

maintain consistency with widespread current usage they are referred to collectively as the Yukon-Tanana Terrane.

The structural geology of the area is dominated by two major subparallel, northnorthwest trending faults that divide and define the boundaries between the Cache Creek Terrane and the Whitehorse Trough, and between the Whitehorse Trough and the Yukon-Tanana Terrane. The Nahlin fault, east of and not in the project area, more or less marks the western extent of the Cache Creek Terrane and eastern extent of the Whitehorse Trough. It is a steeply dipping to vertical fault or series of faults and has been intermittently active, probably since the Late Triassic into the Tertiary. The Llewellyn fault (which transects the Llewellyn property area) marks the boundary between the regionally metamorphosed Yukon-Tanana Terrane in the west and the Whitehorse Trough in the east. It is also steeply dipping and appears to have been active from Late Triassic to Tertiary time.

The Intermontane Belt in the property area is divided into two packages: Yukon-Tanana Terrane to the west, and rocks of the Whitehorse Trough to the east. Overlapping these packages is Lower to Middle Jurassic volcanic rocks. The Yukon-Tanana Terrane consists primarily of the Boundary Ranges metamorphic suite, a belt of polydeformed rocks bounded on the east by the Llewellyn fault and on the west by mainly intrusive rocks of the Late Cretaceous to Tertiary Coast Plutonic Complex. The Boundary Ranges metamorphic suite is comprised of a wide range of protoliths from quartzose to pelitic or carbonaceous and calcareous sediments through volcanic tuffs or flows to small lenses to large bodies up to several kilometres across of gabbroic, dioritic, granodioritic and granitic intrusions and ultramafite. These rocks are believed to be Devonian to Middle Triassic in age.

The Whitehorse Trough is bounded by the Llewellyn fault to the west, and by the Nahlin fault to the east near Taku Arm (Tagish Lake). In the property area, the Whitehorse Trough rocks consist of the Upper Triassic Stuhini Group and Lower Jurassic Laberge Group. The Stuhini Group is comprised of basic to intermediate subalkaline volcanic flows, pyroclastics and related arc sediments. These rocks are intruded by Late Cretaceous and Paleogene granodioritic intrusions. The upper part of the Stuhini Group is comprised of conglomerate, limestone, shale and wacke. The Stuhini Group is correlative with the Lewes River Group in the Yukon and this sequence extends from central Yukon down to the Tulsequah River area in British Columbia.

The Laberge Group is divided into the Takwahoni and Inklin formations. They are dominated by immature marine clastics that are regionally metamorphosed to prehnitepumpellyite and epidote-albite facies. Adjacent to plutons they are hornfelsed to a higher grade. The Takwahoni Formation is of Early to Middle Jurassic age and consists of Stikinia-derived, conglomerate-rich clastic rocks. The Inklin Formation consists of an Early Jurassic, mainly fine grained clastic succession of rhythmically bedded argillites and greywackes with locally abundant thin conglomerate units. The argillite can be

noncalcareous to weakly calcareous to siliceous. Conglomerate units in both the Takwahoni and Inklin formations are polymictic with clasts of well rounded volcanic, sedimentary and intrusive lithologies.

The overlapping Lower to Middle Jurassic volcanic rocks crop out northwest and southeast of Tutshi Lake. They are composed of andesitic to dacitic bladed feldspar porphyry flows and tuffs, dacitic lapilli tuff, rhyolite flows and ash flows, variegated feldspar-phyric flows or coarse pyroclastics, and polymictic felsic lapilli tuffs. In many instances volcanism appears to have been focused along major structural breaks, such as the Nahlin and Llewellyn faults.

b) Property

The central portion of the Llewellyn property covers the northwest trending Llewellyn fault system. The fault zone consists of fault bound sections of the Stuhini Group consisting of argillite, greywacke, wacke, conglomerate turbidites; basalts; calc-alkaline volcanics; conglomerate, coarse clastic sedimentary rocks; limestone, marble, calcareous sedimentary rock; and rhyolite; fault bound Early Cretaceous diorite is also emplaced along the fault system.. In general, east of the fault zone and east of Tagish Lake, the property is underlain by Laberge Group-Inklin Formation sedimentary rocks, which include: argillite, greywacke, conglomerate, mudstone, siltstone, shale and fine clastics. The northwest part of the property and the area west of the fault zone is dominated by the Boundary Ranges Metamorphic suite which consists of Devonian to Middle Triassic greenstone and greenschist facies rocks. At the very northwestern reach of the property a plug of granitoid rocks from the Sloko-Hyder Plutonic Suite intrudes Boundary Ranges strata and Early Eocene Sloko Group rock comprising conglomerate, coarse clastic sedimentary rock; rhyolite; and volcaniclastic rock.

The crustal scale southeast trending Llewellyn fault transects the Llewellyn property along much of its southeast trending length. The steeply dipping fault marks the boundary between regionally metamorphosed rocks of the Yukon-Tanana Terrane on the west and Whitehorse Trough rocks on the east.

Locally the Llewellyn fault zone is a discreet, near vertical structure only a few tens of metres across. Lithologies within the fault zone are commonly silicified, sericitized, argillically altered, and pervasively cleaved; locally protomylonite and orthomylonite textures are preserved. More commonly, the Llewellyn fault zone is one to three kilometers across and is comprised of numerous elongate lenses of various, nearly vertical lithologies.

The fault provides conduits for pluton emplacement and mineralizing hydrothermal systems.

c) Mineralization

Tagish Top (MINFILE 104M 094)

The Tagish Top showing was discovered in 2006 by the author while investigating a radar satellite image indicating very high iron oxide near the northwester most corner of the Tagish Top claim, Llewellyn property. The showing area is underlain by phyllitic metasediments (quartzite) of the Devonian to Middle Triassic Boundary Range Metamorphic Suite close to the contact with granitic rocks of the Paleocene to Eocene Sloko-Hyder Plutonic Suite. A felsic dyke was also observed cutting across the ridge. The ridge turned out to be very gossanous and a brief helicopter landing allowed for the collection of three granitic rock samples. A sample of a rusty granitic rock yielded 8.5 grams per tonne silver, 0.09 per cent lead, 5000 ppm arsenic, and 211 ppm molybdenum (Burjoski, 2007). While lumped into the polymetallic vein deposit category, more work on the showing may yet determine if there is potential for a porphyry style molybdenum deposit or a skarn deposit.

Glean (MINFILE 104M 078)

The Golden Bee group of claims were staked by Golden Bee Minerals in 1989. Golden Bee Minerals conducted a program of sampling, mapping, prospecting and geochemical surveys in 1989 and 1990. Maps from the Golden Bee programs report indicate that part of the Glean showing is on the Llewellyn property tenures. The following is taken in whole from MINFILE.

The area, bounded by faults, is underlain by sediments of the Lower Jurassic Laberge Group. These comprise greywacke, argillite, shale and conglomerate intruded by granite near Bee Peak. The Llewellyn fault is 2 kilometres to the west and separates these rocks from the Coast Plutonic Complex. To the east, the Nahlin fault separates the rocks from the Cache Creek Group. The area of the showing contains splays from these major faults. The bedding generally trends north to northwest.

At the Glean showing, mineralization is hosted in rhyolite, basalt, andesite and tuff of the Paleocene Tagish Volcanic Suite. Mineralization occurs in several silicified shears, 1 to 8 metres wide, displaying parallel, stacked and en echelon zoning. Mineralization, as sparse disseminations and concentrations of up to 40 per cent, consists of pyrite, arsenopyrite, chalcopyrite, galena and pyrrhotite. Sulphides, 1 per cent or less, also occur within large altered units of andesite and rhyolite. A copper zone has been identified by malachite staining on the east face of the rhyolite talus. Alteration consisting of silicification +/-chlorite and sericite is associated with mineralized zones. Samples were taken from the altered contact zone between andesite and banded brecciated rhyolite flows of uncertain age. The zone, 1 metre wide and exposed for 75 metres in length, trends north-south and dips 50 degrees east. The highest sample (89-5R03) assayed 3.2 grams per tonne gold, 58.9 grams per tonne silver, 0.095 per cent copper, 0.986 per cent lead, 0.203 per cent zinc, 8 per cent arsenic and 0.06 per cent antimony (Thompson, 1990b).

Samples in 1990 confirmed these values and further delineated the zone (Lunn and Thompson, 1990b)

Bee Lake Occurrence

In 1981, claims on the east side of Tagish Lake were under option to Nomad Resources Ltd and Tagish Resources Ltd (Ashton, 1982). Limited prospecting was done at the time and several samples were collected in an area west of Bee Lake. The 1981 claims covered some of the same ground that is presently held as part of the Llewellyn Property. About 500 metres west of Bee Lake, is a low erratic greywacke outcrop where two greywacke samples (5 and 6) were taken, about 400 metres apart. Sample 2 was taken about 500 metres west of Sample 5 from greywacke outcrop in an area where outcrop was reported as scarce. Two other samples, about 350 metres north of Sample 2 and 500 meters south proved not to be anomalous.

Sample 2) greywacke outcrop 0 0.026 oz/ton gold (0.9 g/t gold)
Sample 5) greywacke loose, minor pyrite, 0.082 oz/ton gold (2.81 g/t gold)
Sample 6) greywacke, silicified, pyritized, loose, 0.152 oz/ton gold (5.21 g/t gold)

Assays certificates showing the assay results for Samples 5 and 6 are in included in Ashton (1982). A.S. Ashton who authored the assessment report (10511) documenting the 1981 sampling program is identified as a P.Eng.

Northwest Showing

In 1988, 1989 and 1990 Cyprus Gold (Canada) Ltd conducted assessment programs on their Teepee property which covered parts of the northwestern most section of the present Llewellyn Property. Significant mineralized in situ outcrop and float were found in the 'Grissly' Creek area.

d) Engineer Mine

The following was taken from BC Gold's web site with BC Gold being the current operators of the Engineer Mine:

Gold was discovered on the Engineer Mine property in 1899. A total of 561,659 grams gold (18,058 ounces) and 278,373 grams silver (8,950 ounces) was produced from 14,263 tonnes of ore at Engineer Mine during the period 1913 and 1952. This equates to total realized gold and silver production grades of 39.38 g/t gold (1.15 oz/ton) and 19.52 g/t Ag (0.57 oz/ton), respectively.

Quartz veining and gold mineralization occurs in two modes at Engineer Mine and is directly related to two main shear zones. Both shear zones form distinct regional-scale lineaments trending sub-parallel at 145 degrees and 160 degrees. High grade gold and silver mineralization occurs in several narrow, less than 2 metre wide tensional and vertical, northeast-southwest striking quartz-calcite veins hosted in well bedded

sediments of the Lower Jurassic Laberge Group. Veins pinch and swell along strike and display good vertical continuity.

Lower grade gold mineralization is known to occur within the two broad shear zones and subordinate structures, as well as in two densely veined / stockworked quartz "hubs" that appear to represent intersection points with secondary north-south structures. The latter offers excellent potential for lower grade, bulk-tonnage gold mineralization.

Gold and silver mineralization at Engineer has been characterized as transitional epi-mesothermal (B.C. Ministry of Energy and Mines Bulletin 105). Gold grades are very sporadic ranging from trace to 50 grams per tonne gold. Native gold is the principle metallic mineral and occurs in pockets associated with roscoelite, a dark green to black micaceous alumino-silicate. Minor pyrite, tetrahedrite, chalcopyrite, antimony, berthierite, allemontite and tellurides are also reported. Ore grade vein material displays vuggy and drusy quartz crystals and abundant cockscomb and colloform textures in successive layers of quartz and calcite coating country rock fragments and vein material.

GRID EMPLACEMENT

The grid was emplaced as the MMI soil sampling survey was being carried out. This was done by using the UTM coordinates, zone 8, NAD 83, as the grid base and by employing a GPS unit, with the aid of a compass and hip chain. The lines were put in every 100 meters in an east-west direction and the stations were put in every 25 meters along the lines. These were marked by blaze orange flagging with the line and station number marked thereon. The line numbers, being the UTM northings used only the final six digits and thus were missing the first number being six. Thus, for example, line 599600N is actually UTM northing 6299600. The stations were marked used the full UTM six digit easting.

MMI SOIL SAMPLING

(a) Sampling Procedure

The first line was a reconnaissance one that carried out in July, 2007 and was located to run due northeast across the northwest-trending Llewellyn fault. It consisted of 107 samples picked up along a 2,675 meter length running in a northeast-southwest direction with samples picked up every 25 meters. The lab results revealed a copper-molybdenum-zinc anomaly at its southwest end as well as strong gold anomaly midway within the northeastern half. Thus this work was followed up with seven additional lines carried out in the fall of 2007 with the lines running in an east-west direction. In 2011 further work was carried out with 819 samples over thirteen lines totaling 21,550 meters.

The sampling procedure was to first remove the organic material from the sample site (A_0 layer) and then dig a pit over 25 cm deep with a shovel. Sample material was then

scraped from the sides of the pit over the measured depth interval of 10 centimeters to 25 centimeters. About 250 grams of sample material were collected and then placed into a plastic Zip-loc sandwich bag with the sample location marked thereon. The 800 samples were then packaged and sent to SGS Minerals located at 1885 Leslie Street, Toronto, Ontario. (This is only one of three labs in the world that do MMI analysis, the other being in Perth, Australia where the MMI method was developed.)

(b) Analytical Methods

At SGS Minerals, the testing procedure begins with weighing 50 grams of the sample into a plastic vial fitted with a screw cap. Next is added 50 ml of the MMI-M solution to the sample, which is then placed in trays and put into a shaker for 20 minutes. (The MMI-M solution is a neutral mixture of reagents that are used to detach loosely bound ions of any of the 53 elements from the soil substrate and formulated to keep the ions in solution.) These are allowed to sit overnight and subsequently centrifuged for 10 minutes. The solution is then diluted 20 times for a total dilution factor of 200 times and then transferred into plastic test tubes, which are then analyzed on ICP-MS instruments.

Results from the instruments for the 53 elements are processed automatically, loaded into the LIMS (laboratory information management system which is computer software used by laboratories) where the quality control parameters are checked before final reporting.

(c) Compilation of Data

16 elements, or metals, were chosen out of the 53 reported on and these were silver, arsenic, gold, calcium, cadmium, cerium, cobalt, copper, potassium, lithium, nickel, lead, zinc, cobalt, thorium, titanium, and zinc. Plan maps were then made of each of these elements and numbered GC-1 to GC-16, respectively. In addition, 9 elements were chosen out of the above 16, and these were copper, cadmium, cerium, gold, silver, cobalt, nickel, lead, and zinc. The mean background value was calculated for each of the nine metals and this number was then divided into the reported value for that metal to obtain a figure called the response ratio. Two stacked histograms were then made of the response ratios for each of the 13 lines of the nine metals in order to show correlation between the various metals. The first stacked histogram included copper, gold, silver, cobalt, and zinc, and these were labeled H1A to H13 A, respectively. The second one included copper, cadmium, cerium, molybdenum, nickel, and lead and these were labeled H1B to H13B, respectively. Copper, appearing to be one of the main metals, was used in both sets of histograms in order to assist in comparing the metals between the two different sets.

DISCUSSION OF RESULTS

The MMI survey revealed three MMI anomalies or anomalous zones that have been labeled by the upper case letters BA to BC. These anomalies were mainly defined by the copper and

gold results. The 'B' stands for the Bee Lake Grid and is used to differentiate these anomalies from those of the MMI survey on the west side of Tagish Lake.

Anomaly BA occurs at the west end of Bee Lake and consists of two parts. The main part occurs on Bee Lake to its southwest and is 400 meters wide in a north-south direction and a minimum 900 meters long in an east-west direction with it being open to the east and onto Bee Lake to the northeast. It therefore appears to be striking easterly. It consists mainly of copper and gold anomalous results with the copper being up to 34 times background and the gold, up to 506 times background. Anomaly BA also contains anomalous values in arsenic, cadmium, cobalt, lithium, and zinc. Anomalous cobalt often is an indication of pyrite since cobalt at times occurs within the crystal structure of pyrite.

There is some evidence that Anomaly BA may extend to the north and thus this part, which is the second part, is designated as BA?. This part of the anomaly strikes to the north and has dimensions of 450 meters in an east-west direction by a minimum 550 meters in a north-south direction with it being open to the north. This part of the anomaly is similar to the main part in that it is primarily a copper/gold anomaly with additional anomalous values in arsenic, cadmium, cobalt, lithium, and zinc. However, the copper and gold values are, in general, lower than those of the main anomaly with the copper reaching 16 times background and gold, 26 times background.

The main point of interest for anomaly BA is that the 1981 grab samples #5 containing 2.81 g/t gold and #6 containing 5.21 g/t gold occur within the anomaly BA area. This indicates that the mineralization may occur over a much wider area. However, it is difficult to say whether the gold mineralization as represented by the two rock outcrops extend from one to the other since there are areas of non-anomalous results between them. Nevertheless, the fact that two widely spaced rock outcrops contain significant mineralization is of strong exploration interest.

It appears that anomaly BA occurs along a lithological contact with a different rock type occurring to the immediate west of the anomaly. This is reflected by a number of different elements, especially potassium which shows a very definite lineation along the west side of BA with higher values to the west and lower values to the east including the anomaly area. This is also true for silver, calcium, nickel, and cerium, though for these elements, the boundary is less distinct.

On the other hand, thorium is higher to the east of the possible contact so that the thorium/potassium ratio map also shows a very distinct lineation. Uranium is also higher to the east but this should not be construed as indicating uranium mineralization since the MMI values are quite low and thus the uranium values are only of a lithological interest. It should also be kept in mind that the MMI lineation could also be reflecting an alteration contact rather than a lithological one.

Anomaly BB is located on the west side of the grid centered at 599750N. This anomaly strikes northerly with the dimensions being 450 meters in a north-south direction and 150

meters in an east-west direction with it possibly being open to the west. This anomaly is primarily a copper one with lesser values in gold and silver. Copper reaches a high of 45 times background, gold, 24, and silver, 12. It is also strongly anomalous in lithium which is 17 times background.

Zinc and cadmium are anomalous within the southern part of the anomaly and south of the anomaly. If zinc and cadmium are used to define anomaly BB, then the areal extent is significantly larger to the south but the strike is extended only a further 50 meters to 500 meters. That is, BB is fairly narrow within the southern part but the zinc and cadmium anomalous results widen it to the south.

Anomaly BB is high in calcium and nickel, but low in potassium, thorium, and cerium. The nickel may indicate nickel mineralization but it could also indicate that the host rock is a basic or ultra-basic rock type. The thorium/potassium ratio is low which indicative of certain types of deposits such as calc-alkalic types, though BB is not likely reflecting this type of deposit.

The approximate location of sample #2 is 200 meters to the east. It is possible that #2 sample site may occur further west to correlate with anomaly BB, considering that the locations were taken from an old map before the time of GPS units. There are also elevated gold values nearby and thus the #2 sample may simply be taken from localized mineralization.

Anomaly BC occurs at the northwest corner of the grid about 140 meters east of Tagish Lake. It is primarily a copper/gold/silver anomaly with copper being up 20 times background, gold, 22, and silver, 20. The anomaly occurs on only two lines but is quite strong on the northern-most line, 600100N, where it is open to the north and therefore suggests strong potential to the north. The dimensions of the anomaly are 225 meters east-west by a minimum 150 meters north-south.

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GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Surrey, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Consulting Geophysicist of Geotronics Consulting Inc, with offices at 6204 – 125th Street, Surrey, British Columbia.

I further certify that:

1. I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
2. I have been practicing my profession for the past 40 years, and have been active in the mining industry for the past 43 years.
3. This report is compiled from data obtained from MMI soil sampling carried out by a crew of Geotronics Consulting under my direction along survey lines to the west of Bee Lake and east of Tagish Lake within the Llewellyn Property within the Atlin Mining Division of British Columbia. The work was done from September 13th to October 5th, 2011.
4. I do not hold any interest in Momentum Minerals Inc, nor in the property discussed in this report, nor in any other property held by this company, nor do I expect to receive any interest as a result of writing this report.

David G. Mark, P.Geo. March 18th, 2012
Geophysicist

AFFIDAVIT OF EXPENSES (2011 Work)

Grid emplacement as well as MMI soil sampling was carried out on the Llewellyn Property, which occurs on Tagish Lake to the west of the village of Atlin, B.C. This work was done during the period of September 13th to October 5th, 2011, to the value of the following:

MOB/DEMOB:		
Crew wages	$14,700.00	
Geologist, 7 day @ $600/day	4,200.00	
Room and board	5,605.00	
Truck rental and gas	1,800.00	
Airline flights, Vancouver to Whitehorse, return	3,990.00	
TOTAL	$29,665.00	$29,665.00
FIELD:		
Helicopter	$19,500.00	
Junior geologist/supervisor, Tim Norris, 9 days @ $600/day	5,400.00	
6-man crew, 8 days @ $3,400/day	27,200.00	
Expediting, 3rd party costs	620.00	
Courier costs for sample shipping	950.00	
TOTAL	$53,670.00	$53,670.00
LABORATORY:		
Laboratory testing of 800 samples @ $39/sample	$31,200.00	$31,200.00
DATA REDUCTION and REPORT:		
Senior Geophysicist, 15 hours @ $75/hour	$1,125.00	
Geophysical technician, 45 hr @ $50/hr	2,250.00	
Report compilation, photocopying, etc	200.00	
TOTAL	$3,575.00	$3,575.00
GRAND TOTAL		118,730.00

Respectfully submitted,
Geotronics Consulting Ltd.

David G. Mark, P.Geo,
Geophysicist

March 18th, 2012

APPENDIX –GEOCHEMISTRY DATA

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
DETECTION		1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1
UNITS		ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb
598900	543000E	7	75	<10	<0.1	1190	<1	220	13	48	95	100	4.6	160	21	11.1	4.4	28	2
598900	543025E	4	95	<10	<0.1	1550	<1	380	21	34	154	<100	3.3	140	13	7.3	2.3	31	2
598900	543050E	18	117	30	<0.1	1940	<1	300	14	41	54	<100	4.5	130	10	5	2.1	36	3
598900	543075E	7	75	<10	<0.1	1470	<1	350	54	34	150	<100	10.5	110	9	4.8	2.1	20	2
598900	543100E	7	86	30	0.1	860	<1	350	10	29	69	<100	11.6	290	7	3.3	1.9	17	2
598900	543125E	15	74	<10	<0.1	1770	<1	400	30	56	115	<100	12.1	750	24	11.4	6.4	18	2
598900	543150E	7	74	20	<0.1	1880	<1	480	58	13	128	<100	7.9	150	3	1.5	0.7	16	2
598900	543175E	23	122	170	0.1	2260	<1	230	14	58	82	100	4.8	250	11	5.6	2.5	81	7
598900	543200E	10	121	60	<0.1	1260	<1	260	44	48	99	<100	15.7	170	11	5.4	2.5	52	4
598900	543225E	16	100	20	<0.1	2120	<1	330	25	57	171	<100	13.2	340	15	7.4	3.9	44	3
598900	543250E	2	91	<10	<0.1	1630	<1	440	52	33	208	<100	12.3	220	13	7.6	2.8	28	2
598900	543275E	7	97	<10	<0.1	1390	<1	350	56	87	97	<100	12.3	260	30	16.4	6.7	26	2
598900	543300E	6	88	<10	<0.1	1800	<1	300	30	74	253	<100	6.7	340	26	13	6.7	24	2
598900	543325E	28	70	20	0.2	2160	<1	380	9	22	123	<100	5	180	5	2.4	1.4	16	2
598900	543350E	21	113	<10	<0.1	1770	<1	350	40	43	103	<100	7.6	190	18	10.2	3.9	30	2
598900	543375E	<1	53	<10	<0.1	820	<1	370	87	28	183	<100	4.7	140	7	4	1.5	12	2
598900	543400E	11	51	<10	<0.1	1360	<1	470	24	20	91	<100	7.2	500	7	3.3	2.1	13	1
598900	543425E	10	64	<10	<0.1	1910	<1	310	41	35	81	100	3.7	550	15	7.5	4.7	17	1
598900	543475E	6	109	<10	<0.1	2690	<1	380	30	57	191	<100	4	290	28	16.3	6.1	43	2
598900	543500E	13	202	20	<0.1	2470	<1	170	25	76	290	<100	5.7	740	39	20.1	7.5	71	6
598900	543525E	4	57	<10	<0.1	1520	<1	420	53	52	232	100	6.7	380	25	13.2	6.8	17	1
598900	543550E	8	97	<10	<0.1	3000	<1	510	71	98	266	<100	2	750	45	25.9	10.9	42	2
598900	543575E	23	117	<10	<0.1	2280	<1	380	57	76	150	<100	5.9	870	33	17.6	7.3	25	2
598900	543600E	13	68	10	<0.1	1280	<1	410	153	57	243	<100	4.7	410	17	8.3	4.2	27	1
598900	543625E	5	136	20	<0.1	2270	<1	310	52	55	163	<100	2.7	600	25	13.8	4.4	51	3
598900	543650E	3	119	10	<0.1	3000	<1	320	375	73	192	<100	8.4	560	34	18.8	7.6	83	2
598900	543675E	19	59	<10	<0.1	2770	<1	490	159	48	96	<100	3	690	19	9	6.6	23	1
598900	543700E	49	29	<10	0.3	2040	<1	580	47	23	163	<100	2.7	2560	14	6.5	5.8	11	<1
598900	543725E	14	148	10	<0.1	2930	<1	240	65	52	199	<100	5.3	490	26	13.5	5.2	83	2
598900	543750E	15	159	40	<0.1	1890	<1	220	43	66	116	<100	5.9	460	31	14.7	6.2	50	4
599000	543550E	26	251	30	<0.1	8530	<1	80	36	140	630	<100	6.8	630	49	25.2	10.8	132	6
599000	543575E	21	198	60	0.1	2030	<1	220	28	68	232	<100	3.8	300	16	7.6	3.4	130	6
599000	543650E	12	299	<10	<0.1	2600	<1	180	35	8	352	<100	<0.5	580	11	7.1	1.2	71	2
599000	543700E	2	152	<10	0.1	3610	<1	300	19	9	306	<100	<0.5	400	17	33.8	1.2	174	3
599000	543725E	4	138	<10	0.4	3480	<1	260	8	<5	342	<100	1.3	620	6	15.8	<0.5	204	1
599000	543750E	12	214	10	0.3	4310	<1	150	51	110	469	<100	2.1	1630	159	86.1	24.2	151	3
599000	543775E	9	211	10	0.1	2140	<1	200	116	25	603	<100	0.6	670	49	30.2	6	181	5
599000	543800E	12	184	30	<0.1	3810	<1	200	125	53	449	<100	1.5	410	37	20.1	7	205	4
599000	544100E	11	90	<10	<0.1	2260	<1	600	57	58	52	<100	2.8	200	21	9.3	6.3	28	2
599000	544125E	12	97	<10	<0.1	7020	<1	670	25	38	13	<100	0.9	230	27	16.2	6	41	1
599000	544150E	19	101	<10	0.1	3470	<1	490	20	58	35	<100	1	340	65	36.2	11.2	65	2
599000	544175E	2	180	<10	<0.1	2550	<1	230	216	6	1070	<100	1	180	7	6.8	0.6	163	6
599000	544200E	11	221	<10	<0.1	1950	<1	210	50	77	71	<100	4.8	180	23	9.6	4.3	73	8
599000	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599000	544250E	10	119	<10	<0.1	4110	<1	510	15	87	8	<100	15.9	140	24	10.8	7.2	29	2
599000	544300E	3	228	20	<0.1	2050	<1	170	29	29	356	<100	1.8	170	19	10.5	2.9	137	6
599000	544325E	4	151	20	<0.1	3600	<1	60	8	8	84	<100	0.7	740	1	0.8	<0.5	388	4
599000	544350E	3	>300	30	<0.1	1440	<1	<10	29	6	668	<100	0.8	150	7	6.1	0.6	140	4
599000	544375E	5	126	10	0.1	2840	<1	330	15	48	424	<100	6.9	700	21	11.8	4.7	134	2

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
DETECTION		1	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5
UNITS		ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb
598900	543000E	19	<1	<0.5	46.9	16	<5	26	8300	<5	<0.5	35	190	0.6	90	<1	6	<1	114
598900	543025E	12	<1	<0.5	70.9	12	<5	24	6990	<5	<0.5	22	116	0.4	130	<1	4	<1	163
598900	543050E	10	<1	<0.5	29.5	17	<5	32	3550	<5	<0.5	27	143	0.4	240	<1	5	<1	160
598900	543075E	9	<1	<0.5	131	12	<5	39	11800	<5	<0.5	20	285	0.4	80	<1	4	<1	239
598900	543100E	8	<1	<0.5	101	10	<5	36	2540	<5	<0.5	19	133	0.6	90	<1	4	<1	168
598900	543125E	26	<1	<0.5	140	23	<5	51	7530	<5	<0.5	49	290	0.8	60	<1	9	<1	179
598900	543150E	3	<1	<0.5	88.4	6	<5	51	3350	<5	<0.5	9	177	0.5	70	<1	2	<1	212
598900	543175E	11	<1	<0.5	24.7	24	<5	25	2690	<5	1	32	123	0.9	240	<1	7	<1	159
598900	543200E	11	<1	<0.5	59.4	19	<5	23	4710	<5	0.7	29	185	0.8	160	<1	6	<1	190
598900	543225E	16	<1	<0.5	59.8	20	<5	28	4590	<5	<0.5	38	296	0.8	120	<1	7	<1	168
598900	543250E	12	<1	<0.5	145	13	<5	55	11200	<5	<0.5	24	168	0.7	110	<1	5	<1	177
598900	543275E	29	<1	<0.5	52.8	26	16	35	7540	<5	<0.5	53	311	0.5	90	<1	10	<1	215
598900	543300E	27	<1	<0.5	192	20	6	52	11000	<5	<0.5	53	476	0.7	130	<1	9	<1	184
598900	543325E	6	<1	<0.5	125	8	<5	53	3630	<5	<0.5	15	165	0.6	70	<1	3	<1	136
598900	543350E	18	<1	<0.5	156	17	5	28	7220	<5	<0.5	37	515	0.7	100	<1	7	<1	118
598900	543375E	6	<1	<0.5	110	7	<5	59	25500	<5	<0.5	13	84	1	40	<1	3	<1	125
598900	543400E	8	<1	<0.5	87.7	6	<5	48	7600	<5	0.6	15	266	1	20	<1	2	<1	157
598900	543425E	18	<1	<0.5	71	13	<5	39	7240	<5	<0.5	33	264	1.1	30	<1	6	<1	85
598900	543475E	25	<1	<0.5	122	23	<5	42	10800	<5	<0.5	49	278	1.3	80	<1	9	<1	177
598900	543500E	32	<1	<0.5	45.6	29	<5	19	4460	<5	<0.5	64	349	2.8	260	<1	11	<1	136
598900	543525E	27	<1	<0.5	103	28	<5	40	11300	<5	<0.5	53	285	1.4	30	<1	10	<1	88
598900	543550E	47	<1	<0.5	51.2	44	<5	65	14000	<5	<0.5	95	451	1.5	60	<1	17	<1	96
598900	543575E	32	<1	<0.5	48.4	28	<5	20	6430	<5	<0.5	60	351	0.7	90	<1	11	<1	164
598900	543600E	18	<1	<0.5	55.9	16	<5	39	9570	<5	<0.5	37	600	0.6	50	<1	7	<1	100
598900	543625E	19	<1	<0.5	36.2	19	<5	28	7910	<5	<0.5	37	193	0.8	200	<1	7	<1	144
598900	543650E	31	<1	<0.5	61.9	29	<5	52	10700	<5	0.6	62	328	1.3	110	<1	12	<1	132
598900	543675E	26	<1	<0.5	64.9	22	<5	46	6680	<5	<0.5	55	501	1.5	30	<1	9	<1	58
598900	543700E	21	<1	<0.5	33.7	15	<5	27	5250	<5	<0.5	43	491	0.6	<10	<1	7	<1	30
598900	543725E	23	<1	<0.5	58.6	21	<5	52	9560	<5	0.5	44	392	1.9	170	<1	8	<1	78
598900	543750E	27	<1	<0.5	46.5	27	<5	17	5630	<5	0.7	54	307	1.3	210	<1	10	<1	138
599000	543550E	42	<1	<0.5	58.7	42	<5	19	11700	<5	1.1	94	512	7.1	270	<1	17	<1	196
599000	543575E	15	<1	<0.5	33.1	23	<5	29	1860	<5	0.7	38	223	2.3	350	<1	8	<1	122
599000	543650E	6	<1	<0.5	20.2	2	13	38	510	<5	<0.5	9	152	0.7	340	<1	1	<1	13
599000	543700E	5	<1	<0.5	31.1	4	6	41	230	<5	<0.5	8	198	0.8	50	<1	1	<1	<5
599000	543725E	1	<1	<0.5	22.5	1	<5	50	2700	<5	<0.5	2	193	0.3	<10	<1	<1	<1	57
599000	543750E	110	<1	<0.5	16.6	30	<5	51	1730	<5	<0.5	167	532	0.7	250	<1	25	<1	52
599000	543775E	28	<1	<0.5	27.3	7	9	52	920	<5	<0.5	35	221	1.6	290	<1	5	<1	47
599000	543800E	30	<1	<0.5	30.8	19	17	44	8090	<5	<0.5	53	227	3.1	290	<1	9	<1	55
599000	544100E	24	<1	<0.5	48.4	20	<5	97	2190	<5	<0.5	48	429	1	60	<1	8	<1	179
599000	544125E	25	<1	<0.5	4.4	21	<5	88	880	<5	<0.5	42	201	0.2	80	<1	8	<1	36
599000	544150E	54	<1	<0.5	2.9	42	<5	47	1600	<5	<0.5	86	205	0.2	160	<1	16	<1	22
599000	544175E	2	<1	<0.5	23	2	10	42	11100	<5	0.6	3	58	2.5	220	<1	<1	<1	13
599000	544200E	20	<1	<0.5	12.6	28	<5	23	2680	<5	0.6	54	56	2.2	320	<1	11	<1	117
599000	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599000	544250E	30	<1	<0.5	10.3	34	<5	32	490	<5	<0.5	70	70	0.7	50	<1	13	<1	186
599000	544300E	12	<1	<0.5	22.3	8	<5	41	8250	<5	0.7	25	89	1.6	700	<1	4	<1	56
599000	544325E	1	<1	<0.5	33.2	4	<5	16	5480	<5	1.5	4	108	1.6	<10	<1	<1	<1	9
599000	544350E	2	<1	<0.5	13.8	2	<5	5	13400	<5	0.7	4	48	1.2	310	<1	<1	<1	56
599000	544375E	19	<1	<0.5	14.1	23	<5	25	20500	<5	<0.5	41	208	0.6	180	<1	8	<1	150

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
DETECTION		1	5	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
598900	543000E	<1	34	13	<1	1160	<1	3	<10	6.3	37	<0.5	7	<1	102	9	150	8
598900	543025E	<1	23	8	<1	2660	<1	2	<10	6.2	26	<0.5	11	<1	70	5	320	6
598900	543050E	1	13	8	<1	2190	<1	2	<10	7.6	86	<0.5	6	<1	50	4	260	8
598900	543075E	<1	9	7	<1	2090	<1	1	<10	3.7	25	<0.5	6	<1	46	4	870	<5
598900	543100E	1	7	6	<1	2230	<1	1	<10	7.4	48	<0.5	5	<1	30	2	410	<5
598900	543125E	<1	17	18	<1	2230	<1	4	<10	4.2	15	<0.5	7	<1	116	8	870	6
598900	543150E	<1	6	3	<1	3480	<1	<1	<10	4.8	38	<0.5	4	<1	17	1	1990	<5
598900	543175E	5	26	9	<1	2010	<1	2	<10	19.4	290	<0.5	9	<1	54	4	230	17
598900	543200E	2	20	9	<1	2150	<1	2	<10	13.1	135	<0.5	9	<1	48	4	490	10
598900	543225E	<1	22	12	<1	2670	<1	2	<10	8.4	64	<0.5	8	<1	72	5	250	8
598900	543250E	<1	26	8	<1	3870	<1	2	<10	5	21	<0.5	10	<1	72	6	840	8
598900	543275E	<1	52	19	<1	2890	<1	4	<10	8.3	22	<0.5	14	<1	164	12	280	8
598900	543300E	<1	20	19	<1	1620	<1	4	<10	4.8	16	<0.5	6	<1	118	9	490	6
598900	543325E	<1	<5	5	<1	2790	<1	<1	<10	4.6	22	<0.5	5	<1	25	2	270	<5
598900	543350E	<1	17	12	<1	2520	<1	3	<10	5.8	21	<0.5	20	<1	98	8	240	10
598900	543375E	<1	6	5	<1	2720	<1	1	<10	2.7	23	<0.5	4	<1	32	3	2730	<5
598900	543400E	<1	8	6	<1	2540	<1	1	<10	4.8	23	<0.5	5	<1	30	2	320	<5
598900	543425E	<1	11	12	<1	1710	<1	3	<10	2.2	15	<0.5	4	<1	74	5	400	<5
598900	543475E	<1	41	17	<1	2360	<1	4	<10	7.4	27	<0.5	12	<1	149	12	500	11
598900	543500E	<1	57	22	<1	1350	<1	6	<10	17.8	99	<0.5	10	<1	202	14	440	25
598900	543525E	<1	12	18	<1	2200	<1	4	<10	2.1	16	<0.5	6	<1	142	10	3100	<5
598900	543550E	<1	39	32	<1	2990	<1	7	<10	7.1	34	<0.5	11	<1	255	19	2540	7
598900	543575E	<1	50	21	<1	2780	<1	5	<10	8.5	22	<0.5	13	<1	175	12	590	10
598900	543600E	2	18	13	<1	2500	<1	3	<10	6.1	21	<0.5	9	<1	82	6	940	7
598900	543625E	<1	71	13	<1	2490	<1	3	<10	16.6	47	<0.5	25	<1	130	10	1100	12
598900	543650E	<1	66	21	<1	2370	<1	5	<10	12.6	41	<0.5	12	<1	187	13	6500	17
598900	543675E	<1	13	18	<1	2630	<1	3	<10	4.7	12	0.5	6	<1	104	6	1590	7
598900	543700E	<1	17	15	<1	3450	<1	3	<10	6.1	4	0.6	7	<1	82	5	130	<5
598900	543725E	2	59	15	<1	1690	<1	4	<10	15.4	37	<0.5	12	<1	129	10	870	23
598900	543750E	8	46	18	<1	1490	<1	5	<10	23.4	78	<0.5	16	<1	145	10	700	18
599000	543550E	3	115	31	<1	920	<1	7	<10	30.9	193	<0.5	11	<1	257	18	450	20
599000	543575E	3	29	12	<1	2660	<1	3	<10	17.8	138	<0.5	6	<1	74	5	240	15
599000	543650E	<1	22	3	<1	3320	<1	1	<10	7.6	29	<0.5	5	<1	60	5	860	<5
599000	543700E	2	69	3	<1	4270	<1	1	<10	7.4	32	<0.5	20	<1	130	51	1040	8
599000	543725E	1	33	<1	<1	3740	<1	<1	<10	3.8	7	<0.5	9	<1	33	18	100	<5
599000	543750E	2	112	64	<1	2020	<1	22	<10	11.1	24	<0.5	11	<1	1110	55	950	<5
599000	543775E	1	52	15	<1	2580	<1	6	<10	7.8	49	<0.5	7	<1	298	20	1750	<5
599000	543800E	4	69	19	<1	2370	<1	5	<10	13	64	<0.5	8	<1	218	15	1850	9
599000	544100E	<1	16	17	<1	4820	<1	4	<10	1.8	8	<0.5	4	<1	110	6	540	<5
599000	544125E	<1	48	15	<1	7030	<1	4	<10	3.6	5	<0.5	25	<1	207	12	190	<5
599000	544150E	<1	77	30	<1	5580	<1	9	<10	5.5	8	<0.5	30	<1	464	24	40	<5
599000	544175E	<1	46	1	<1	2470	<1	<1	<10	9.4	121	<0.5	9	<1	41	6	5440	11
599000	544200E	<1	32	15	<1	2280	<1	4	<10	13.8	147	<0.5	7	<1	114	6	740	13
599000	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599000	544250E	<1	27	22	<1	4320	<1	4	<10	3.9	14	0.8	14	<1	123	6	60	7
599000	544300E	1	45	8	<1	1720	<1	3	<10	10.7	194	<0.5	6	<1	100	8	320	18
599000	544325E	2	17	<1	<1	870	<1	<1	<10	4.8	263	<0.5	4	<1	7	<1	100	16
599000	544350E	2	32	1	<1	130	<1	<1	<10	6.1	203	<0.5	5	<1	39	5	660	11
599000	544375E	3	45	13	<1	2550	<1	3	<10	10	65	0.5	10	<1	134	9	450	11

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599000	544400E	<1	246	<10	<0.1	1640	<1	70	26	<5	400	<100	0.8	120	8	9.5	<0.5	139	6
599000	544425E	<1	243	20	<0.1	1400	<1	30	16	<5	48	<100	<0.5	300	<1	<0.5	<0.5	252	6
599000	544450E	2	37	20	0.1	1000	<1	580	78	69	190	<100	1.8	590	34	18	10.9	66	2
599000	544475E	8	151	10	0.1	1010	<1	340	21	35	75	<100	1.8	180	18	9.4	4.4	107	4
599000	544500E	5	91	<10	<0.1	1280	<1	600	38	74	40	<100	6.3	420	39	22.8	9.6	24	1
599000	544525E	29	45	<10	0.3	1290	<1	650	27	33	20	<100	115	530	17	7.5	5.6	11	1
599000	544550E	5	90	<10	0.1	1310	<1	600	29	58	25	<100	6.1	310	34	18.4	8.1	22	1
599000	544575E	<1	68	60	0.2	1270	<1	430	13	9	147	<100	1.9	1370	4	2.1	0.9	252	1
599000	544600E	5	289	40	<0.1	1020	<1	10	12	19	169	<100	0.7	210	10	8.7	0.9	133	5
599000	544625E	1	106	80	<0.1	1000	<1	60	3	7	55	<100	0.9	970	<1	0.7	<0.5	447	3
599000	544650E	4	271	40	<0.1	1370	<1	60	57	87	247	<100	6.5	290	41	20.2	8	110	6
599000	544675E	1	204	10	<0.1	620	<1	170	72	74	183	<100	4.7	310	38	19.8	6.9	72	4
599000	544725E	3	236	20	<0.1	1020	<1	50	55	10	338	<100	2.5	330	17	15.9	1.1	169	5
599000	544750E	3	247	20	<0.1	730	<1	70	126	14	229	<100	<0.5	140	11	8.6	1	103	4
599100	543000E	6	67	<10	0.5	810	<1	480	47	59	9	<100	2.1	630	99	64.2	16.3	24	1
599100	543025E	9	60	<10	<0.1	2100	<1	450	27	73	69	<100	6.7	160	18	9.3	4.6	40	2
599100	543050E	18	289	10	<0.1	1340	<1	110	18	64	70	<100	1.5	330	16	6.8	3.1	52	4
599100	543075E	8	94	20	<0.1	2280	<1	420	97	37	152	<100	2.6	180	10	5.5	2	48	4
599100	543100E	11	8	<10	<0.1	580	<1	610	48	<5	11	<100	<0.5	110	<1	<0.5	<0.5	8	<1
599100	543125E	37	79	<10	<0.1	2280	<1	410	29	130	146	<100	5.8	550	33	16.6	9.2	29	3
599100	543150E	2	84	60	0.2	1400	<1	220	10	18	312	<100	1.6	990	7	6	1.3	312	2
599100	543175E	7	96	<10	<0.1	1350	<1	370	20	49	89	<100	9.8	230	14	6.8	3.6	29	3
599100	543200E	14	118	50	<0.1	2240	<1	250	21	105	243	<100	7	270	13	7	3.2	53	7
599100	543225E	9	122	<10	<0.1	1470	<1	410	56	65	238	<100	2.5	750	25	16.3	4.5	59	3
599100	543250E	11	83	<10	0.1	3010	<1	410	41	45	96	<100	3.8	110	14	7.4	3.4	26	3
599100	543275E	23	91	<10	<0.1	1600	<1	480	44	75	221	<100	2.2	670	35	19.9	8.7	40	3
599100	543300E	10	90	<10	<0.1	1970	<1	430	58	46	145	<100	2.7	380	16	7.8	4.2	24	3
599100	543325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599100	543350E	9	215	50	<0.1	2250	<1	180	47	22	260	<100	1.1	610	23	13.6	2.3	106	6
599100	543375E	16	28	<10	0.3	1790	<1	660	70	16	33	<100	<0.5	270	10	5	2.9	14	1
599100	543400E	22	134	<10	<0.1	1750	<1	280	107	63	212	<100	3.1	710	29	16.5	5.8	70	4
599100	543425E	3	117	<10	<0.1	840	<1	260	76	67	1150	<100	6.2	770	32	21.2	6	93	4
599100	543450E	7	34	<10	<0.1	1110	<1	600	65	23	40	<100	1.9	220	13	5.9	3.7	13	1
599100	543475E	13	112	<10	<0.1	2090	<1	380	105	111	118	<100	4.4	1150	54	30.8	11.7	39	3
599100	543500E	7	106	<10	<0.1	1370	<1	390	159	82	182	<100	2.6	630	47	26.5	10	51	3
599100	543525E	15	90	<10	<0.1	1850	<1	400	338	51	30	<100	2.4	270	17	7.6	4.4	26	2
599100	543550E	29	47	<10	<0.1	2150	<1	590	151	29	44	<100	2.5	590	12	5.7	4	15	2
599100	543575E	26	44	<10	<0.1	2290	<1	440	10	53	47	<100	9.3	480	21	8.5	6.6	18	2
599100	543600E	4	82	<10	<0.1	3350	<1	410	78	42	121	<100	2.8	420	27	16.3	5.9	20	1
599100	543625E	7	121	20	<0.1	1590	<1	360	65	33	196	<100	1.7	160	9	5.3	1.8	94	4
599100	543650E	13	30	<10	<0.1	4090	<1	470	46	112	422	<100	4.1	1190	26	12.4	8.9	45	2
599100	543675E	16	92	<10	<0.1	2110	<1	390	105	86	76	<100	2.4	460	44	21.8	11.4	30	2
599100	543700E	17	53	<10	<0.1	1890	<1	480	68	79	88	<100	4.8	620	55	25	16.6	28	2
599100	543725E	12	57	<10	<0.1	1160	<1	460	32	75	66	<100	12.3	890	45	20.8	13.9	30	3
599100	543750E	10	53	20	0.6	1980	<1	470	36	110	515	<100	<0.5	3230	22	11.1	6.4	98	2
599100	543775E	13	44	<10	0.4	2240	<1	490	52	85	202	<100	<0.5	190	52	28.6	12.6	13	1
599100	543800E	18	90	<10	<0.1	2680	<1	480	45	63	99	<100	1.7	430	23	11.2	5.7	29	2
599100	543825E	13	82	<10	<0.1	2730	<1	470	182	85	22	<100	0.7	170	33	16.1	8.2	23	2
599100	543850E	25	109	<10	<0.1	2940	<1	390	76	83	21	<100	3.3	230	31	14.8	7.6	25	2
599100	543875E	12	127	<10	<0.1	2010	<1	370	154	82	68	<100	14.2	470	43	22.9	9.9	44	2
599100	543900E	11	91	<10	<0.1	3160	<1	500	33	59	35	<100	3.2	190	18	8.4	4.4	26	1

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599000	544400E	2	<1	<0.5	18.8	2	7	14	1980	<5	0.8	3	65	2.8	120	<1	<1	<1	20
599000	544425E	<1	<1	<0.5	16.6	1	6	16	3770	<5	0.7	1	44	0.6	<10	<1	<1	<1	30
599000	544450E	41	<1	<0.5	20.6	52	<5	21	7310	<5	<0.5	95	134	0.5	90	<1	19	<1	19
599000	544475E	16	<1	<0.5	12.5	16	5	24	2100	<5	<0.5	35	98	1.2	230	<1	6	<1	34
599000	544500E	41	<1	<0.5	15.2	45	<5	26	3910	<5	<0.5	84	88	0.3	140	<1	16	<1	55
599000	544525E	22	<1	<0.5	17.7	28	<5	40	900	<5	<0.5	54	94	0.3	60	<1	10	<1	105
599000	544550E	32	<1	<0.5	14.7	34	<5	33	2390	<5	<0.5	65	119	0.2	110	<1	12	<1	51
599000	544575E	3	<1	<0.5	8.4	4	<5	29	12800	<5	<0.5	7	167	0.3	20	<1	1	<1	39
599000	544600E	4	<1	<0.5	15.8	8	<5	4	950	<5	1.4	10	55	2	130	<1	2	<1	58
599000	544625E	<1	<1	<0.5	20.7	4	<5	14	6250	<5	4.9	4	67	2.6	<10	<1	<1	<1	36
599000	544650E	33	<1	<0.5	14.5	26	<5	15	3280	<5	0.9	78	87	2.8	290	<1	15	<1	141
599000	544675E	29	<1	<0.5	14.9	22	<5	20	4860	<5	<0.5	66	87	1.5	220	<1	12	<1	90
599000	544725E	5	<1	<0.5	14.2	4	8	15	770	<5	1	8	135	2.5	200	<1	2	<1	90
599000	544750E	5	<1	<0.5	23.8	6	11	21	1860	<5	<0.5	9	60	1.3	170	<1	2	<1	18
599100	543000E	72	<1	<0.5	7.8	59	<5	32	750	<5	<0.5	127	70	<0.1	100	<1	23	<1	60
599100	543025E	20	<1	<0.5	102	29	<5	61	2000	<5	<0.5	47	118	0.4	210	<1	9	<1	235
599100	543050E	14	<1	<0.5	20.6	26	<5	25	1080	<5	0.6	41	123	1.5	690	<1	9	<1	104
599100	543075E	9	<1	<0.5	65.5	14	<5	34	8040	<5	<0.5	22	126	0.8	240	<1	5	<1	136
599100	543100E	1	<1	<0.5	14.9	<1	26	112	1610	<5	<0.5	1	340	0.3	20	<1	<1	<1	30
599100	543125E	38	<1	<0.5	180	31	<5	62	8990	<5	<0.5	73	529	0.6	120	<1	13	<1	195
599100	543150E	4	<1	<0.5	16.4	9	<5	30	7490	<5	0.7	13	97	1.1	20	<1	3	<1	31
599100	543175E	16	<1	<0.5	75.3	18	<5	39	4280	<5	<0.5	35	157	0.5	120	<1	7	<1	123
599100	543200E	15	<1	<0.5	74.5	27	<5	24	16800	<5	0.7	43	256	2.6	210	<1	9	<1	125
599100	543225E	21	<1	<0.5	121	18	<5	51	12000	<5	<0.5	37	624	2.3	170	<1	7	<1	105
599100	543250E	14	<1	<0.5	90.4	16	<5	36	7370	<5	<0.5	31	256	0.7	140	<1	6	<1	201
599100	543275E	36	<1	<0.5	90.9	27	<5	79	9700	<5	<0.5	66	832	1.7	110	<1	12	<1	65
599100	543300E	18	<1	<0.5	203	15	<5	69	3770	<5	<0.5	34	498	0.6	180	<1	6	<1	204
599100	543325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599100	543350E	11	<1	<0.5	66.1	8	<5	45	3300	<5	<0.5	17	268	1.7	430	<1	3	<1	79
599100	543375E	13	<1	<0.5	35.7	8	26	58	3380	<5	<0.5	22	256	1.1	30	<1	4	<1	27
599100	543400E	26	<1	<0.5	41	21	<5	15	7110	<5	<0.5	50	375	1	230	<1	9	<1	127
599100	543425E	27	<1	<0.5	142	20	8	60	18600	<5	<0.5	48	145	1.9	230	<1	9	<1	206
599100	543450E	17	<1	<0.5	28.4	11	18	91	3380	<5	<0.5	29	181	0.7	30	<1	5	<1	93
599100	543475E	53	<1	<0.5	71.3	41	<5	30	5250	<5	<0.5	95	420	0.8	190	<1	17	<1	157
599100	543500E	44	<1	<0.5	48.7	31	6	40	5720	<5	<0.5	76	338	1.2	220	<1	14	<1	126
599100	543525E	18	<1	<0.5	124	15	<5	76	2790	<5	<0.5	34	334	1.1	90	<1	6	<1	122
599100	543550E	16	<1	<0.5	59.2	12	<5	50	4060	<5	<0.5	27	529	0.8	40	<1	5	<1	119
599100	543575E	27	<1	<0.5	112	22	<5	99	1930	<5	<0.5	56	445	0.7	60	<1	10	<1	151
599100	543600E	25	<1	<0.5	207	16	<5	91	7230	<5	<0.5	38	266	0.9	90	<1	7	<1	327
599100	543625E	9	<1	<0.5	61.5	15	<5	53	3510	<5	0.6	21	139	0.7	380	<1	4	<1	180
599100	543650E	35	<1	<0.5	91.7	29	6	80	16500	<5	<0.5	75	569	1.1	70	<1	13	<1	60
599100	543675E	50	<1	<0.5	119	29	<5	67	3870	<5	<0.5	84	364	1.1	100	<1	14	<1	130
599100	543700E	73	<1	<0.5	67.2	39	<5	105	2730	<5	<0.5	123	407	1.4	60	<1	19	<1	62
599100	543725E	57	<1	<0.5	57.7	38	<5	89	1560	<5	<0.5	111	325	1.1	60	<1	18	<1	72
599100	543750E	25	<1	<0.5	80	33	<5	39	30700	6	<0.5	68	517	0.4	120	<1	13	<1	23
599100	543775E	55	<1	<0.5	153	37	5	58	9530	<5	<0.5	89	375	0.2	150	<1	15	<1	41
599100	543800E	25	<1	<0.5	159	20	<5	47	4700	<5	<0.5	45	523	0.9	120	<1	8	<1	244
599100	543825E	37	<1	<0.5	37.9	24	<5	67	2500	<5	<0.5	61	363	0.7	80	<1	11	<1	89
599100	543850E	34	<1	<0.5	68.6	32	<5	40	770	<5	<0.5	67	238	0.5	120	<1	12	<1	103
599100	543875E	42	<1	<0.5	69.7	28	6	44	1990	<5	<0.5	70	440	1.1	100	<1	12	<1	119
599100	543900E	19	<1	<0.5	40.2	18	<5	32	2000	<5	<0.5	36	225	0.6	130	<1	7	<1	145

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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599000	544400E	<1	47	<1	<1	820	<1	<1	<10	7.3	132	<0.5	7	<1	47	9	820	8
599000	544425E	1	11	<1	<1	390	<1	<1	<10	1	89	<0.5	2	<1	<5	<1	230	<5
599000	544450E	24	23	29	<1	3990	<1	6	<10	2.5	25	<0.5	7	<1	245	12	1230	5
599000	544475E	3	28	12	<1	2140	<1	3	<10	6.7	81	<0.5	5	<1	111	6	850	11
599000	544500E	2	19	26	<1	3730	<1	6	<10	2	18	<0.5	9	<1	290	14	450	<5
599000	544525E	4	7	16	<1	4290	<1	3	<10	1.5	5	<0.5	4	<1	105	5	670	<5
599000	544550E	3	16	21	<1	4500	<1	5	<10	1.4	13	<0.5	5	<1	265	12	550	<5
599000	544575E	7	19	2	<1	4520	<1	<1	<10	1.4	45	<0.5	9	<1	23	2	150	<5
599000	544600E	3	32	3	<1	170	<1	1	<10	11.4	201	<0.5	8	<1	47	8	400	19
599000	544625E	17	21	<1	<1	360	<1	<1	<10	4.1	479	<0.5	4	2	5	<1	320	14
599000	544650E	7	55	24	<1	710	<1	6	<10	16.6	237	<0.5	8	<1	210	13	1190	24
599000	544675E	2	36	21	<1	2020	<1	6	<10	9.2	61	<0.5	8	<1	217	13	960	10
599000	544725E	1	50	3	<1	740	<1	1	<10	10.4	167	<0.5	7	<1	87	15	1420	15
599000	544750E	1	22	3	<1	930	<1	1	<10	5.7	112	<0.5	4	<1	59	7	2160	8
599100	543000E	<1	40	43	<1	4600	<1	13	<10	2	5	<0.5	28	<1	714	43	410	<5
599100	543025E	<1	23	14	<1	4330	<1	3	<10	8.8	27	<0.5	10	<1	100	7	290	<5
599100	543050E	<1	23	10	<1	1060	<1	3	<10	13.9	203	<0.5	7	<1	77	4	340	15
599100	543075E	<1	16	6	<1	3200	<1	2	<10	8	47	<0.5	10	<1	54	4	3430	6
599100	543100E	<1	<5	<1	<1	5480	<1	<1	<10	<0.5	3	<0.5	3	<1	6	<1	270	<5
599100	543125E	<1	26	26	<1	2380	<1	6	<10	7.3	17	0.6	11	<1	156	12	320	6
599100	543150E	22	39	4	<1	3120	<1	<1	<10	10.1	134	<0.5	13	<1	35	5	200	13
599100	543175E	<1	15	12	<1	2290	<1	3	<10	8	29	<0.5	9	<1	64	4	260	6
599100	543200E	<1	22	12	<1	1350	<1	2	<10	20.9	154	<0.5	12	<1	65	5	530	24
599100	543225E	<1	61	13	<1	2310	<1	4	<10	13	29	<0.5	23	<1	147	13	1040	20
599100	543250E	<1	12	10	<1	2370	<1	2	<10	6.7	26	<0.5	12	<1	69	6	310	<5
599100	543275E	<1	44	23	<1	4550	<1	6	<10	7.6	20	<0.5	21	<1	179	16	300	10
599100	543300E	<1	11	12	<1	2550	<1	3	<10	4.4	23	<0.5	11	<1	76	5	770	<5
599100	543325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599100	543350E	<1	28	7	<1	1820	<1	3	<10	14.4	113	<0.5	9	<1	111	9	990	7
599100	543375E	<1	5	8	<1	6050	<1	2	<10	6.5	14	<0.5	10	<1	55	3	1420	<5
599100	543400E	<1	62	17	<1	2700	<1	4	<10	17	31	<0.5	18	<1	163	12	2450	14
599100	543425E	<1	81	17	<1	2110	<1	5	<10	16.9	39	<0.5	10	<1	169	19	2860	6
599100	543450E	<1	<5	11	<1	6060	<1	2	<10	3	12	<0.5	11	<1	69	4	1010	<5
599100	543475E	<1	88	34	<1	3290	<1	9	<10	13.6	16	<0.5	25	<1	312	21	1530	9
599100	543500E	<1	66	28	<1	3420	<1	7	<10	11.1	17	<0.5	16	<1	243	19	3120	5
599100	543525E	<1	11	12	<1	2930	<1	3	<10	3.4	12	<0.5	11	<1	81	5	6620	<5
599100	543550E	<1	<5	10	<1	4500	<1	2	<10	3.1	11	<0.5	9	<1	63	4	2400	<5
599100	543575E	<1	5	19	<1	2810	<1	4	<10	4.3	8	<0.5	8	<1	95	5	130	<5
599100	543600E	<1	22	15	<1	3080	<1	4	<10	3.5	13	<0.5	12	<1	144	11	2920	<5
599100	543625E	<1	20	6	<1	3640	<1	2	<10	9.7	83	<0.5	6	<1	53	4	1170	5
599100	543650E	<1	19	25	<1	3020	<1	5	<10	4	8	0.7	8	<1	136	9	1040	<5
599100	543675E	<1	25	32	<1	2150	<1	8	<10	4.1	15	<0.5	8	<1	223	15	940	<5
599100	543700E	<1	14	47	<1	2840	<1	10	<10	2.4	9	<0.5	8	<1	281	17	810	<5
599100	543725E	<1	16	40	<1	2480	<1	8	<10	2.6	9	<0.5	6	<1	221	14	450	<5
599100	543750E	19	58	19	<1	2280	<1	4	<10	11.3	14	0.6	15	<1	110	9	220	9
599100	543775E	1	16	33	<1	2050	<1	9	<10	6.7	7	<0.5	6	<1	252	21	390	<5
599100	543800E	<1	17	16	<1	2750	<1	4	<10	4.3	12	<0.5	14	<1	108	7	220	6
599100	543825E	<1	16	23	<1	2820	<1	6	<10	4.2	10	<0.5	10	<1	173	11	990	<5
599100	543850E	<1	19	23	<1	2670	<1	5	<10	4.8	10	<0.5	12	<1	155	9	140	<5
599100	543875E	<1	39	27	<1	1630	<1	7	<10	4.2	13	<0.5	11	<1	230	16	1100	<5
599100	543900E	<1	11	12	<1	3920	<1	3	<10	4.2	10	<0.5	12	<1	90	5	270	<5

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599100	543925E	3	91	<10	<0.1	1820	<1	450	267	57	79	<100	2.1	300	18	11.2	3.5	30	2
599100	543950E	9	104	50	<0.1	1720	<1	330	12	53	82	<100	4.6	240	12	5.8	2.9	84	4
599100	543975E	7	141	<10	<0.1	2280	<1	420	12	43	63	<100	0.5	360	27	16.6	4.9	57	2
599100	544000E	7	93	<10	<0.1	2050	<1	310	80	35	11	<100	2.9	720	81	55.3	9.7	23	1
599100	544025E	6	150	10	0.2	1340	<1	200	25	39	292	<100	5.2	400	34	22.4	3.9	118	2
599100	544050E	4	230	<10	<0.1	1970	<1	220	49	6	672	<100	<0.5	220	8	6.2	0.9	122	3
599100	544075E	2	>300	<10	<0.1	4020	<1	180	10	<5	180	<100	<0.5	40	<1	2.1	<0.5	81	3
599100	544100E	5	236	<10	<0.1	1050	<1	30	9	<5	185	<100	<0.5	70	<1	1.4	<0.5	100	3
599100	544125E	5	234	30	<0.1	1880	<1	30	63	26	345	<100	5.2	310	14	10	1.4	193	6
599100	544150E	17	90	90	<0.1	2600	<1	200	43	24	509	<100	0.9	1780	6	4.4	1.2	327	4
599100	544175E	3	162	<10	<0.1	1770	<1	270	99	26	125	<100	0.7	250	11	6.3	1.8	84	4
599100	544200E	8	93	<10	<0.1	3580	<1	360	52	45	126	<100	2.7	260	12	6.6	2.6	104	2
599100	544225E	5	225	30	<0.1	1700	<1	100	48	34	286	<100	4.7	300	19	10.4	2.5	122	4
599100	544250E	4	270	40	0.2	1430	<1	30	10	40	225	<100	5.5	420	7	4	1.4	142	4
599100	544275E	10	264	10	<0.1	1210	<1	60	29	64	162	<100	4.2	220	33	16.5	5.2	103	7
599100	544300E	2	>300	<10	<0.1	1640	<1	20	8	<5	115	<100	<0.5	60	1	2.9	<0.5	59	3
599100	544325E	1	64	<10	0.5	740	<1	350	25	18	93	<100	0.9	790	13	9.5	2.1	97	<1
599100	544350E	1	268	<10	<0.1	2420	<1	40	11	<5	177	<100	<0.5	20	<1	1.1	<0.5	98	4
599100	544375E	6	161	110	0.9	1980	<1	50	12	38	261	<100	1.5	840	6	4.7	1.7	278	2
599100	544400E	1	131	10	<0.1	1340	1	220	122	30	191	<100	1.4	230	33	22.9	5.5	118	7
599100	544425E	10	197	50	0.3	1540	<1	150	54	194	231	<100	42.3	430	57	30.3	16.4	71	4
599100	544450E	4	206	40	0.2	1370	<1	150	72	75	569	<100	1.5	420	60	38.2	10.1	125	5
599100	544475E	4	81	20	0.4	1130	<1	350	54	60	409	<100	6.3	1180	42	25.3	9.7	146	3
599100	544500E	3	199	30	<0.1	1150	<1	100	153	19	650	<100	1.5	430	51	52.1	3	152	5
599100	544525E	10	128	20	0.2	1030	<1	310	221	109	267	<100	3.2	380	78	45.9	17	85	4
599100	544550E	13	86	<10	0.2	990	<1	500	81	25	59	<100	1.7	740	55	38.5	9.6	75	3
599100	544575E	4	201	10	<0.1	960	<1	130	52	46	170	<100	3	200	30	16.2	5.2	95	6
599100	544600E	2	203	10	<0.1	1200	<1	280	81	43	336	<100	1.5	630	82	94.6	7.2	106	3
599100	544625E	13	56	<10	0.2	2110	<1	540	32	178	113	<100	<0.5	240	103	47.4	29.9	15	2
599100	544650E	5	211	30	<0.1	960	<1	110	50	33	147	<100	2.6	240	22	13.5	3.2	131	5
599100	544675E	3	293	30	<0.1	1020	<1	<10	22	21	294	<100	1.4	260	22	12.9	2	92	6
599200	534450E	21	69	<10	<0.1	1170	<1	460	43	134	53	<100	3.6	300	37	16.3	12.8	23	1
599200	534475E	29	129	<10	0.2	1490	<1	340	75	221	89	<100	4.3	4270	120	64.9	30.4	28	3
599200	534500E	37	74	<10	0.1	2720	<1	500	9	83	27	<100	2.3	530	32	14.2	9.4	22	2
599200	534800E	13	144	<10	<0.1	2870	<1	280	107	119	158	<100	4.3	420	57	26.8	14.8	51	2
599200	534825E	16	137	10	<0.1	3270	<1	340	51	136	271	<100	4.5	630	49	24.2	14.4	52	3
599200	534850E	18	110	<10	<0.1	1950	<1	500	239	151	61	<100	4.4	940	54	25.5	15.7	31	2
599200	534875E	5	91	<10	<0.1	1710	<1	410	126	35	42	<100	2.3	270	13	7.1	2.6	26	2
599200	543000E	62	14	<10	0.5	740	<1	620	61	<5	14	<100	0.7	1220	7	3.9	2.3	5	1
599200	543025E	34	95	10	0.1	2320	<1	420	36	152	95	<100	6.2	480	33	16.3	9	37	3
599200	543050E	14	74	<10	<0.1	1640	<1	340	150	33	68	<100	2.1	170	7	3.6	1.5	23	3
599200	543100E	11	42	<10	<0.1	1720	<1	440	35	62	41	<100	9.1	240	13	6.2	4.4	21	2
599200	543125E	34	47	10	<0.1	2270	<1	370	8	57	63	<100	4.1	250	10	4.7	3.5	20	3
599200	543150E	14	126	20	<0.1	1640	<1	270	98	115	111	<100	2.3	470	30	15.2	6.8	65	4
599200	543175E	26	103	<10	0.1	1680	<1	350	11	203	40	<100	5.6	810	57	26.1	18	24	2
599200	543200E	65	105	20	0.2	1310	<1	390	22	114	69	<100	4.2	610	37	18.5	10.1	32	2
599200	543225E	14	66	<10	<0.1	1690	<1	460	22	73	67	<100	9.8	300	19	8.7	6.2	31	3
599200	543250E	24	80	<10	0.2	860	<1	440	20	76	65	<100	21.3	600	27	12.4	8.3	17	3
599200	543275E	10	29	10	<0.1	1320	<1	540	40	57	81	<100	2.9	770	13	5.8	4.5	14	2
599200	543300E	14	122	40	<0.1	1560	<1	330	50	118	337	<100	16.2	460	22	10.8	6.3	45	4
599200	543325E	32	60	<10	<0.1	1980	<1	430	14	50	191	<100	19.6	350	11	5.1	3.5	26	3

Llewellyn Property
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		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599100	543925E	16	<1	<0.5	87.6	15	<5	41	8290	<5	<0.5	29	155	1.6	100	<1	5	<1	117
599100	543950E	12	<1	<0.5	34.6	23	<5	47	1310	<5	1.1	33	148	0.5	330	<1	7	<1	170
599100	543975E	23	<1	<0.5	32.8	22	<5	29	2390	<5	<0.5	43	161	0.4	350	<1	8	<1	46
599100	544000E	49	<1	<0.5	22.9	25	<5	23	1390	<5	<0.5	74	144	0.3	80	<1	12	<1	100
599100	544025E	19	<1	<0.5	9.9	15	<5	22	5540	<5	<0.5	33	128	0.8	200	<1	6	<1	98
599100	544050E	4	<1	<0.5	19	2	<5	43	11700	<5	<0.5	6	97	0.8	170	<1	1	<1	49
599100	544075E	<1	<1	<0.5	6.4	<1	9	31	620	<5	<0.5	<1	72	<0.1	<10	<1	<1	<1	14
599100	544100E	<1	<1	<0.5	12.2	2	15	17	1400	<5	<0.5	2	59	0.6	20	<1	<1	<1	32
599100	544125E	6	<1	<0.5	15.5	9	<5	10	12600	<5	1	12	165	7.4	260	<1	3	<1	187
599100	544150E	5	<1	<0.5	44.5	11	<5	23	19900	<5	1.5	14	262	1.6	30	<1	3	<1	48
599100	544175E	8	<1	<0.5	20.1	9	<5	66	6330	<5	<0.5	16	121	0.9	310	<1	3	<1	50
599100	544200E	11	<1	<0.5	18.4	18	<5	57	11100	<5	<0.5	30	126	0.7	220	<1	6	<1	111
599100	544225E	11	<1	<0.5	16.9	11	<5	18	11400	<5	0.7	21	128	3.6	400	<1	4	<1	157
599100	544250E	5	<1	<0.5	9.3	16	<5	10	4110	<5	1.6	17	94	3.8	150	<1	4	<1	134
599100	544275E	25	<1	<0.5	17.8	20	<5	11	4550	<5	2.4	58	80	5.2	520	<1	10	<1	201
599100	544300E	<1	<1	<0.5	9.6	1	5	7	1000	<5	<0.5	1	44	0.3	10	<1	<1	<1	44
599100	544325E	9	<1	<0.5	10	12	<5	29	8490	<5	<0.5	19	59	0.2	50	<1	4	<1	21
599100	544350E	<1	<1	<0.5	24.2	2	19	25	980	<5	<0.5	2	79	0.4	<10	<1	<1	<1	10
599100	544375E	5	<1	<0.5	21.9	17	7	18	6010	<5	0.8	20	144	1.7	10	<1	5	<1	37
599100	544400E	23	<1	<0.5	17.5	13	7	19	3800	<5	<0.5	36	54	2.1	340	<1	6	<1	42
599100	544425E	59	<1	<0.5	31.3	71	<5	19	11300	<5	<0.5	139	209	1.8	380	<1	27	<1	199
599100	544450E	42	<1	<0.5	23.7	27	<5	23	14600	<5	0.6	71	231	1.7	420	<1	12	<1	32
599100	544475E	38	<1	<0.5	22.9	41	10	20	14100	<5	<0.5	80	144	0.6	330	<1	15	<1	30
599100	544500E	13	<1	<0.5	39.2	8	18	25	3150	<5	<0.5	16	113	2.3	280	<1	3	<1	34
599100	544525E	69	<1	<0.5	23.5	58	<5	27	4480	<5	<0.5	126	89	1.1	300	<1	23	<1	41
599100	544550E	42	<1	<0.5	9.5	28	<5	31	720	<5	<0.5	63	123	0.3	290	<1	11	<1	13
599100	544575E	23	<1	<0.5	8.9	17	<5	24	940	<5	0.5	47	84	1.4	370	<1	8	<1	105
599100	544600E	32	<1	<0.5	19	23	5	30	1160	<5	<0.5	52	90	0.5	260	<1	10	<1	14
599100	544625E	132	<1	<0.5	126	69	<5	107	4450	<5	<0.5	210	268	0.4	120	<1	35	<1	27
599100	544650E	14	<1	<0.5	17	11	8	17	990	<5	0.6	27	76	2.1	340	<1	5	<1	65
599100	544675E	10	<1	<0.5	24.5	7	<5	4	5820	<5	0.7	14	89	3.9	360	<1	3	<1	119
599200	534450E	49	<1	<0.5	49.5	46	<5	42	1910	<5	<0.5	111	212	0.5	50	<1	20	<1	141
599200	534475E	141	<1	<0.5	64.5	135	<5	25	9820	<5	<0.5	298	739	0.9	100	<1	55	<1	234
599200	534500E	42	<1	<0.5	91	37	<5	28	1180	<5	<0.5	93	151	0.5	60	<1	17	<1	177
599200	534800E	63	<1	<0.5	41.8	39	<5	33	3900	<5	<0.5	110	372	1.5	290	<1	19	<1	65
599200	534825E	56	<1	<0.5	50.9	57	<5	32	7100	<5	<0.5	129	371	0.8	240	<1	23	<1	107
599200	534850E	69	<1	<0.5	59.5	57	<5	38	2040	<5	<0.5	143	654	0.7	80	<1	25	<1	156
599200	534875E	13	<1	<0.5	130	10	<5	69	4060	<5	<0.5	21	208	1.4	70	<1	4	<1	214
599200	543000E	10	<1	<0.5	15.3	4	24	115	3040	7	0.8	13	428	0.4	<10	<1	2	<1	22
599200	543025E	40	<1	<0.5	98.2	50	<5	52	3580	<5	0.8	99	372	0.5	120	<1	20	<1	223
599200	543050E	7	<1	<0.5	109	9	<5	45	9680	<5	<0.5	18	301	0.7	110	<1	4	<1	179
599200	543100E	18	<1	<0.5	123	22	<5	44	2330	<5	<0.5	46	249	0.6	60	<1	9	<1	254
599200	543125E	14	<1	<0.5	161	17	<5	54	1760	<5	<0.5	37	147	0.5	80	<1	7	<1	187
599200	543150E	31	<1	<0.5	55.3	29	<5	28	6120	<5	<0.5	65	396	1.2	210	<1	12	<1	153
599200	543175E	75	<1	<0.5	83.3	79	<5	41	2420	<5	<0.5	180	230	0.6	130	<1	33	<1	199
599200	543200E	45	<1	<0.5	95.5	45	<5	15	4390	<5	<0.5	103	217	1.8	130	<1	19	<1	222
599200	543225E	25	<1	<0.5	136	26	<5	51	2050	<5	<0.5	57	229	0.6	110	<1	11	<1	172
599200	543250E	35	<1	<0.5	82.6	30	<5	50	2080	<5	<0.5	76	284	0.8	70	<1	14	<1	220
599200	543275E	19	<1	<0.5	44.4	15	14	71	2330	<5	<0.5	42	224	0.7	30	<1	7	<1	163
599200	543300E	28	<1	<0.5	170	35	<5	42	6840	<5	<0.5	72	406	1.4	210	<1	14	<1	197
599200	543325E	15	<1	<0.5	99	17	<5	37	3220	<5	<0.5	37	172	0.7	90	<1	7	<1	198

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599100	543925E	<1	21	10	<1	2380	<1	3	<10	4.6	21	<0.5	13	<1	102	9	4670	9
599100	543950E	1	22	9	<1	3640	<1	2	<10	12.7	150	<0.5	8	<1	61	4	130	10
599100	543975E	<1	41	14	<1	3220	<1	4	<10	11.2	15	<0.5	13	<1	175	12	110	6
599100	544000E	<1	70	26	<1	2190	<1	10	<10	7.3	8	<0.5	41	<1	527	38	390	<5
599100	544025E	4	39	11	<1	1640	<1	4	<10	8.7	55	<0.5	13	<1	185	16	400	8
599100	544050E	<1	24	2	<1	2340	<1	<1	<10	10.5	96	<0.5	8	<1	53	5	1900	8
599100	544075E	<1	24	<1	<1	2060	<1	<1	<10	1.7	4	<0.5	3	<1	<5	4	80	<5
599100	544100E	<1	10	<1	<1	270	<1	<1	<10	1.9	33	<0.5	2	<1	<5	2	220	<5
599100	544125E	3	44	4	<1	360	<1	2	<10	22.1	319	<0.5	13	<1	69	8	1720	24
599100	544150E	3	66	4	<1	1980	<1	<1	<10	31.8	261	<0.5	24	<1	37	4	270	18
599100	544175E	<1	35	5	<1	2020	<1	2	<10	18.8	53	<0.5	10	<1	62	5	4440	10
599100	544200E	1	35	8	<1	1800	<1	2	<10	10.8	34	<0.5	12	<1	56	5	1380	10
599100	544225E	3	46	7	<1	850	<1	2	<10	20.3	273	<0.5	13	<1	90	7	880	24
599100	544250E	5	36	4	<1	320	<1	1	<10	22.8	812	<0.5	8	<1	29	3	440	37
599100	544275E	<1	45	18	<1	680	<1	5	<10	23	807	0.6	15	<1	153	11	810	59
599100	544300E	<1	32	<1	<1	240	<1	<1	<10	3.3	25	<0.5	4	<1	7	5	170	<5
599100	544325E	7	22	6	<1	3200	<1	2	<10	2.1	11	<0.5	17	<1	87	7	340	<5
599100	544350E	<1	36	<1	<1	780	<1	<1	<10	1.8	31	<0.5	3	<1	5	3	210	<5
599100	544375E	13	38	5	<1	670	<1	<1	<10	15.5	78	<0.5	8	<1	28	5	180	18
599100	544400E	<1	48	14	<1	1400	<1	4	<10	10.6	61	<0.5	7	<1	194	18	2970	5
599100	544425E	6	68	43	<1	680	<1	9	<10	17.5	121	0.5	9	<1	296	21	800	20
599100	544450E	5	100	26	<1	930	<1	8	<10	18	172	<0.5	11	<1	367	28	970	18
599100	544475E	28	60	25	<1	1800	<1	6	<10	9	39	<0.5	12	<1	286	19	1450	13
599100	544500E	2	71	6	<1	880	<1	4	<10	9.5	77	<0.5	8	<1	311	44	1720	9
599100	544525E	4	84	43	<1	2320	<1	11	<10	10.9	32	<0.5	19	<1	496	33	1350	8
599100	544550E	2	49	23	<1	5150	<1	7	<10	3.5	<3	<0.5	59	<1	480	28	540	<5
599100	544575E	1	24	15	<1	1950	<1	4	<10	8.6	102	<0.5	8	<1	162	11	1070	9
599100	544600E	2	73	18	<1	2680	<1	8	<10	12.8	<3	<0.5	30	<1	547	87	1300	8
599100	544625E	<1	20	81	<1	2820	<1	18	<10	5.1	7	<0.5	11	<1	511	28	290	<5
599100	544650E	5	33	9	<1	1030	<1	3	<10	13.1	141	<0.5	7	<1	109	10	1210	11
599100	544675E	3	41	5	<1	140	<1	3	<10	19.8	286	<0.5	10	<1	102	9	620	18
599200	534450E	<1	28	36	<1	3110	<1	7	<10	5.9	9	<0.5	9	<1	193	10	110	<5
599200	534475E	1	138	95	<1	2750	<1	20	<10	20.8	38	<0.5	35	<1	875	43	470	13
599200	534500E	1	25	30	<1	4620	<1	6	<10	10	32	<0.5	17	<1	180	9	90	7
599200	534800E	<1	54	40	<1	1880	<1	10	<10	10.6	29	<0.5	8	<1	349	16	1300	7
599200	534825E	4	46	40	<1	2560	<1	8	<10	14.5	57	<0.5	11	<1	321	15	340	13
599200	534850E	1	36	47	<1	3110	<1	10	<10	6.3	10	<0.5	13	<1	360	14	1250	8
599200	534875E	1	17	8	<1	4020	<1	2	<10	3.4	11	<0.5	11	<1	87	5	2470	<5
599200	543000E	4	15	5	<1	5760	<1	2	<10	2.1	20	<0.5	4	<1	43	3	130	<5
599200	543025E	2	81	30	<1	3340	<1	6	<10	17.5	31	0.5	17	<1	176	11	160	10
599200	543050E	1	17	6	<1	2240	<1	1	<10	5.6	20	<0.5	4	<1	37	2	3380	<5
599200	543100E	<1	15	14	<1	3350	<1	2	<10	4.2	11	<0.5	6	<1	78	4	290	<5
599200	543125E	1	9	11	<1	2420	<1	2	<10	4.4	24	<0.5	4	<1	54	3	100	<5
599200	543150E	<1	53	21	<1	2050	<1	5	<10	17	59	<0.5	11	<1	159	10	2710	10
599200	543175E	1	53	56	<1	3140	<1	10	<10	13.9	14	<0.5	15	<1	325	16	200	9
599200	543200E	1	68	32	<1	3390	<1	6	<10	11.4	30	<0.5	16	<1	208	13	490	<5
599200	543225E	<1	20	19	<1	3510	<1	4	<10	5.5	<3	<0.5	9	<1	106	6	190	<5
599200	543250E	<1	18	25	<1	3800	<1	5	<10	7.7	<3	<0.5	12	<1	146	8	220	<5
599200	543275E	<1	11	15	<1	5560	<1	3	<10	7.1	<3	<0.5	6	<1	73	4	390	<5
599200	543300E	2	33	21	<1	3240	<1	4	<10	12.2	93	<0.5	13	<1	121	7	940	13
599200	543325E	<1	12	12	<1	4090	<1	2	<10	5.8	11	<0.5	6	<1	59	3	200	7

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599200	543350E	7	108	<10	<0.1	1140	<1	360	70	137	231	<100	10.2	590	41	22	10.3	30	3
599200	543375E	28	105	10	<0.1	2470	<1	400	13	93	85	<100	7.5	250	24	12.4	8.5	31	3
599200	543400E	20	78	<10	<0.1	1920	<1	460	42	97	57	<100	12	610	37	18.7	12.9	33	2
599200	543425E	36	39	<10	0.2	2380	<1	520	108	48	62	<100	2.1	1490	31	15.4	10.2	39	1
599200	543450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543525E	15	53	<10	<0.1	2190	<1	590	19	53	86	<100	1.7	170	17	7.8	5	12	1
599200	543550E	11	146	20	<0.1	2550	<1	270	18	140	452	<100	14.6	530	36	19	8.2	86	5
599200	543575E	12	89	<10	<0.1	3390	<1	440	16	102	71	<100	3.4	200	19	8.8	5.6	24	2
599200	543600E	23	86	<10	<0.1	2630	<1	420	22	58	188	<100	24.2	740	17	8.2	4.9	33	3
599200	543625E	3	102	<10	<0.1	2650	<1	390	52	70	347	<100	9.1	440	27	14.4	6	50	2
599200	543650E	19	122	10	<0.1	3860	<1	280	97	159	429	<100	24	1340	44	21	11.5	44	3
599200	543675E	11	90	<10	<0.1	2940	<1	490	65	72	200	<100	61.6	480	23	10.3	6.6	33	2
599200	543700E	11	111	10	<0.1	3900	<1	300	19	122	104	<100	15.2	390	31	14.5	9	49	3
599200	543725E	12	262	50	<0.1	2250	<1	60	16	31	459	<100	1.9	670	25	13	3.7	107	7
599200	543750E	16	95	<10	<0.1	2950	<1	390	73	75	29	<100	3.1	180	15	7.5	4.4	28	2
599200	543775E	10	141	20	<0.1	2160	<1	260	62	54	71	<100	3	260	17	8.2	4	70	3
599200	543800E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543825E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543850E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543875E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543925E	11	242	20	<0.1	580	<1	20	21	57	260	<100	10.9	1570	70	46.6	6.6	124	5
599200	543950E	6	125	<10	<0.1	1270	<1	480	91	71	74	<100	1.3	1090	81	52.6	14.4	77	1
599200	543975E	1	104	40	0.4	2240	<1	170	3	31	452	<100	2	3700	7	3.7	1.6	454	1
599200	544000E	10	69	<10	<0.1	1350	<1	670	57	18	19	<100	<0.5	390	14	7.9	3.1	20	<1
599200	544025E	2	73	<10	<0.1	670	<1	430	31	21	68	<100	<0.5	1070	36	28	5.5	36	<1
599200	544050E	<1	74	<10	<0.1	770	<1	390	212	21	356	<100	1	80	12	10.3	2.5	111	4
599200	544150E	4	165	10	<0.1	970	<1	240	236	136	207	<100	1	450	128	81.1	21.3	117	4
599200	544175E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	544200E	2	>300	<10	<0.1	810	<1	30	15	<5	219	<100	<0.5	180	18	11.7	1.2	59	3
599200	544225E	7	37	<10	0.4	1040	<1	580	49	24	51	<100	1.6	1150	8	4.9	2.7	23	<1
599200	544250E	3	162	<10	<0.1	1070	<1	240	32	62	254	<100	9.2	390	61	36.8	10.7	105	5
599200	544275E	3	294	20	<0.1	980	1	50	29	152	272	<100	6.3	300	54	26.1	11.1	85	8
599200	544300E	1	84	<10	<0.1	780	<1	570	137	58	23	<100	1.6	380	31	19.3	6.2	23	1
599200	544325E	4	>300	<10	<0.1	1350	<1	20	14	<5	145	<100	0.7	60	3	4.5	<0.5	133	4
599200	544350E	6	165	60	<0.1	940	2	140	52	113	703	<100	6.1	760	40	24.8	7.3	204	6
599200	544375E	1	288	<10	<0.1	980	<1	100	39	<5	189	<100	<0.5	140	9	13.4	<0.5	133	5
599200	544400E	12	157	10	<0.1	1260	<1	330	33	146	227	<100	2	310	45	22	11.7	80	4
599200	544425E	2	125	<10	<0.1	900	<1	310	47	52	149	<100	1.7	1220	132	92.9	14.8	71	5
599200	544450E	3	186	<10	<0.1	1740	<1	240	38	156	323	<100	2	620	104	59.7	19.7	146	3
599200	544475E	15	97	10	0.2	1780	<1	500	125	134	28	<100	8.7	440	48	25.7	13.7	37	1
599200	544500E	9	89	20	0.9	1390	<1	360	55	74	206	<100	7.3	2040	40	24.2	9.3	150	1
599200	544525E	2	269	30	<0.1	820	<1	110	41	44	180	<100	0.7	160	24	13.9	4.1	134	6
599200	544550E	9	116	<10	<0.1	910	<1	410	166	55	115	<100	4	290	40	25.3	8.1	93	3
599200	544575E	10	174	10	0.2	1560	<1	330	156	97	141	<100	4.1	750	113	70.9	15.1	147	3
599200	544600E	7	116	<10	0.4	1270	<1	460	244	77	53	<100	1.3	1690	117	83.6	16.7	101	1
599200	544625E	5	80	10	0.2	1200	<1	510	109	58	56	<100	1.4	1420	75	71.7	9	64	1
599200	544650E	8	65	<10	0.1	1300	<1	700	290	65	34	<100	1.7	170	24	12.8	7	17	2
599200	544675E	9	133	10	<0.1	1340	<1	400	81	100	102	<100	1.6	420	64	38.4	14.4	86	2
599200	544700E	3	102	<10	0.7	1600	<1	420	71	25	268	<100	1.3	750	36	30.3	3.2	177	<1

Llewellyn Property
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		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599200	543350E	46	<1	<0.5	161	41	34	48	10800	<5	<0.5	92	253	1	130	<1	17	<1	237
599200	543375E	30	<1	<0.5	72.1	36	<5	38	2130	<5	<0.5	69	240	0.8	90	<1	13	<1	188
599200	543400E	49	<1	<0.5	82.5	38	8	38	3430	<5	<0.5	100	595	1.1	70	<1	17	<1	109
599200	543425E	39	<1	<0.5	81.9	31	11	68	3480	<5	<0.5	74	1410	0.6	50	<1	13	<1	67
599200	543450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543525E	23	<1	<0.5	36	21	7	73	2510	<5	<0.5	48	192	0.5	80	<1	9	<1	102
599200	543550E	36	<1	<0.5	71.7	44	<5	32	5550	<5	<0.5	86	323	1	300	<1	17	<1	154
599200	543575E	22	<1	<0.5	125	26	<5	34	3930	<5	<0.5	53	212	0.9	130	<1	10	<1	139
599200	543600E	19	<1	<0.5	160	19	<5	46	5490	<5	<0.5	42	231	2.2	90	<1	8	<1	134
599200	543625E	26	<1	<0.5	70.6	22	<5	47	6610	<5	<0.5	48	228	1.3	190	<1	9	<1	195
599200	543650E	43	<1	<0.5	88.1	55	<5	31	5830	<5	<0.5	102	297	1.4	320	<1	20	<1	175
599200	543675E	26	<1	<0.5	115	31	<5	43	2540	<5	<0.5	59	316	0.8	150	<1	11	<1	149
599200	543700E	36	<1	<0.5	43.3	49	<5	79	2390	<5	<0.5	90	358	0.7	120	<1	18	<1	146
599200	543725E	17	<1	<0.5	70	10	<5	29	10400	<5	0.7	29	342	4.3	300	<1	5	<1	61
599200	543750E	18	<1	<0.5	52.7	20	<5	44	1990	<5	<0.5	43	233	0.9	90	<1	8	<1	143
599200	543775E	18	<1	<0.5	111	18	<5	38	4460	<5	<0.5	39	230	2.1	170	<1	7	<1	84
599200	543800E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543825E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543850E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543875E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543925E	32	<1	<0.5	12.1	25	<5	3	560	<5	1.8	52	186	3.9	140	<1	9	<1	120
599200	543950E	66	<1	<0.5	15.8	39	<5	24	3460	<5	<0.5	104	382	0.7	140	<1	18	<1	83
599200	543975E	5	<1	<0.5	10.5	14	<5	23	8510	<5	0.6	17	330	1	<10	<1	4	<1	87
599200	544000E	14	<1	<0.5	2.3	10	<5	44	1230	<5	<0.5	23	198	0.2	60	<1	4	<1	20
599200	544025E	27	<1	<0.5	11.6	14	<5	26	3490	<5	<0.5	34	103	0.2	110	<1	6	<1	<5
599200	544050E	9	<1	<0.5	40.9	8	6	41	4740	<5	<0.5	18	36	0.5	160	<1	3	<1	12
599200	544150E	95	<1	<0.5	19.7	56	8	28	5580	<5	<0.5	162	78	1.6	390	<1	28	<1	39
599200	544175E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	544200E	6	<1	<0.5	11.1	1	<5	11	590	<5	<0.5	5	93	0.9	200	<1	<1	<1	65
599200	544225E	10	<1	<0.5	10.3	14	17	50	7820	<5	<0.5	29	159	0.2	50	<1	5	<1	88
599200	544250E	49	<1	<0.5	15.4	27	<5	21	2930	<5	<0.5	82	117	1	250	<1	14	<1	70
599200	544275E	52	<1	<0.5	13.5	46	<5	11	1570	<5	0.7	134	97	3.5	440	<1	25	<1	169
599200	544300E	29	<1	<0.5	19.7	31	<5	32	3150	<5	<0.5	58	74	0.4	80	<1	11	<1	18
599200	544325E	<1	<1	<0.5	14.4	2	16	12	240	<5	0.5	2	78	1	50	<1	<1	<1	86
599200	544350E	32	<1	<0.5	23.4	36	<5	18	24000	<5	0.9	69	327	2.7	340	<1	14	<1	63
599200	544375E	2	<1	<0.5	11.9	1	15	23	410	<5	<0.5	2	121	0.9	110	<1	<1	<1	42
599200	544400E	47	<1	<0.5	17.8	61	<5	28	4230	<5	<0.5	116	107	1.5	300	<1	23	<1	70
599200	544425E	73	<1	<0.5	5.1	25	<5	35	1600	<5	<0.5	102	124	0.3	310	<1	16	<1	12
599200	544450E	85	<1	<0.5	9.1	55	<5	31	3870	<5	<0.5	161	272	0.8	530	<1	28	<1	102
599200	544475E	54	<1	<0.5	24.7	65	<5	27	4280	<5	<0.5	125	226	0.7	160	<1	24	<1	131
599200	544500E	35	<1	<0.5	16.1	47	<5	24	23700	<5	<0.5	84	256	0.3	150	<1	17	<1	83
599200	544525E	19	<1	<0.5	15.7	15	7	23	2260	<5	0.7	45	96	2.8	470	<1	8	<1	49
599200	544550E	35	<1	<0.5	15	29	<5	33	1880	<5	<0.5	62	102	0.6	300	<1	11	<1	84
599200	544575E	69	<1	<0.5	23	38	<5	58	2360	<5	<0.5	111	264	0.5	480	<1	19	<1	105
599200	544600E	73	<1	<0.5	23.6	43	13	37	1970	<5	<0.5	108	182	0.3	300	<1	19	<1	50
599200	544625E	41	<1	<0.5	10.1	32	20	36	3270	<5	<0.5	64	97	0.1	290	<1	12	<1	18
599200	544650E	29	<1	<0.5	21	26	7	51	3940	<5	<0.5	57	141	0.4	80	<1	10	<1	76
599200	544675E	63	<1	<0.5	12.5	60	12	31	3510	<5	<0.5	123	151	0.5	410	<1	23	<1	54
599200	544700E	15	<1	<0.5	9	12	<5	42	7520	<5	<0.5	26	157	0.2	200	<1	5	<1	57

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599200	543350E	<1	46	32	<1	3480	<1	7	<10	10.4	17	<0.5	18	<1	271	15	1460	10
599200	543375E	<1	30	21	<1	3590	<1	4	<10	7.1	16	<0.5	8	<1	152	8	170	8
599200	543400E	<1	33	34	<1	4340	<1	7	<10	4.4	17	<0.5	11	<1	241	12	860	<5
599200	543425E	2	18	26	<1	4800	<1	5	<10	3.2	9	<0.5	10	<1	207	11	2250	<5
599200	543450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543525E	<1	5	16	<1	5550	<1	3	<10	3	10	<0.5	17	<1	107	5	180	<5
599200	543550E	2	74	27	<1	2080	<1	6	<10	24.5	115	<0.5	17	<1	211	14	190	14
599200	543575E	<1	22	16	<1	3150	<1	3	<10	7	20	<0.5	10	<1	108	5	300	<5
599200	543600E	<1	53	14	<1	2940	<1	3	<10	6.3	18	<0.5	11	<1	90	6	210	9
599200	543625E	<1	40	17	<1	2360	<1	4	<10	6.5	28	<0.5	8	<1	144	10	830	7
599200	543650E	<1	83	33	<1	1890	<1	7	<10	16.4	44	<0.5	13	<1	230	14	1000	24
599200	543675E	<1	26	19	<1	3480	<1	4	<10	4.2	6	<0.5	8	<1	139	6	840	<5
599200	543700E	<1	35	27	<1	2400	<1	6	<10	9.9	26	<0.5	8	<1	184	9	170	10
599200	543725E	5	40	10	<1	920	<1	4	<10	21.6	249	<0.5	9	<1	145	8	500	15
599200	543750E	<1	15	13	<1	2560	<1	3	<10	5.4	9	<0.5	8	<1	89	5	1180	7
599200	543775E	3	27	13	<1	1680	<1	3	<10	10.2	45	<0.5	11	<1	98	5	1290	11
599200	543800E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543825E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543850E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543875E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	543925E	3	67	18	<1	250	<1	8	<10	23.4	571	0.6	24	<1	410	32	330	34
599200	543950E	<1	118	37	<1	4820	<1	12	<10	16.1	10	<0.5	39	<1	667	37	200	14
599200	543975E	5	34	4	<1	2160	<1	<1	<10	13.6	102	<0.5	10	<1	34	2	30	15
599200	544000E	<1	10	8	<1	7770	<1	2	<10	2	<3	<0.5	35	<1	115	5	170	<5
599200	544025E	<1	10	13	<1	5540	<1	5	<10	1.7	<3	<0.5	20	<1	383	20	120	<5
599200	544050E	<1	66	6	<1	3090	<1	2	<10	10	30	<0.5	8	<1	80	12	9700	<5
599200	544150E	2	70	58	<1	2750	<1	18	<10	14.2	46	<0.5	16	<1	960	55	2980	8
599200	544175E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599200	544200E	<1	32	3	<1	390	<1	2	<10	4.8	92	<0.5	4	<1	103	8	490	<5
599200	544225E	6	8	8	<1	5330	<1	1	<10	1.4	<3	<0.5	3	<1	69	4	100	<5
599200	544250E	<1	71	28	<1	1970	<1	9	<10	8.8	44	<0.5	12	<1	442	25	980	10
599200	544275E	3	46	38	<1	590	<1	9	<10	14.5	271	<0.5	8	<1	306	17	600	17
599200	544300E	<1	20	19	<1	4550	<1	5	<10	3.4	9	<0.5	39	<1	241	13	1890	6
599200	544325E	<1	19	<1	<1	280	<1	<1	<10	3	133	<0.5	3	<1	17	6	340	6
599200	544350E	5	62	21	<1	1210	<1	6	<10	18.6	257	<0.5	12	<1	256	18	1790	19
599200	544375E	<1	32	<1	<1	1860	<1	<1	<10	5	88	<0.5	6	<1	61	13	730	<5
599200	544400E	2	61	35	<1	2170	<1	8	<10	11.1	101	<0.5	8	<1	262	16	630	11
599200	544425E	1	36	37	<1	3600	<1	17	<10	3.3	4	<0.5	15	<1	1200	59	260	<5
599200	544450E	4	103	53	<1	2870	<1	16	<10	17.3	32	<0.5	12	<1	749	41	1000	13
599200	544475E	4	37	38	<1	3530	<1	8	<10	5.8	12	<0.5	8	<1	348	17	1450	<5
599200	544500E	17	98	25	<1	2520	<1	6	<10	5.2	15	<0.5	14	<1	303	18	970	6
599200	544525E	3	33	13	<1	1100	<1	4	<10	8.5	247	<0.5	5	<1	167	10	1260	12
599200	544550E	2	71	21	<1	2620	<1	6	<10	8.8	24	<0.5	10	<1	294	17	1790	8
599200	544575E	4	108	39	<1	3170	<1	15	<10	12.4	13	<0.5	25	<1	762	48	2260	8
599200	544600E	7	97	38	<1	5910	<1	15	<10	7	3	<0.5	41	<1	1040	59	3350	6
599200	544625E	4	58	22	<1	5690	<1	8	<10	3.7	24	<0.5	56	<1	567	59	350	<5
599200	544650E	3	9	19	<1	6770	<1	4	<10	5.1	9	<0.5	8	<1	179	9	3200	<5
599200	544675E	6	50	39	<1	3840	<1	10	<10	11.8	24	<0.5	13	<1	535	26	1140	7
599200	544700E	22	40	8	<1	4230	<1	4	<10	3.7	12	<0.5	16	<1	313	20	1010	<5

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599300	543000E	20	69	<10	<0.1	2810	<1	440	22	33	88	<100	2.1	140	5	2.2	1.5	22	3
599300	543025E	12	58	<10	<0.1	1650	<1	390	43	22	38	<100	4.8	80	4	1.9	1.1	16	2
599300	543050E	33	29	<10	<0.1	2400	<1	530	23	16	29	<100	2.3	250	3	1.5	1.1	9	1
599300	543075E	29	86	20	<0.1	1520	<1	350	27	101	58	<100	5.6	360	14	6.5	3.5	26	2
599300	543100E	7	52	<10	<0.1	670	<1	460	30	28	61	<100	4.5	200	7	3.2	2	17	1
599300	543125E	44	70	50	<0.1	1180	<1	350	8	33	172	<100	5.5	180	6	2.8	1.5	30	4
599300	543150E	20	59	<10	<0.1	1400	<1	380	57	60	95	<100	2.6	230	15	7.1	4.9	24	2
599300	543175E	35	134	20	<0.1	2420	<1	280	29	152	152	<100	3.9	330	24	11.4	6.8	33	4
599300	543200E	13	53	<10	<0.1	1230	<1	430	33	33	155	<100	7.9	190	7	3.2	2.3	21	2
599300	543225E	17	67	<10	<0.1	1320	<1	500	48	55	55	<100	4.3	260	14	6.7	4.7	18	1
599300	543275E	22	56	<10	<0.1	3010	<1	490	19	23	60	<100	5.2	260	8	4.1	2.8	16	1
599300	543300E	16	124	<10	<0.1	4460	<1	320	26	67	501	<100	3.3	500	23	12.3	5	94	3
599300	543325E	18	153	50	0.1	980	<1	240	17	49	126	<100	3.6	190	9	4.3	2.5	66	5
599300	543350E	28	113	20	0.2	2330	<1	400	26	136	138	<100	1.3	1170	49	25	13.4	26	2
599300	543375E	34	77	10	<0.1	3280	<1	380	13	76	83	<100	3.7	330	12	5.6	3.6	24	2
599300	543400E	30	75	20	<0.1	1910	<1	410	32	27	75	<100	5.2	190	5	2.1	1.3	24	2
599300	543425E	16	191	100	0.2	1400	<1	240	34	48	126	<100	3.8	380	12	5.6	2.4	79	6
599300	543450E	23	87	<10	<0.1	1660	<1	410	20	95	107	<100	2.7	350	23	10.2	6.2	39	2
599300	543475E	9	25	<10	0.3	690	<1	630	23	<5	15	<100	0.7	770	1	0.6	<0.5	3	<1
599300	543500E	24	83	10	0.1	2870	<1	450	106	118	80	<100	3.4	410	21	9.8	6.8	26	2
599300	543525E	20	115	30	<0.1	1750	<1	240	32	64	425	<100	4.9	790	13	6.5	3.1	91	4
599300	543550E	17	65	<10	<0.1	2610	<1	420	24	54	47	<100	3.6	110	9	3.7	2.8	14	2
599300	543575E	17	73	<10	<0.1	5710	<1	510	33	86	89	<100	5	510	21	10.1	6.8	30	2
599300	543600E	11	138	20	<0.1	960	<1	250	29	53	160	<100	7	220	12	5.5	3	72	4
599300	543625E	4	113	10	<0.1	3070	<1	290	56	53	440	<100	7.7	230	13	6.9	3	66	4
599300	543650E	7	120	10	<0.1	2230	<1	300	51	70	940	<100	11.4	400	15	7.2	3.4	94	3
599300	543675E	12	104	20	<0.1	2670	<1	380	29	52	102	<100	5.4	210	12	5.8	2.7	67	2
599300	543700E	13	100	20	0.2	2520	<1	330	64	88	116	<100	2.6	280	27	12.8	7.5	79	2
599300	543725E	18	115	40	0.2	1790	<1	300	8	144	207	<100	2.8	540	35	15.7	9.6	47	3
599300	543750E	17	98	<10	0.4	2510	<1	440	30	197	205	<100	4.5	1010	74	36.5	21.8	40	1
599300	543775E	23	116	10	<0.1	2880	<1	310	54	116	228	<100	7.3	360	28	13.3	8.1	55	2
599300	543800E	19	104	<10	0.1	2260	<1	350	21	74	623	<100	1	830	15	7.3	4.1	42	1
599300	543825E	34	80	<10	<0.1	2430	<1	330	32	97	36	<100	6.9	250	26	10.6	9.2	26	1
599300	543850E	23	128	<10	0.1	1700	<1	280	29	83	136	<100	1.5	220	34	13.7	8.1	75	2
599300	543875E	13	68	840	25.3	2540	<1	350	38	70	93	<100	2.7	150	47	20.4	12.2	65	2
599300	543950E	5	299	80	0.3	2050	<1	30	17	44	147	<100	4.2	520	23	10.5	3	110	5
599300	543975E	2	273	<10	<0.1	2930	<1	160	8	<5	50	<100	<0.5	300	<1	0.8	<0.5	164	2
599300	544000E	3	61	<10	0.2	1900	<1	610	62	20	31	<100	<0.5	920	22	14.9	4.1	52	1
599300	544025E	17	76	<10	0.2	1860	<1	470	63	105	60	<100	2.5	870	36	19.1	10.8	49	<1
599300	544050E	9	75	<10	1.3	2650	<1	350	20	55	238	<100	4.5	1170	30	18.1	6.2	63	<1
599300	544075E	4	222	<10	<0.1	1360	<1	60	29	10	362	<100	<0.5	220	8	6.7	0.8	150	2
599300	544100E	9	63	<10	0.1	1220	<1	520	128	11	8	<100	6.2	180	8	4.7	2	4	<1
599300	544125E	10	183	100	0.6	4460	<1	250	45	148	849	<100	1.2	1270	189	150	26.7	123	2
599300	544150E	9	74	<10	<0.1	2840	<1	490	67	59	74	<100	6.6	310	15	6.6	4.6	35	1
599300	544175E	2	137	50	0.3	4100	<1	370	69	83	508	<100	1.1	660	55	34	11.7	113	2
599300	544200E	5	258	20	<0.1	1670	<1	20	28	66	265	<100	0.9	350	42	20.6	7.4	126	3
599300	544225E	10	141	20	0.1	2390	<1	280	26	104	98	<100	2.9	340	34	17.1	9	69	2
599300	544250E	15	176	10	0.2	2360	<1	140	23	24	716	<100	2.5	630	10	6.1	1.6	196	2
599300	544275E	4	104	<10	0.3	2440	<1	200	3	12	207	<100	1	1600	5	3.3	0.9	265	1
599300	544300E	9	98	<10	0.3	1710	<1	410	106	122	69	<100	2.2	980	121	76.5	23.6	79	<1
599300	544325E	15	54	<10	0.1	1340	<1	550	55	34	39	<100	1.8	430	15	7.8	5	21	<1

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599300	543000E	6	<1	<0.5	129	12	<5	49	2320	<5	0.9	19	200	0.6	80	<1	4	<1	210
599300	543025E	5	<1	<0.5	95.4	8	<5	40	5040	<5	0.6	15	141	0.5	40	<1	3	<1	126
599300	543050E	4	<1	<0.5	105	6	<5	56	1540	<5	<0.5	12	83	0.3	20	<1	2	<1	207
599300	543075E	15	<1	<0.5	61.6	24	6	33	4940	<5	0.5	46	273	0.6	100	<1	9	<1	176
599300	543100E	8	<1	<0.5	181	9	<5	72	5950	<5	<0.5	17	296	0.8	50	<1	3	<1	199
599300	543125E	7	<1	<0.5	98.4	11	<5	22	3210	<5	0.8	20	199	0.8	70	<1	4	<1	153
599300	543150E	19	<1	<0.5	143	21	<5	68	6430	5	<0.5	46	370	0.8	40	<1	8	<1	166
599300	543175E	27	<1	<0.5	48.7	38	<5	25	6870	<5	<0.5	74	465	1.3	180	<1	14	<1	285
599300	543200E	8	<1	<0.5	207	10	<5	55	6180	<5	<0.5	21	268	0.7	40	<1	4	<1	187
599300	543225E	19	<1	<0.5	35.8	20	17	40	4280	<5	<0.5	49	314	0.6	40	<1	9	<1	151
599300	543275E	11	<1	<0.5	247	12	<5	47	3610	<5	<0.5	25	235	0.8	40	<1	5	<1	172
599300	543300E	22	<1	<0.5	51	27	<5	46	6100	<5	<0.5	51	508	1.1	230	<1	10	<1	166
599300	543325E	10	<1	<0.5	39.2	18	<5	20	2920	<5	<0.5	28	157	2.1	160	<1	6	<1	144
599300	543350E	58	<1	<0.5	156	80	<5	41	18100	<5	<0.5	152	542	1.4	60	<1	29	<1	104
599300	543375E	15	<1	<0.5	72.4	24	<5	36	2440	<5	<0.5	44	170	0.7	90	<1	9	<1	199
599300	543400E	5	<1	<0.5	47.9	11	<5	43	1960	<5	<0.5	16	131	0.6	70	<1	3	<1	160
599300	543425E	10	<1	<0.5	84	20	<5	39	7070	<5	1.1	28	245	1.9	380	<1	6	<1	91
599300	543450E	27	<1	<0.5	42.4	41	<5	40	4040	<5	<0.5	74	214	0.7	110	<1	14	<1	111
599300	543475E	1	<1	<0.5	10.1	<1	13	88	2300	8	<0.5	2	519	0.2	20	<1	<1	<1	<5
599300	543500E	28	<1	<0.5	66	39	<5	31	3960	<5	<0.5	78	255	0.9	70	<1	15	<1	154
599300	543525E	12	<1	<0.5	56.5	23	<5	43	20900	<5	<0.5	37	263	0.9	100	<1	8	<1	129
599300	543550E	12	<1	<0.5	61.6	15	<5	44	3310	<5	<0.5	31	126	0.4	70	<1	6	<1	251
599300	543575E	27	<1	<0.5	76	37	<5	37	2380	<5	<0.5	72	409	0.7	40	<1	13	<1	96
599300	543600E	13	<1	<0.5	77.4	21	<5	44	2070	<5	<0.5	34	198	1.5	210	<1	7	<1	116
599300	543625E	12	<1	<0.5	47.1	20	<5	18	12800	<5	<0.5	34	219	1.7	200	<1	7	<1	119
599300	543650E	14	<1	<0.5	28	23	<5	32	18200	<5	<0.5	37	251	1.3	170	<1	8	<1	80
599300	543675E	12	<1	<0.5	54.1	20	<5	36	4800	<5	<0.5	33	257	0.9	120	<1	7	<1	90
599300	543700E	30	<1	<0.5	54.5	38	<5	38	5260	<5	<0.5	75	296	2.2	140	<1	14	<1	58
599300	543725E	40	<1	<0.5	39	59	<5	47	2930	<5	<0.5	107	268	0.7	190	<1	20	<1	127
599300	543750E	88	<1	<0.5	18.1	104	<5	23	2870	<5	<0.5	224	733	0.6	90	<1	41	<1	62
599300	543775E	32	<1	<0.5	125	44	<5	45	3280	<5	<0.5	84	487	1.5	120	<1	16	<1	67
599300	543800E	17	<1	<0.5	44.3	27	<5	70	22800	<5	<0.5	50	519	0.5	60	<1	10	<1	84
599300	543825E	34	<1	<0.5	92	35	6	56	2680	<5	<0.5	84	225	2.1	70	<1	15	<1	63
599300	543850E	34	<1	<0.5	51.7	38	5	49	2530	<5	<0.5	71	275	1.1	230	<1	14	<1	128
599300	543875E	50	<1	<0.5	32.5	23	<5	19	5730	<5	<0.5	65	246	2.1	40	<1	11	<1	69
599300	543950E	14	<1	<0.5	12.2	18	<5	8	1930	<5	1.2	29	110	1.7	410	<1	6	<1	148
599300	543975E	<1	<1	<0.5	6.1	<1	<5	25	1180	<5	<0.5	<1	54	0.2	<10	<1	<1	<1	24
599300	544000E	17	<1	<0.5	5.7	11	<5	35	2660	<5	<0.5	25	164	0.2	140	<1	4	<1	11
599300	544025E	40	<1	<0.5	13.4	42	18	35	5460	<5	<0.5	88	490	0.4	130	<1	16	<1	34
599300	544050E	24	<1	<0.5	8.6	30	<5	43	29500	<5	<0.5	51	285	0.1	30	<1	10	<1	78
599300	544075E	3	<1	<0.5	14.3	4	<5	20	1450	<5	<0.5	7	78	1.8	100	<1	1	<1	39
599300	544100E	8	<1	<0.5	8.2	8	<5	30	1450	<5	<0.5	16	172	0.1	20	<1	3	<1	60
599300	544125E	113	<1	<0.5	56.8	89	6	29	10400	<5	<0.5	189	507	0.6	300	<1	34	<1	22
599300	544150E	17	<1	<0.5	16.8	23	10	19	5220	<5	<0.5	42	244	0.6	100	<1	8	<1	91
599300	544175E	45	<1	<0.5	29.9	42	33	24	20900	<5	<0.5	86	179	1.3	280	<1	16	<1	18
599300	544200E	32	<1	<0.5	21	22	<5	11	2450	<5	0.6	63	158	3.4	320	<1	11	<1	49
599300	544225E	35	<1	<0.5	11.5	47	<5	29	1460	<5	<0.5	84	134	1.3	240	<1	16	<1	84
599300	544250E	6	<1	<0.5	12.5	9	<5	32	9040	<5	<0.5	14	213	1.1	110	<1	3	<1	72
599300	544275E	3	<1	<0.5	14.5	5	<5	50	2030	<5	<0.5	8	292	0.9	<10	<1	2	<1	26
599300	544300E	97	<1	<0.5	19.5	73	10	35	4180	<5	<0.5	161	315	0.3	230	<1	29	<1	25
599300	544325E	19	<1	<0.5	8	22	6	30	3070	<5	<0.5	47	178	0.2	80	<1	9	<1	58

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599300	543000E	<1	6	5	<1	4030	<1	<1	<10	4.8	98	<0.5	5	<1	25	2	520	8
599300	543025E	<1	<5	4	<1	3010	<1	<1	<10	3.2	53	<0.5	5	<1	21	1	590	6
599300	543050E	<1	<5	4	<1	5460	<1	<1	<10	3.7	22	<0.5	4	<1	16	<1	270	<5
599300	543075E	1	18	13	<1	3400	<1	2	<10	12.6	84	<0.5	12	<1	68	5	480	11
599300	543100E	<1	<5	6	<1	3550	<1	1	<10	3.4	10	<0.5	4	<1	34	2	1580	<5
599300	543125E	1	5	6	<1	3140	<1	<1	<10	72.4	158	<0.5	41	<1	27	2	590	7
599300	543150E	<1	11	14	<1	3500	<1	3	10	6.9	15	<0.5	7	<1	83	5	820	6
599300	543175E	1	30	22	<1	1830	<1	4	<10	13.6	126	<0.5	9	<1	119	8	450	13
599300	543200E	<1	7	7	<1	2870	<1	1	<10	3	6	<0.5	3	<1	32	2	1190	<5
599300	543225E	<1	17	15	<1	5000	<1	3	<10	6.1	25	<0.5	17	<1	82	5	440	<5
599300	543275E	<1	9	8	<1	3770	<1	1	<10	3	6	<0.5	5	<1	44	3	250	<5
599300	543300E	<1	37	15	<1	3010	<1	4	<10	7.2	41	<0.5	7	<1	135	8	800	6
599300	543325E	2	19	9	<1	2040	<1	2	<10	13.4	164	<0.5	8	<1	42	3	710	9
599300	543350E	1	89	45	<1	4170	<1	8	<10	24.5	48	<0.5	34	<1	295	18	370	17
599300	543375E	<1	17	12	<1	3960	<1	2	<10	8	42	<0.5	7	<1	59	4	190	6
599300	543400E	<1	6	5	<1	4680	<1	<1	<10	6	34	<0.5	6	<1	22	1	190	6
599300	543425E	4	28	8	<1	2500	<1	2	<10	18.4	432	<0.5	9	<1	56	4	860	13
599300	543450E	<1	28	22	<1	4440	<1	4	<10	10.1	29	<0.5	16	<1	123	7	230	8
599300	543475E	1	<5	<1	<1	7540	<1	<1	<10	0.8	<3	<0.5	5	<1	8	<1	420	<5
599300	543500E	<1	23	23	<1	4650	<1	4	<10	9.7	25	<0.5	11	<1	111	6	1560	7
599300	543525E	2	38	10	<1	2350	<1	2	<10	11.1	82	<0.5	7	<1	65	4	470	12
599300	543550E	<1	6	9	<1	3570	<1	2	<10	4.4	23	<0.5	6	<1	42	2	450	<5
599300	543575E	<1	19	21	<1	4020	<1	4	<10	5	13	<0.5	6	<1	124	7	190	6
599300	543600E	1	22	10	<1	1880	<1	2	<10	12.8	116	<0.5	6	<1	61	4	790	8
599300	543625E	<1	40	10	<1	2200	<1	2	<10	13.7	102	<0.5	8	<1	72	5	1940	12
599300	543650E	1	56	11	<1	2230	<1	2	<10	16.8	92	<0.5	13	<1	73	5	1390	10
599300	543675E	1	31	10	<1	2530	<1	2	<10	12.2	39	<0.5	7	<1	60	4	650	8
599300	543700E	2	49	24	<1	2720	<1	5	<10	12.4	43	<0.5	9	<1	148	9	1140	12
599300	543725E	4	48	31	<1	2110	<1	6	<10	17	139	<0.5	11	<1	193	10	160	11
599300	543750E	<1	86	67	<1	4150	<1	12	<10	10.9	9	<0.5	17	<1	451	25	280	10
599300	543775E	3	46	25	<1	2530	<1	5	<10	10.9	24	<0.5	7	<1	152	9	1020	12
599300	543800E	4	34	14	<1	3720	<1	3	<10	7.6	11	<0.5	9	<1	80	5	150	6
599300	543825E	4	13	27	<1	1880	<1	5	<10	4.9	8	<0.5	6	<1	130	6	460	6
599300	543850E	4	41	24	<1	1990	<1	6	<10	9.2	13	<0.5	6	<1	169	8	730	<5
599300	543875E	126	61	29	<1	2310	<1	8	<10	4.9	21	<0.5	9	<1	213	13	470	12
599300	543950E	22	38	9	<1	410	<1	3	<10	21.9	835	0.8	7	<1	114	6	450	30
599300	543975E	<1	7	<1	<1	1920	<1	<1	<10	1.4	9	<0.5	2	<1	<5	<1	140	<5
599300	544000E	2	37	10	<1	9690	<1	3	<10	2.8	4	<0.5	83	<1	182	11	660	<5
599300	544025E	2	67	28	<1	5190	<1	6	<10	5.8	6	<0.5	21	<1	232	14	1290	7
599300	544050E	1	83	16	<1	4800	<1	4	<10	4	<3	0.5	25	<1	207	14	110	<5
599300	544075E	1	42	2	<1	830	<1	<1	<10	14.5	139	<0.5	8	<1	41	6	620	11
599300	544100E	3	7	5	<1	4510	<1	1	<10	1.2	<3	<0.5	8	<1	66	3	1940	<5
599300	544125E	8	383	65	<1	3870	<1	23	<10	40	72	<0.5	30	<1	1500	126	450	39
599300	544150E	2	16	13	<1	4610	<1	3	<10	4.8	16	<0.5	8	<1	74	5	570	6
599300	544175E	4	190	31	<1	5530	<1	8	<10	30.9	48	<0.5	18	<1	340	27	1820	39
599300	544200E	3	50	21	<1	290	<1	6	<10	17.1	180	<0.5	6	<1	202	14	880	14
599300	544225E	2	52	26	<1	2070	<1	6	<10	15.5	101	<0.5	7	<1	191	11	990	14
599300	544250E	3	35	4	<1	1700	<1	1	<10	11.6	120	<0.5	7	<1	53	4	700	7
599300	544275E	3	36	2	<1	2580	<1	<1	<10	7	70	<0.5	11	<1	27	3	50	5
599300	544300E	2	107	57	<1	3930	<1	17	<10	9.5	7	<0.5	28	<1	915	54	890	6
599300	544325E	<1	12	14	<1	4080	<1	3	<10	2.5	<3	<0.5	20	<1	99	5	1190	<5

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599300	544350E	6	77	<10	0.2	2150	<1	470	46	39	516	<100	2.7	1070	8	4.3	2.2	122	2
599300	544375E	7	194	<10	<0.1	1610	<1	270	67	36	235	<100	0.6	760	53	34.3	6.6	100	2
599300	544400E	17	104	10	0.7	2320	<1	390	85	137	726	<100	1.9	1850	33	18.8	9	64	1
599300	544425E	8	151	30	0.1	2020	<1	140	51	97	541	<100	2.9	340	36	20.8	8.1	186	4
599300	544450E	9	103	<10	<0.1	1420	<1	330	63	47	259	<100	1.1	350	25	14.3	4.8	127	2
599300	544475E	32	170	<10	0.5	2220	<1	200	44	66	268	<100	2.3	1490	67	40.3	10.3	142	2
599300	544500E	12	119	20	0.2	1840	<1	400	57	121	211	<100	1.2	560	46	26.2	11.3	95	1
599300	544525E	13	61	20	0.6	1820	<1	410	15	152	541	<100	1.3	1430	28	15.4	9.7	131	2
599300	544550E	12	58	<10	0.3	1100	<1	540	62	41	14	<100	1.8	370	14	7.5	5	15	<1
599300	544575E	20	116	10	0.3	1640	<1	210	51	26	113	<100	1.6	1480	21	15.5	2.6	211	1
599300	544600E	7	131	<10	0.3	1550	<1	170	8	9	166	<100	1	1220	4	4.2	0.7	220	1
599300	544625E	7	118	10	0.3	1920	<1	230	6	9	92	<100	0.6	2300	3	3	0.6	246	1
599300	544650E	4	58	50	1.3	2100	<1	480	16	188	681	<100	1.6	2600	26	14.6	9.4	150	1
599300	544675E	9	91	20	0.7	1670	<1	420	26	129	416	<100	6.4	1950	26	14.2	7.9	76	1
599300	544700E	5	92	10	0.2	1320	<1	440	144	101	161	<100	2.1	530	35	20	9.4	57	2
599300	544725E	48	71	<10	1	1810	<1	660	93	137	17	<100	3.1	720	80	48.5	17.6	10	<1
599300	544750E	3	246	<10	<0.1	2110	<1	130	72	8	267	<100	0.6	130	16	15.9	1.1	110	4
599400	544400E	5	199	20	<0.1	1450	<1	70	44	41	400	<100	3.6	390	24	16.9	3.4	172	6
599400	543000E	4	65	20	0.1	1070	<1	430	37	79	132	<100	1.2	970	19	11.8	3.7	45	1
599400	543025E	6	53	<10	<0.1	1300	<1	520	59	20	213	<100	4.4	550	6	3.1	1.6	23	1
599400	543075E	1	46	<10	<0.1	630	<1	460	80	10	235	<100	2.7	140	3	2	0.6	20	<1
599400	543100E	3	27	<10	<0.1	1190	<1	480	65	6	367	<100	1.4	280	<1	0.5	<0.5	15	<1
599400	543125E	3	64	<10	<0.1	1690	<1	430	103	23	262	<100	1.9	120	4	2.3	0.9	27	2
599400	543175E	26	100	10	<0.1	1730	<1	340	54	86	268	<100	3	380	23	12.1	5.6	42	2
599400	543200E	14	111	20	<0.1	1390	<1	330	13	26	134	<100	2.8	170	6	3.2	1.4	55	3
599400	543225E	12	213	190	0.2	1720	<1	120	10	70	275	<100	3.6	350	18	9.1	3.8	158	13
599400	543250E	35	134	40	2.3	800	<1	280	12	109	179	<100	6.9	420	26	11.3	6.5	38	3
599400	543275E	22	32	40	0.2	1170	<1	360	20	12	99	<100	5.6	220	3	2.2	0.7	25	2
599400	543300E	16	117	70	<0.1	2730	<1	280	10	94	265	<100	4.3	260	15	7.4	3.8	67	6
599400	543350E	1	30	<10	<0.1	1100	<1	440	54	13	244	<100	6.7	190	2	1.7	0.7	24	2
599400	543375E	19	180	60	<0.1	1340	<1	170	8	74	362	<100	6.6	460	18	9.5	3.9	98	6
599400	543400E	7	128	40	<0.1	1620	<1	270	20	36	257	<100	3.7	210	7	4	1.5	51	4
599400	543450E	7	149	40	<0.1	2030	<1	190	16	29	338	<100	2.1	190	7	3.7	1.3	85	5
599400	543475E	4	92	<10	<0.1	2060	<1	370	35	38	358	<100	2.9	280	11	6	2.4	35	2
599400	543500E	4	71	20	<0.1	2410	<1	510	28	24	258	<100	15.6	260	6	3.5	1.8	34	1
599400	543525E	8	128	20	<0.1	1700	<1	320	22	66	253	<100	4.9	250	16	9.5	2.8	40	2
599400	543550E	6	90	<10	<0.1	3730	<1	350	15	33	343	<100	3.8	230	7	3.9	1.8	26	2
599400	543575E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	543600E	12	72	20	<0.1	1630	<1	390	20	33	236	<100	4.3	380	7	3.4	1.7	26	2
599400	543625E	3	93	<10	<0.1	760	<1	320	73	51	543	<100	5.4	550	18	10.1	4.7	44	3
599400	543650E	2	64	<10	<0.1	1670	<1	340	25	26	341	<100	7.4	140	6	3.6	1.4	32	3
599400	543675E	17	106	10	<0.1	1920	<1	340	17	45	179	<100	3.3	410	14	7.7	3.5	26	3
599400	543700E	7	124	<10	<0.1	1320	<1	280	17	55	256	<100	9.4	380	21	11.3	5.2	49	3
599400	543725E	9	82	10	<0.1	2220	<1	380	14	32	215	<100	5.1	170	8	4.7	2	28	2
599400	543750E	2	90	40	<0.1	2110	<1	300	16	23	366	<100	3.2	230	9	5.4	1.7	71	2
599400	543775E	7	204	40	<0.1	1850	<1	100	22	64	571	<100	9.4	980	26	15.1	4.3	126	9
599400	543800E	2	182	10	<0.1	4130	<1	240	33	36	479	<100	6.6	350	14	9.3	2.4	126	6
599400	543825E	6	187	20	<0.1	2160	<1	150	70	16	204	<100	1.4	590	24	18.7	1.8	145	4
599400	543850E	17	83	<10	0.1	1700	<1	450	93	9	78	<100	1.1	310	7	4.2	1.6	15	1
599400	543925E	7	>300	10	0.3	950	<1	70	3	17	99	<100	0.7	760	17	18.5	1.6	62	3
599400	543950E	4	277	60	0.1	1320	<1	80	14	29	241	<100	1.7	350	16	9.1	2.9	138	7

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599300	544350E	8	<1	<0.5	8.5	15	<5	40	28000	<5	<0.5	24	236	0.4	50	<1	5	<1	63
599300	544375E	30	<1	<0.5	8.1	12	<5	32	700	<5	<0.5	45	156	0.6	240	<1	7	<1	50
599300	544400E	32	<1	<0.5	17.3	54	<5	39	45300	<5	<0.5	93	398	0.4	110	<1	20	<1	33
599300	544425E	31	<1	<0.5	15.8	40	12	23	12500	<5	0.6	74	150	2.6	290	<1	15	<1	63
599300	544450E	20	<1	<0.5	10.5	19	<5	24	9130	<5	<0.5	40	159	0.4	170	<1	8	<1	51
599300	544475E	43	<1	<0.5	6.4	25	9	29	5540	<5	<0.5	70	390	0.6	230	<1	12	<1	79
599300	544500E	43	<1	<0.5	18.2	56	8	33	6600	<5	<0.5	100	284	0.7	290	<1	19	<1	28
599300	544525E	32	<1	<0.5	9.7	82	<5	27	20600	<5	<0.5	123	186	0.5	70	<1	26	<1	33
599300	544550E	18	<1	<0.5	10.8	22	<5	38	1280	<5	<0.5	48	194	0.2	20	<1	9	<1	48
599300	544575E	10	<1	<0.5	10.6	10	<5	25	6480	<5	<0.5	20	208	0.7	50	<1	4	<1	52
599300	544600E	3	<1	<0.5	25.6	4	8	23	2330	<5	<0.5	6	144	0.6	<10	<1	1	<1	17
599300	544625E	2	<1	<0.5	13.8	4	6	43	1400	<5	<0.5	6	301	0.5	<10	<1	1	<1	22
599300	544650E	32	<1	<0.5	7.9	96	<5	29	41300	6	<0.5	137	208	0.3	40	<1	30	<1	39
599300	544675E	27	<1	<0.5	11	62	<5	24	33600	<5	<0.5	99	190	0.4	70	<1	21	<1	74
599300	544700E	36	<1	<0.5	13.5	54	11	23	11200	<5	<0.5	100	188	0.5	160	<1	20	<1	55
599300	544725E	71	<1	<0.5	6.1	90	12	44	1040	<5	<0.5	150	239	<0.1	90	<1	29	<1	62
599300	544750E	5	<1	<0.5	9.6	3	34	18	320	<5	<0.5	7	75	0.4	190	<1	1	<1	47
599400	544400E	14	<1	<0.5	18.1	17	<5	18	3190	<5	1.2	30	146	5.6	120	<1	6	<1	106
599400	543000E	19	<1	<0.5	52	29	9	64	6520	<5	0.6	51	362	0.4	150	<1	10	<1	131
599400	543025E	6	<1	<0.5	62.9	10	<5	52	6650	<5	0.6	16	308	0.3	50	<1	3	<1	192
599400	543075E	3	<1	<0.5	63	3	<5	69	6040	<5	<0.5	7	398	0.7	30	<1	1	<1	182
599400	543100E	<1	<1	<0.5	89	2	<5	48	15900	<5	<0.5	2	86	1.1	20	<1	<1	<1	194
599400	543125E	4	<1	<0.5	54.1	5	<5	55	15400	<5	<0.5	9	200	0.5	60	<1	2	<1	139
599400	543175E	22	<1	<0.5	62.8	31	<5	29	8610	<5	<0.5	59	263	0.7	100	<1	12	<1	178
599400	543200E	6	<1	<0.5	84.8	10	<5	35	2400	<5	<0.5	16	141	0.5	210	<1	3	<1	149
599400	543225E	17	<1	<0.5	37.9	29	<5	17	1160	<5	1.6	48	221	4.8	320	<1	10	<1	148
599400	543250E	28	<1	<0.5	40.4	45	<5	20	2900	<5	<0.5	72	219	0.7	150	<1	15	<1	161
599400	543275E	3	<1	<0.5	50	5	<5	29	2160	<5	<0.5	8	129	0.2	110	<1	2	<1	300
599400	543300E	17	<1	<0.5	68.4	41	<5	24	11100	<5	0.9	55	151	1.2	170	<1	12	<1	227
599400	543350E	3	<1	<0.5	102	4	<5	48	17100	<5	<0.5	7	149	1.3	40	<1	1	<1	163
599400	543375E	17	<1	<0.5	79.9	28	<5	42	2710	<5	0.8	44	392	1.1	200	<1	9	<1	167
599400	543400E	7	<1	<0.5	64	11	<5	37	13500	<5	0.6	16	164	0.9	160	<1	3	<1	127
599400	543450E	6	<1	<0.5	46.1	13	<5	55	3010	<5	0.8	17	204	1.1	270	<1	4	<1	151
599400	543475E	11	<1	<0.5	107	12	<5	46	14600	<5	<0.5	24	225	0.9	80	<1	4	<1	236
599400	543500E	7	<1	<0.5	146	8	<5	62	4640	<5	<0.5	17	357	0.8	50	<1	3	<1	182
599400	543525E	13	<1	<0.5	92.1	16	<5	32	9040	<5	<0.5	31	272	0.6	200	<1	6	<1	182
599400	543550E	7	<1	<0.5	210	9	<5	42	12700	<5	<0.5	18	332	1	80	<1	3	<1	210
599400	543575E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	543600E	8	<1	<0.5	116	9	<5	37	7910	<5	<0.5	18	250	1	70	<1	3	<1	210
599400	543625E	18	<1	<0.5	105	14	7	39	20900	<5	<0.5	38	449	1.3	80	<1	7	<1	203
599400	543650E	6	<1	<0.5	131	8	10	56	9300	<5	<0.5	16	126	0.9	90	<1	3	<1	322
599400	543675E	16	<1	<0.5	122	17	<5	40	9790	<5	<0.5	34	404	0.6	100	<1	6	<1	347
599400	543700E	21	<1	<0.5	95.2	17	7	41	10200	<5	<0.5	44	326	1.2	120	<1	8	<1	225
599400	543725E	9	<1	<0.5	94.8	10	5	103	7370	<5	<0.5	19	367	0.9	60	<1	3	<1	240
599400	543750E	7	<1	<0.5	146	8	8	124	4580	<5	<0.5	16	184	1.7	120	<1	3	<1	306
599400	543775E	19	<1	<0.5	70	24	7	30	10400	<5	1.4	44	354	8.7	180	<1	9	<1	230
599400	543800E	10	<1	<0.5	260	12	<5	82	6110	<5	<0.5	22	277	3.7	170	<1	4	<1	206
599400	543825E	9	<1	<0.5	75.6	7	<5	43	2480	<5	<0.5	13	193	2.5	160	<1	2	<1	51
599400	543850E	7	<1	<0.5	229	5	<5	71	6050	<5	<0.5	13	548	2.4	50	<1	2	<1	136
599400	543925E	6	<1	<0.5	7.2	7	<5	15	170	<5	<0.5	15	127	0.3	20	<1	3	<1	59
599400	543950E	12	<1	<0.5	22.1	11	<5	21	1940	<5	1.1	28	157	3.3	320	<1	5	<1	53

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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599300	544350E	2	32	7	<1	3900	<1	1	<10	5.4	52	<0.5	11	<1	47	4	570	<5
599300	544375E	<1	53	17	<1	3280	<1	7	<10	9.3	24	<0.5	12	<1	395	24	1000	<5
599300	544400E	3	88	26	<1	3360	<1	5	<10	10.3	17	<0.5	25	<1	203	15	750	10
599300	544425E	4	76	23	<1	1450	<1	5	<10	17.9	177	<0.5	8	<1	215	16	1480	13
599300	544450E	1	46	14	<1	3470	<1	3	<10	7.5	51	<0.5	11	<1	146	10	1270	5
599300	544475E	3	114	25	<1	2460	<1	9	<10	12.3	19	<0.5	22	<1	452	29	1130	<5
599300	544500E	4	77	30	<1	3610	<1	7	<10	12.5	29	<0.5	15	<1	302	19	1070	11
599300	544525E	13	67	30	<1	3660	<1	5	<10	11.5	19	<0.5	12	<1	172	13	330	11
599300	544550E	3	9	14	<1	4050	<1	2	<10	3.5	<3	<0.5	6	<1	93	5	390	<5
599300	544575E	3	58	7	<1	2150	<1	2	<10	10.2	40	<0.5	16	<1	131	12	580	<5
599300	544600E	4	44	2	<1	2070	<1	<1	<10	12	32	<0.5	12	<1	26	4	110	<5
599300	544625E	4	28	2	<1	3280	<1	<1	<10	8.8	34	<0.5	12	<1	19	3	70	<5
599300	544650E	33	57	30	<1	6190	<1	4	<10	9.2	15	<0.5	16	<1	169	12	130	8
599300	544675E	17	50	24	<1	5700	<1	4	<10	7.4	29	<0.5	22	<1	159	11	200	9
599300	544700E	7	47	28	<1	6760	<1	5	<10	8.3	18	<0.5	20	<1	238	15	1450	12
599300	544725E	4	47	46	<1	9780	<1	11	<10	2.3	<3	<0.5	37	<1	705	33	510	<5
599300	544750E	1	23	3	<1	2680	<1	2	<10	7.4	87	<0.5	5	<1	107	15	2440	7
599400	544400E	6	70	10	<1	860	<1	3	<10	15.3	335	<0.5	15	<1	123	14	760	17
599400	543000E	1	60	14	<1	4460	<1	3	<10	24.3	33	<0.5	16	<1	119	10	190	8
599400	543025E	<1	14	5	<1	4990	<1	<1	<10	6.3	36	<0.5	6	<1	33	2	1080	6
599400	543075E	<1	8	2	<1	2860	<1	<1	<10	2.4	58	<0.5	5	<1	17	2	5140	5
599400	543100E	<1	<5	<1	<1	4830	<1	<1	<10	0.8	18	0.6	2	<1	<5	<1	9520	<5
599400	543125E	<1	7	3	<1	2940	<1	<1	<10	2.9	23	<0.5	5	<1	23	2	2790	<5
599400	543175E	<1	41	18	<1	3570	<1	4	<10	10.4	45	<0.5	10	<1	115	9	1880	8
599400	543200E	1	14	5	<1	2970	<1	<1	<10	6.3	68	<0.5	5	<1	29	2	810	5
599400	543225E	4	36	14	<1	1300	<1	3	<10	23.3	459	<0.5	11	1	86	7	620	18
599400	543250E	4	28	22	<1	1830	<1	4	<10	16.5	27	<0.5	10	<1	124	7	190	8
599400	543275E	1	7	2	<1	3110	<1	<1	<10	3.1	59	<0.5	6	<1	20	2	270	6
599400	543300E	3	27	15	<1	2240	<1	3	<10	15.2	280	<0.5	9	<1	82	6	210	23
599400	543350E	<1	<5	2	<1	3440	<1	<1	<10	1.8	37	<0.5	4	<1	13	1	1850	<5
599400	543375E	3	30	13	<1	1340	<1	3	<10	15	251	<0.5	6	<1	100	7	360	17
599400	543400E	1	22	5	<1	2210	<1	1	<10	11.3	166	<0.5	7	<1	36	3	680	11
599400	543450E	2	20	5	<1	1880	<1	<1	<10	11.3	218	<0.5	5	<1	37	3	890	9
599400	543475E	<1	17	8	<1	2870	<1	2	<10	4.4	22	<0.5	8	<1	61	5	840	7
599400	543500E	<1	13	5	<1	4120	<1	1	<10	5.2	26	<0.5	7	<1	31	3	310	7
599400	543525E	<1	42	10	<1	2470	<1	2	<10	18.2	45	<0.5	17	<1	90	8	220	13
599400	543550E	<1	16	6	<1	2460	<1	1	<10	4.9	23	<0.5	8	<1	35	3	110	11
599400	543575E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	543600E	2	11	6	<1	2710	<1	1	<10	7.6	48	<0.5	7	<1	29	3	310	8
599400	543625E	1	31	14	<1	1930	<1	3	<10	7.4	41	<0.5	8	<1	88	9	370	16
599400	543650E	<1	11	5	<1	2060	<1	1	<10	3.6	67	<0.5	6	<1	31	3	400	8
599400	543675E	1	20	11	<1	2100	<1	2	<10	6.2	45	<0.5	11	<1	78	5	230	8
599400	543700E	3	44	15	<1	1430	<1	3	<10	9.1	53	<0.5	9	<1	101	9	130	12
599400	543725E	<1	13	6	<1	2470	<1	1	<10	3.9	23	<0.5	6	<1	44	3	170	7
599400	543750E	2	43	5	<1	2210	<1	1	<10	10.6	59	<0.5	11	<1	43	5	380	8
599400	543775E	4	97	14	<1	860	<1	4	<10	41.5	330	<0.5	26	<1	124	12	540	33
599400	543800E	2	39	7	<1	2510	<1	2	<10	10.9	102	<0.5	10	<1	80	7	810	19
599400	543825E	23	62	5	<1	1890	<1	3	<10	13.3	86	<0.5	26	<1	134	15	1980	12
599400	543850E	62	10	5	<1	2800	<1	1	<10	3.1	11	<0.5	14	<1	40	3	1560	<5
599400	543925E	5	56	5	<1	890	<1	2	<10	18	112	<0.5	12	<1	100	15	50	13
599400	543950E	23	43	9	<1	800	<1	2	<10	14.6	366	<0.5	8	<1	95	7	920	24

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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599400	544000E	1	80	<10	<0.1	1480	<1	460	123	15	116	<100	0.7	500	16	14.1	2.1	41	1
599400	544025E	13	76	<10	0.3	1250	<1	550	79	25	66	<100	0.7	850	20	12.1	4.5	31	<1
599400	544050E	3	274	110	0.3	1220	<1	<10	13	34	402	<100	4.6	820	31	20	2.7	118	8
599400	544075E	11	241	20	<0.1	1370	<1	120	16	6	194	<100	1.2	290	10	9.1	1	130	2
599400	544100E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	544125E	9	214	10	<0.1	1180	<1	170	32	13	180	<100	1.1	400	25	21.4	2.1	174	4
599400	544150E	6	57	<10	1.3	1500	<1	580	51	14	262	<100	0.6	3600	16	13.3	3.1	72	<1
599400	544175E	2	67	<10	0.1	970	<1	500	74	<5	132	<100	<0.5	1280	10	11.4	1	105	2
599400	544200E	4	145	20	0.4	1900	<1	350	130	57	380	<100	0.8	1380	56	42	8.3	134	2
599400	544225E	1	118	40	0.8	2260	<1	660	26	31	475	<100	0.9	1880	41	62.2	5	115	1
599400	544250E	2	84	<10	0.2	1060	<1	450	59	31	122	<100	0.6	1200	18	23	1.7	88	2
599400	544275E	16	187	10	0.6	1950	<1	130	5	20	323	<100	2	1940	12	12.8	1.7	199	2
599400	544300E	7	177	50	0.3	1240	<1	60	2	26	303	<100	3	1000	5	2.9	1.3	301	5
599400	544325E	21	119	30	0.6	1900	<1	180	28	65	711	<100	1.8	1330	28	18	5.8	234	2
599400	544350E	30	67	<10	0.5	930	<1	570	65	21	36	<100	1.3	1400	17	10.3	4.5	21	<1
599400	544375E	6	166	<10	0.2	1210	<1	330	37	11	464	<100	1	1250	38	41.8	2.7	127	2
599400	544425E	<1	162	10	<0.1	970	<1	40	6	14	128	<100	1.1	40	2	1.6	0.6	182	7
599400	544450E	<1	107	<10	0.1	1010	<1	300	20	9	132	<100	0.9	270	26	26.1	1.9	85	3
599400	544475E	2	106	30	0.3	1150	<1	470	53	23	184	<100	0.8	740	36	32.8	4.2	156	2
599400	544500E	3	208	<10	<0.1	1230	<1	460	64	16	75	<100	<0.5	180	13	12	1.7	125	4
599400	544525E	15	164	40	0.1	1340	<1	210	34	59	126	<100	1.4	440	16	10.1	3.8	152	7
599400	544550E	2	142	<10	<0.1	710	<1	190	168	12	117	<100	1.2	360	22	22.1	2	138	6
599400	544575E	1	191	60	0.2	1480	<1	170	85	87	413	<100	2.8	940	78	59.5	10.4	103	5
599400	544600E	4	147	50	<0.1	2310	<1	300	105	19	234	<100	1.6	100	17	15.8	2.1	158	4
599400	544625E	2	60	10	0.3	610	<1	510	49	22	55	<100	1.4	230	8	5.6	1.9	14	<1
599400	544650E	<1	48	10	0.5	530	<1	530	232	14	69	<100	1.2	260	9	6.6	1.8	11	<1
599400	544675E	<1	30	<10	<0.1	470	<1	620	369	7	40	<100	1.1	80	5	3.2	1.1	6	<1
599400	544700E	<1	12	<10	<0.1	230	<1	220	92	<5	20	<100	1.5	10	<1	1.2	<0.5	10	1
599400	544725E	2	60	<10	0.2	700	<1	500	223	14	222	<100	<0.5	290	11	8.4	1.9	75	1
599400	544750E	2	66	<10	0.7	790	<1	490	236	48	75	<100	2.9	550	42	29.4	7.9	10	<1
599500	543000E	12	82	<10	<0.1	1580	<1	440	113	48	166	<100	2.1	370	17	9	4.4	33	2
599500	543025E	20	71	<10	<0.1	1550	<1	400	36	28	318	<100	7.5	380	6	2.8	1.4	26	2
599500	543050E	27	94	<10	0.1	1720	<1	430	58	123	316	<100	4.2	2080	54	27.5	13.5	57	2
599500	543075E	40	82	<10	<0.1	1530	<1	380	45	52	154	<100	2.5	340	9	4.5	2.1	42	2
599500	543100E	29	28	<10	<0.1	1000	<1	420	49	37	118	<100	1.7	490	11	4.5	3.5	15	<1
599500	543125E	20	96	10	<0.1	2270	<1	330	95	68	218	<100	3.3	260	12	6.4	2.4	56	3
599500	543150E	23	100	40	<0.1	750	<1	290	16	48	120	<100	8.5	270	10	4.7	2.4	55	4
599500	543175E	29	106	10	<0.1	690	<1	280	39	62	103	<100	6.7	760	21	11.4	5.2	29	3
599500	543200E	31	82	40	<0.1	1020	<1	370	20	48	61	<100	5.3	290	9	4.4	2.6	40	3
599500	543250E	27	100	20	0.1	2520	<1	400	18	162	122	<100	6.1	440	37	17.8	10.4	39	2
599500	543275E	37	62	20	0.5	1860	<1	510	17	71	51	<100	1	780	34	17.6	9.7	21	1
599500	543300E	36	84	30	0.1	1300	<1	380	8	88	94	<100	6.1	270	15	6.8	4.5	27	2
599500	543325E	17	107	10	<0.1	1380	<1	340	23	135	270	<100	3.2	360	34	17.3	9.2	38	2
599500	543350E	8	163	20	<0.1	870	<1	220	23	80	370	<100	9.1	230	28	15.4	7	119	5
599500	543375E	86	16	<10	1.7	1420	<1	570	15	26	150	<100	1.6	5200	14	6.6	5.1	14	<1
599500	543400E	29	71	<10	<0.1	1460	<1	340	8	50	173	<100	12.9	520	9	4.2	3.1	32	2
599500	543425E	35	96	10	<0.1	1550	<1	400	6	37	71	<100	2.3	180	8	3.8	2	27	2
599500	543450E	19	127	40	<0.1	580	<1	290	8	150	95	<100	7.4	550	43	19.2	11.7	45	3
599500	543475E	92	46	<10	0.3	1910	<1	510	13	52	74	<100	4.5	2280	48	22.3	16.4	15	1
599500	543500E	22	92	40	<0.1	2580	<1	460	45	63	98	<100	5.9	280	13	6.1	3.3	22	2
599500	543525E	13	104	20	<0.1	2130	<1	350	42	62	314	<100	4.5	230	12	5.5	2.9	37	3

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599400	544000E	10	<1	<0.5	9.7	6	<5	42	4320	<5	<0.5	15	122	0.4	90	<1	3	<1	15
599400	544025E	19	<1	<0.5	11.7	13	12	55	3760	<5	<0.5	30	600	0.2	80	<1	5	<1	25
599400	544050E	13	<1	<0.5	13	12	8	6	4750	<5	1.5	24	183	1.4	190	<1	5	<1	179
599400	544075E	4	<1	<0.5	19.9	2	<5	54	290	<5	<0.5	6	154	0.9	30	<1	1	<1	41
599400	544100E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	544125E	10	<1	<0.5	19.4	6	12	35	640	<5	0.5	14	166	1.7	90	<1	2	<1	29
599400	544150E	12	<1	<0.5	7.3	10	33	49	6590	<5	<0.5	20	327	0.1	110	<1	4	<1	20
599400	544175E	5	<1	<0.5	9.1	2	14	33	1450	<5	<0.5	6	204	0.2	160	<1	<1	<1	15
599400	544200E	36	<1	<0.5	13.6	24	9	33	3990	<5	<0.5	57	386	0.8	170	<1	10	<1	20
599400	544225E	20	<1	<0.5	32.2	17	<5	77	2230	<5	<0.5	36	137	1	40	<1	7	<1	71
599400	544250E	8	<1	<0.5	7.7	18	17	34	1670	<5	<0.5	9	114	0.1	190	<1	2	<1	43
599400	544275E	6	<1	<0.5	14.5	10	9	34	1950	<5	<0.5	15	355	1.5	<10	<1	3	<1	65
599400	544300E	5	<1	<0.5	15.2	12	9	23	5120	<5	1.3	15	167	3.1	20	<1	3	<1	58
599400	544325E	22	<1	<0.5	10.6	28	<5	40	14700	<5	<0.5	51	424	1.5	100	<1	10	<1	56
599400	544350E	17	<1	<0.5	9.5	14	9	40	2510	<5	<0.5	31	452	0.1	70	<1	5	<1	35
599400	544375E	13	<1	<0.5	13.5	5	25	32	1850	<5	<0.5	13	227	0.4	190	<1	2	<1	32
599400	544425E	2	<1	<0.5	17.2	7	17	8	710	<5	1.1	7	66	2.1	<10	<1	2	<1	51
599400	544450E	9	<1	<0.5	4.6	3	<5	31	1080	<5	<0.5	11	92	0.1	120	<1	2	<1	8
599400	544475E	19	<1	<0.5	6.4	10	6	56	990	<5	<0.5	27	171	0.6	280	<1	5	<1	15
599400	544500E	7	<1	<0.5	34.3	7	<5	99	2880	<5	<0.5	13	106	0.5	240	<1	3	<1	25
599400	544525E	15	<1	<0.5	32.4	26	<5	36	3320	<5	1.3	40	168	1.6	170	<1	8	<1	35
599400	544550E	10	<1	<0.5	18.8	5	7	31	2280	<5	0.7	12	122	1.4	170	<1	2	<1	92
599400	544575E	45	<1	<0.5	23.2	31	8	24	7740	<5	0.6	76	277	2.9	200	<1	14	<1	45
599400	544600E	10	<1	<0.5	29.5	7	7	36	9120	<5	0.9	17	154	2.6	290	<1	3	<1	45
599400	544625E	8	<1	<0.5	15.8	8	<5	37	3890	<5	<0.5	16	166	0.3	40	<1	3	<1	30
599400	544650E	7	<1	<0.5	12.9	7	11	34	4500	<5	<0.5	13	90	0.2	80	<1	2	<1	26
599400	544675E	5	<1	<0.5	18.7	3	12	41	6380	<5	<0.5	7	68	0.3	40	<1	1	<1	43
599400	544700E	<1	<1	<0.5	23.2	<1	<5	36	140	<5	<0.5	2	45	2.7	30	<1	<1	<1	25
599400	544725E	8	<1	<0.5	6.6	8	<5	51	5530	<5	<0.5	16	100	0.1	190	<1	3	<1	45
599400	544750E	34	<1	<0.5	9.6	31	<5	32	3370	<5	<0.5	63	159	<0.1	80	<1	12	<1	71
599500	543000E	18	<1	<0.5	107	16	<5	52	7790	<5	<0.5	38	323	0.7	110	<1	7	<1	119
599500	543025E	6	<1	<0.5	115	11	<5	52	6550	<5	<0.5	18	221	0.6	40	<1	4	<1	240
599500	543050E	56	<1	<0.5	41.5	58	<5	44	8660	<5	<0.5	119	534	0.6	150	<1	22	<1	89
599500	543075E	9	<1	<0.5	39.7	15	<5	32	7850	<5	<0.5	26	301	0.5	110	<1	5	<1	196
599500	543100E	14	<1	<0.5	114	12	<5	50	3420	<5	<0.5	29	250	0.4	30	<1	5	<1	124
599500	543125E	12	<1	<0.5	73.3	20	<5	38	11400	<5	<0.5	32	228	0.8	140	<1	6	<1	252
599500	543150E	11	<1	<0.5	46.7	20	<5	24	1640	<5	<0.5	31	220	0.7	140	<1	6	<1	188
599500	543175E	23	<1	<0.5	83.4	23	<5	36	5300	<5	<0.5	52	339	0.8	80	<1	9	<1	223
599500	543200E	11	<1	<0.5	32.5	18	<5	20	1920	<5	<0.5	29	115	0.5	110	<1	6	<1	164
599500	543250E	46	<1	<0.5	60.6	67	<5	29	2000	<5	<0.5	117	252	0.3	210	<1	23	<1	167
599500	543275E	43	<1	<0.5	32.6	48	<5	36	4850	<5	<0.5	99	209	0.5	40	<1	18	<1	59
599500	543300E	19	<1	<0.5	45.8	30	<5	20	2460	<5	<0.5	54	112	0.4	140	<1	11	<1	176
599500	543325E	37	<1	<0.5	71.4	37	42	35	12000	<5	<0.5	85	266	0.7	140	<1	16	<1	80
599500	543350E	27	<1	<0.5	39.5	27	<5	35	6360	<5	<0.5	61	237	2.3	300	<1	11	<1	119
599500	543375E	21	<1	<0.5	20.8	15	25	98	4210	<5	<0.5	44	526	0.3	10	<1	7	<1	62
599500	543400E	11	<1	<0.5	85.9	14	<5	53	4330	<5	<0.5	30	385	1	70	<1	6	<1	154
599500	543425E	9	<1	<0.5	67.9	15	<5	49	1740	<5	<0.5	23	187	0.3	160	<1	5	<1	121
599500	543450E	50	<1	<0.5	57.1	54	<5	21	2980	<5	<0.5	117	173	1.6	100	<1	22	<1	133
599500	543475E	67	<1	<0.5	24.5	42	21	51	2800	<5	<0.5	128	500	0.5	20	<1	21	<1	184
599500	543500E	15	<1	<0.5	159	20	<5	28	9730	<5	<0.5	36	322	0.9	80	<1	7	<1	263
599500	543525E	13	<1	<0.5	40.3	21	<5	27	8520	<5	<0.5	35	220	0.8	180	<1	7	<1	188

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599400	544000E	3	23	6	<1	6080	<1	2	<10	2.7	4	<0.5	21	<1	124	12	720	<5
599400	544025E	2	28	11	<1	6180	<1	3	<10	3.2	4	<0.5	19	<1	138	9	1270	<5
599400	544050E	40	79	8	<1	170	<1	3	<10	34.6	689	1.1	15	1	136	14	260	36
599400	544075E	6	46	2	<1	1240	<1	1	<10	8.9	59	<0.5	6	<1	59	9	230	7
599400	544100E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599400	544125E	3	59	5	<1	2050	<1	3	<10	7.6	117	<0.5	6	<1	148	20	580	10
599400	544150E	4	51	7	<1	5930	<1	2	<10	2.7	<3	<0.5	34	<1	131	12	740	<5
599400	544175E	3	32	2	<1	4890	<1	1	<10	2.2	<3	<0.5	39	<1	85	12	800	<5
599400	544200E	8	146	20	<1	3970	<1	7	<10	22.5	19	<0.5	41	<1	392	37	2100	23
599400	544225E	8	202	12	<1	7660	<1	4	<10	16.9	9	<0.5	68	<1	305	94	250	20
599400	544250E	2	54	4	<1	4580	<1	2	<10	3.9	<3	<0.5	21	<1	150	25	1260	<5
599400	544275E	5	81	5	<1	1530	<1	1	<10	18.9	94	<0.5	20	<1	71	14	110	12
599400	544300E	13	38	4	<1	650	<1	<1	<10	16.3	346	<0.5	8	<1	23	3	90	25
599400	544325E	7	95	16	<1	1550	<1	4	<10	14	108	<0.5	11	<1	167	16	730	16
599400	544350E	2	19	11	<1	4200	<1	3	<10	3.2	<3	<0.5	22	<1	123	8	670	<5
599400	544375E	3	78	6	<1	3640	<1	4	<10	10.6	13	<0.5	26	<1	299	44	710	6
599400	544425E	2	37	2	<1	670	<1	<1	<10	8.3	196	<0.5	8	<1	10	3	60	13
599400	544450E	2	18	4	<1	2860	<1	3	<10	2.9	8	<0.5	17	<1	221	23	180	<5
599400	544475E	12	100	10	<1	5210	<1	4	<10	10.3	18	<0.5	42	<1	267	32	820	12
599400	544500E	2	30	5	<1	5200	<1	2	<10	7.3	48	<0.5	8	<1	106	11	1950	7
599400	544525E	9	56	12	<1	2020	<1	3	<10	24.5	335	<0.5	12	<1	99	8	630	22
599400	544550E	3	61	5	<1	2130	<1	2	<10	12.6	121	<0.5	20	<1	158	23	2850	10
599400	544575E	11	148	27	<1	2360	<1	9	<10	23.2	174	<0.5	22	<1	522	56	790	27
599400	544600E	5	61	6	<1	3740	<1	2	<10	13.6	154	<0.5	12	<1	120	16	1440	22
599400	544625E	5	11	5	<1	6210	<1	1	<10	2.5	12	<0.5	7	<1	61	5	430	<5
599400	544650E	9	12	5	<1	6040	<1	1	<10	1.4	<3	<0.5	10	<1	72	6	1660	<5
599400	544675E	3	<5	3	<1	7500	<1	<1	<10	1.8	<3	<0.5	5	<1	30	2	2920	<5
599400	544700E	<1	<5	<1	<1	3350	<1	<1	<10	2.3	5	<0.5	2	<1	7	2	9790	<5
599400	544725E	5	28	5	<1	7800	<1	1	<10	2.8	3	<0.5	16	<1	82	7	3420	<5
599400	544750E	5	32	21	<1	5420	<1	6	<10	1.9	<3	<0.5	28	<1	340	22	2440	<5
599500	543000E	<1	27	13	<1	4390	<1	3	<10	5.8	22	<0.5	10	<1	87	6	2670	8
599500	543025E	<1	13	5	<1	2410	<1	<1	<10	6.5	31	<0.5	4	<1	27	2	290	7
599500	543050E	2	81	39	<1	4200	<1	8	<10	11.6	19	<0.5	12	<1	307	19	1200	8
599500	543075E	<1	18	7	<1	3770	<1	1	<10	5.5	69	<0.5	10	<1	46	3	1370	8
599500	543100E	<1	12	10	<1	3580	<1	2	<10	5.8	10	<0.5	5	<1	52	3	1390	<5
599500	543125E	<1	29	9	<1	2730	<1	2	<10	11.7	78	<0.5	10	<1	66	5	2130	17
599500	543150E	2	18	9	<1	1480	<1	2	<10	9.9	220	<0.5	6	<1	48	3	430	10
599500	543175E	1	33	17	<1	1170	<1	3	<10	9	272	<0.5	8	<1	109	8	550	18
599500	543200E	2	16	8	<1	2910	<1	1	<10	6.7	61	<0.5	6	<1	44	3	390	6
599500	543250E	2	24	35	<1	2820	<1	6	<10	9.1	40	<0.5	11	<1	214	11	230	7
599500	543275E	1	31	32	<1	3980	<1	6	<10	12.5	15	<0.5	20	<1	208	12	90	9
599500	543300E	1	16	16	<1	2850	<1	3	<10	8.9	55	<0.5	9	<1	72	5	170	8
599500	543325E	1	68	28	<1	3190	<1	6	<10	15.7	79	<0.5	7	<1	183	13	380	12
599500	543350E	2	64	21	<1	2330	<1	4	<10	21	239	<0.5	11	<1	147	12	380	18
599500	543375E	1	21	15	<1	6160	<1	3	<10	4.1	10	<0.5	4	<1	84	5	70	<5
599500	543400E	3	13	9	1	2310	<1	2	<10	8.6	32	<0.5	6	<1	42	3	100	11
599500	543425E	1	15	7	<1	2870	<1	1	<10	5.6	47	<0.5	6	<1	41	3	130	5
599500	543450E	4	53	37	<1	1330	<1	7	<10	15.8	89	<0.5	13	<1	208	12	220	12
599500	543475E	1	41	47	<1	4260	<1	8	<10	9.8	10	<0.5	6	<1	273	16	80	5
599500	543500E	<1	16	11	<1	3050	<1	2	<10	7.9	38	<0.5	10	<1	66	4	540	8
599500	543525E	<1	17	10	<1	2180	<1	2	<10	7.1	66	<0.5	7	<1	58	4	1630	9

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599500	543550E	28	83	20	0.2	4280	<1	440	15	37	60	<100	3.5	240	10	4.7	3.4	21	2
599500	543575E	19	125	20	0.1	1490	<1	240	29	43	977	<100	1.3	810	12	6.4	2.3	116	2
599500	543600E	32	90	10	<0.1	3270	<1	410	31	59	92	<100	4.6	280	13	5.9	4.5	25	2
599500	543625E	36	91	10	<0.1	2970	<1	380	17	26	42	<100	3.8	240	6	2.9	1.7	21	2
599500	543650E	17	109	10	<0.1	1800	<1	270	37	46	149	<100	38.4	190	15	7.4	3.9	44	2
599500	543675E	34	145	20	<0.1	1960	<1	230	12	163	293	<100	5.6	870	46	20	12.7	41	3
599500	543700E	21	151	20	<0.1	2820	<1	220	24	54	108	<100	3.5	340	17	8.4	3.8	43	2
599500	543725E	7	104	10	0.2	3950	<1	300	49	35	512	<100	6.1	250	8	4.4	2	62	2
599500	543750E	6	220	30	<0.1	2690	<1	150	53	55	344	<100	0.7	380	20	10	3.6	84	5
599500	543775E	20	47	<10	0.9	2290	<1	550	37	10	7	<100	<0.5	600	6	3.3	1.8	18	<1
599500	543800E	10	81	30	0.4	3130	<1	330	61	66	132	<100	1	340	28	15.1	7	32	<1
599500	543825E	26	85	10	1	3110	<1	430	23	77	537	<100	0.6	2820	30	15.8	7.7	35	<1
599500	543850E	32	78	20	1.1	4960	<1	380	14	73	477	<100	1.8	1050	18	9.2	4.9	69	<1
599500	543875E	14	86	50	5	2340	<1	420	11	90	374	<100	0.9	500	21	9	6.1	45	<1
599500	543900E	17	182	20	0.3	3670	<1	260	12	186	325	<100	0.8	670	88	45	20.9	53	2
599500	543925E	11	174	30	0.3	3040	<1	250	18	82	361	<100	1.1	590	46	23.3	9.3	133	2
599500	543950E	10	216	30	0.1	1530	<1	140	51	17	304	<100	<0.5	240	14	7.3	2	130	2
599500	543975E	9	98	<10	0.1	1910	<1	380	88	39	69	<100	0.7	330	29	17.2	5.8	28	<1
599500	544000E	3	141	30	0.4	1500	<1	140	3	18	302	<100	1.1	1070	5	2.8	1.1	265	1
599500	544025E	27	79	<10	0.2	2230	<1	510	50	26	33	<100	0.7	740	26	15.7	5.5	36	<1
599500	544050E	17	94	<10	0.3	3580	<1	430	30	62	92	<100	1.3	580	30	15.9	7.4	39	<1
599500	544075E	50	66	<10	1.1	2150	<1	490	25	36	19	<100	3.3	1000	22	10.9	6.9	12	<1
599500	544100E	15	50	<10	0.2	2060	<1	560	56	12	56	<100	1.3	770	7	3.5	2.4	12	<1
599500	544125E	7	46	<10	0.2	1840	<1	570	43	16	35	<100	<0.5	500	8	4.2	2.2	21	<1
599500	544150E	7	46	10	0.4	1620	<1	480	49	11	380	<100	0.7	4680	4	2.3	0.9	148	<1
599500	544175E	6	90	<10	<0.1	1500	<1	350	107	28	200	<100	0.9	870	29	18.1	4.8	121	1
599500	544200E	5	71	<10	0.2	1350	<1	510	175	20	47	<100	0.6	910	23	15.1	3.8	50	<1
599500	544225E	13	70	<10	0.6	2480	<1	560	130	28	92	<100	1	880	31	20.9	5.8	20	<1
599500	544250E	7	72	<10	0.1	1730	<1	510	43	28	89	<100	0.8	1510	40	28.5	6.4	69	<1
599500	544275E	8	68	<10	0.6	2120	<1	360	17	6	292	<100	0.6	5560	6	4.3	1	224	<1
599500	544300E	6	165	<10	<0.1	3130	<1	210	9	<5	423	<100	<0.5	70	1	3.5	<0.5	134	2
599500	544325E	10	231	30	<0.1	1410	<1	70	39	56	131	<100	2	390	32	17.2	5.8	172	5
599500	544350E	21	98	<10	0.6	2290	<1	360	87	119	447	<100	2.8	1000	36	20.4	9.7	95	1
599500	544375E	5	74	<10	0.2	1640	<1	640	79	34	85	<100	0.7	850	29	17.8	5.8	26	<1
599500	544400E	10	64	<10	0.5	1170	<1	590	126	15	16	<100	1.7	470	6	3.6	1.6	19	<1
599500	544425E	2	295	70	<0.1	1230	<1	30	14	23	91	<100	<0.5	110	10	5.6	1.4	127	9
599500	544450E	19	210	50	0.2	3680	<1	180	12	103	262	<100	2.7	520	31	15.7	6.6	146	4
599500	544475E	18	85	<10	0.2	2310	<1	540	13	28	10	<100	1.5	1010	10	5.1	3	21	<1
599500	544500E	7	185	40	<0.1	1050	<1	160	32	46	346	<100	1.2	220	15	8.7	2.8	111	7
599500	544525E	7	>300	<10	<0.1	2180	<1	50	8	<5	125	<100	<0.5	70	4	7.6	<0.5	58	2
599600	543000E	3	10	<10	<0.1	250	<1	540	56	<5	11	<100	<0.5	250	<1	<0.5	<0.5	4	<1
599600	543025E	3	13	20	0.2	510	<1	670	165	<5	37	<100	4.3	670	4	2	0.9	5	<1
599600	543050E	<1	20	10	<0.1	390	<1	610	198	<5	36	<100	1.2	850	3	2.2	0.7	5	<1
599600	543075E	3	3	<10	0.3	260	<1	510	115	<5	18	<100	<0.5	610	<1	<0.5	<0.5	3	<1
599600	543100E	5	62	<10	<0.1	1660	<1	600	62	24	151	<100	1.4	120	7	3.5	1.8	17	2
599600	543125E	4	148	30	<0.1	1450	<1	300	72	42	419	<100	1.6	160	7	4	1.8	86	8
599600	543150E	7	103	10	<0.1	1030	<1	350	75	127	76	<100	3.6	310	26	13.8	6.5	42	3
599600	543200E	<1	95	<10	<0.1	1630	<1	530	196	64	844	<100	2.1	520	27	21.4	5.6	65	5
599600	543225E	14	59	<10	<0.1	1090	<1	510	17	55	27	<100	2.1	290	23	10.9	6.6	17	2
599600	543250E	25	30	<10	0.3	960	<1	510	62	17	15	<100	<0.5	460	14	6.5	3.9	8	<1
599600	543275E	4	27	<10	<0.1	870	<1	640	66	9	12	<100	1.1	210	10	5.2	2.7	5	<1

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599500	543550E	13	<1	<0.5	121	17	<5	35	1990	<5	<0.5	32	319	0.6	80	<1	6	<1	149
599500	543575E	10	<1	<0.5	21.5	13	<5	20	48300	<5	<0.5	25	402	1	70	<1	5	<1	90
599500	543600E	17	<1	<0.5	55.2	22	<5	34	4990	<5	<0.5	47	260	1.1	70	<1	8	<1	134
599500	543625E	8	<1	<0.5	69	11	<5	24	1490	<5	<0.5	20	247	0.6	80	<1	4	<1	199
599500	543650E	16	<1	<0.5	94.3	17	<5	28	5200	<5	<0.5	37	290	1.7	110	<1	7	<1	96
599500	543675E	50	<1	<0.5	51	69	<5	33	4600	<5	<0.5	123	339	1.3	200	<1	24	<1	229
599500	543700E	16	<1	<0.5	42.8	23	<5	42	2640	<5	<0.5	38	253	1	240	<1	7	<1	140
599500	543725E	8	<1	<0.5	61.4	14	<5	31	12700	<5	<0.5	22	248	1.4	110	<1	4	<1	113
599500	543750E	16	<1	<0.5	30	20	<5	31	6270	<5	<0.5	39	343	2.2	290	<1	8	<1	55
599500	543775E	7	<1	<0.5	5.1	6	<5	131	810	<5	<0.5	14	509	0.2	10	<1	3	<1	13
599500	543800E	29	<1	<0.5	60.1	25	<5	58	7920	<5	<0.5	55	342	0.9	90	<1	10	<1	72
599500	543825E	32	<1	<0.5	18.1	40	<5	90	22800	<5	<0.5	74	843	0.3	70	<1	14	<1	43
599500	543850E	19	<1	<0.5	33.9	30	11	65	20000	<5	<0.5	50	324	0.4	60	<1	10	<1	46
599500	543875E	22	<1	<0.5	25.7	40	<5	83	16700	<5	<0.5	60	184	0.4	140	<1	12	<1	54
599500	543900E	87	<1	<0.5	43.1	81	<5	66	9150	<5	<0.5	181	363	0.8	180	<1	33	<1	21
599500	543925E	39	<1	<0.5	14.1	37	<5	36	4960	<5	<0.5	75	219	1.4	200	<1	14	<1	68
599500	543950E	9	<1	<0.5	47.4	6	<5	36	5430	<5	<0.5	15	171	2	330	<1	3	<1	29
599500	543975E	26	<1	<0.5	16.6	19	<5	76	8450	<5	<0.5	45	192	0.5	50	<1	8	<1	29
599500	544000E	4	<1	<0.5	10.6	9	<5	34	1560	<5	<0.5	12	222	1	<10	<1	3	<1	65
599500	544025E	23	<1	<0.5	8.7	15	<5	52	1580	<5	<0.5	35	392	0.2	100	<1	6	<1	30
599500	544050E	32	<1	<0.5	6.7	28	<5	58	4310	<5	<0.5	61	364	0.2	130	<1	11	<1	40
599500	544075E	28	<1	<0.5	9.4	22	<5	58	950	<5	<0.5	55	151	0.2	20	<1	9	<1	62
599500	544100E	9	<1	<0.5	8.5	9	6	41	3140	<5	<0.5	19	259	0.2	30	<1	3	<1	106
599500	544125E	9	<1	<0.5	4.7	8	8	43	1350	<5	<0.5	19	290	<0.1	40	<1	3	<1	8
599500	544150E	3	<1	<0.5	7	5	13	44	12500	<5	<0.5	9	532	0.3	40	<1	2	<1	29
599500	544175E	21	<1	<0.5	9.4	13	15	36	6330	<5	<0.5	30	309	0.4	270	<1	5	<1	32
599500	544200E	18	<1	<0.5	8.4	10	<5	49	2230	<5	<0.5	24	302	0.3	160	<1	4	<1	36
599500	544225E	25	<1	<0.5	12.5	16	<5	76	3590	<5	<0.5	37	419	0.1	80	<1	6	<1	39
599500	544250E	28	<1	<0.5	9.2	15	35	55	3710	<5	<0.5	36	364	0.2	250	<1	6	<1	31
599500	544275E	3	<1	<0.5	5.7	3	<5	44	5780	<5	<0.5	6	761	0.3	30	<1	1	<1	32
599500	544300E	<1	<1	<0.5	14.5	1	33	48	460	<5	<0.5	2	169	0.2	<10	<1	<1	<1	23
599500	544325E	24	<1	<0.5	15.7	21	<5	21	1080	<5	1.3	50	191	5.8	250	<1	9	<1	143
599500	544350E	36	<1	<0.5	23.2	56	<5	31	13300	<5	<0.5	91	319	0.5	100	<1	19	<1	76
599500	544375E	25	<1	<0.5	16.7	18	<5	27	3310	<5	<0.5	38	233	0.4	140	<1	7	<1	20
599500	544400E	7	<1	<0.5	22.3	7	<5	49	2210	<5	<0.5	13	159	0.5	10	<1	3	<1	98
599500	544425E	7	<1	<0.5	24.5	9	<5	11	1260	<5	2.5	18	77	2.8	310	<1	4	<1	41
599500	544450E	27	<1	<0.5	7	44	<5	25	4200	<5	1.1	68	144	1.3	220	<1	14	<1	140
599500	544475E	12	<1	<0.5	6.3	12	<5	44	300	<5	0.6	26	230	0.3	20	<1	5	<1	53
599500	544500E	13	<1	<0.5	30.4	13	<5	42	14800	<5	1.4	28	140	3.9	160	<1	5	<1	198
599500	544525E	<1	<1	<0.5	13.5	<1	<5	19	90	<5	<0.5	1	97	0.2	20	<1	<1	<1	45
599600	543000E	<1	<1	<0.5	11.6	<1	<5	88	1360	<5	0.6	1	270	0.2	20	<1	<1	<1	<5
599600	543025E	4	<1	<0.5	66.8	3	19	151	7770	<5	<0.5	5	701	1.6	10	<1	<1	<1	53
599600	543050E	3	<1	<0.5	62.4	3	7	126	5880	<5	<0.5	5	349	1.4	10	<1	<1	<1	28
599600	543075E	<1	<1	<0.5	19.6	<1	<5	124	2060	<5	<0.5	<1	406	0.3	10	<1	<1	<1	<5
599600	543100E	7	<1	<0.5	102	9	<5	119	4180	<5	<0.5	16	247	0.6	110	<1	3	<1	160
599600	543125E	8	<1	<0.5	60.1	16	7	41	13000	<5	1.2	23	206	3.1	270	<1	5	<1	56
599600	543150E	28	<1	<0.5	45.1	33	10	43	5430	<5	<0.5	66	237	0.7	150	<1	13	<1	152
599600	543200E	24	<1	<0.5	77	26	<5	107	33900	<5	<0.5	51	77	1.4	150	<1	10	<1	83
599600	543225E	30	<1	<0.5	13.6	26	<5	70	2640	<5	<0.5	61	239	0.3	40	<1	11	<1	73
599600	543250E	17	<1	<0.5	9.7	11	5	91	2250	<5	<0.5	31	274	0.3	20	<1	5	<1	32
599600	543275E	13	<1	<0.5	27	6	<5	122	2880	<5	<0.5	18	181	0.6	20	<1	3	<1	29

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599500	543550E	1	10	10	<1	3310	<1	2	<10	4.7	25	<0.5	9	<1	52	3	170	6
599500	543575E	2	36	8	<1	2320	<1	2	<10	12.2	52	<0.5	11	<1	61	5	360	9
599500	543600E	1	10	15	<1	2710	<1	2	<10	5.2	32	<0.5	7	<1	64	4	360	8
599500	543625E	<1	6	6	<1	2260	<1	1	<10	4.1	22	<0.5	7	<1	30	2	340	<5
599500	543650E	<1	12	12	<1	1840	<1	3	<10	6	20	<0.5	7	<1	84	5	590	6
599500	543675E	2	39	39	<1	1660	<1	8	<10	17.9	102	<0.5	12	<1	225	12	250	15
599500	543700E	2	30	11	<1	1850	<1	3	<10	14.8	53	<0.5	10	<1	93	6	560	10
599500	543725E	<1	21	6	<1	2420	<1	1	<10	10	38	<0.5	8	<1	45	3	940	10
599500	543750E	3	34	11	<1	1560	<1	3	<10	17.2	156	<0.5	9	<1	106	7	830	13
599500	543775E	18	<5	4	<1	7350	<1	1	<10	1.4	<3	<0.5	10	<1	42	3	490	<5
599500	543800E	10	41	19	<1	5550	<1	5	<10	8.8	17	<0.5	20	<1	164	11	1180	14
599500	543825E	50	74	23	<1	9390	<1	5	<10	8.7	5	<0.5	33	<1	183	11	220	10
599500	543850E	19	32	14	<1	5420	<1	3	<10	8.2	9	<0.5	15	<1	110	7	150	7
599500	543875E	15	45	17	<1	3230	<1	4	<10	14.6	6	<0.5	11	<1	97	6	130	7
599500	543900E	11	82	58	<1	2790	<1	14	<10	16.5	20	<0.5	15	<1	557	30	420	8
599500	543925E	17	64	25	<1	2540	<1	7	<10	14.5	41	<0.5	12	<1	265	15	380	14
599500	543950E	32	16	5	<1	1400	<1	2	<10	9.4	55	<0.5	5	<1	76	5	980	7
599500	543975E	7	24	16	<1	4500	<1	4	<10	3.6	<3	<0.5	15	<1	202	13	1320	<5
599500	544000E	41	15	4	<1	2060	<1	<1	<10	11.3	69	<0.5	9	<1	25	2	50	10
599500	544025E	3	36	13	<1	7600	<1	4	<10	2.2	<3	<0.5	23	<1	200	12	280	<5
599500	544050E	4	38	21	<1	4920	<1	5	<10	4.3	<3	<0.5	30	<1	191	11	100	<5
599500	544075E	5	10	19	<1	6270	<1	4	<10	2.9	<3	<0.5	11	<1	138	7	80	<5
599500	544100E	5	<5	7	<1	5450	<1	1	<10	1.9	<3	<0.5	12	<1	51	3	310	<5
599500	544125E	4	6	6	<1	5900	<1	1	<10	1.1	<3	<0.5	8	<1	57	3	200	<5
599500	544150E	5	30	3	<1	5820	<1	<1	<10	2.1	4	<0.5	17	<1	25	2	210	<5
599500	544175E	4	60	12	<1	4250	<1	4	<10	6.6	8	<0.5	24	<1	207	13	2880	6
599500	544200E	2	59	9	<1	5900	<1	3	<10	4.2	<3	<0.5	60	<1	165	13	3000	6
599500	544225E	1	41	14	<1	5960	<1	4	<10	2.9	<3	<0.5	41	<1	232	16	830	<5
599500	544250E	3	86	15	<1	5380	<1	5	<10	5.4	<3	<0.5	42	<1	296	23	210	5
599500	544275E	4	55	2	<1	4730	<1	<1	<10	3.5	<3	<0.5	19	<1	42	4	270	<5
599500	544300E	<1	46	<1	<1	2930	<1	<1	<10	2.7	<3	<0.5	7	<1	9	16	180	<5
599500	544325E	6	55	17	<1	830	<1	5	<10	16	216	<0.5	12	<1	180	12	800	20
599500	544350E	3	112	27	<1	3260	<1	6	<10	14.4	9	<0.5	24	<1	224	16	760	15
599500	544375E	2	27	15	<1	6360	<1	4	<10	4.2	<3	<0.5	40	<1	204	14	1320	9
599500	544400E	3	6	5	<1	6600	<1	1	<10	9.1	<3	<0.5	19	<1	37	3	980	<5
599500	544425E	6	20	5	<1	470	<1	1	<10	10.8	660	<0.5	6	<1	52	4	470	23
599500	544450E	10	48	20	<1	2670	<1	5	<10	19	273	0.6	14	<1	165	10	270	20
599500	544475E	5	7	9	<1	6040	<1	2	<10	5.9	<3	<0.5	24	<1	61	4	60	<5
599500	544500E	3	56	9	<1	1430	<1	2	<10	13	301	<0.5	10	<1	83	6	710	16
599500	544525E	<1	17	<1	<1	1120	<1	<1	<10	2.6	<3	<0.5	3	<1	27	9	100	<5
599600	543000E	2	<5	<1	<1	4560	<1	<1	<10	0.5	5	<0.5	2	<1	6	<1	1420	<5
599600	543025E	2	9	2	<1	6260	<1	<1	<10	0.9	16	<0.5	3	<1	24	1	2690	<5
599600	543050E	1	6	2	<1	5600	<1	<1	<10	1	10	<0.5	4	<1	26	2	2070	<5
599600	543075E	1	<5	<1	<1	4660	<1	<1	<10	<0.5	<3	<0.5	2	<1	<5	<1	1180	<5
599600	543100E	<1	9	5	<1	5740	<1	1	<10	3.4	29	<0.5	7	<1	37	3	1470	<5
599600	543125E	1	26	6	<1	1940	<1	1	<10	14.5	299	<0.5	6	<1	40	3	2240	21
599600	543150E	1	41	21	<1	3090	<1	4	<10	16	47	<0.5	15	<1	156	10	400	12
599600	543200E	<1	93	16	<1	4740	<1	4	<10	21.8	46	<0.5	15	<1	166	22	1410	12
599600	543225E	<1	20	21	<1	4210	<1	4	<10	6.7	6	<0.5	14	<1	151	7	60	<5
599600	543250E	<1	10	12	<1	4310	<1	2	<10	4.2	5	<0.5	6	<1	84	5	160	<5
599600	543275E	<1	6	8	<1	5480	<1	2	<10	2.8	<3	<0.5	13	<1	65	4	580	<5

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599600	543300E	3	111	20	<0.1	1940	<1	360	15	34	153	<100	1.4	170	9	5.6	2	64	5
599600	543325E	38	48	10	<0.1	2760	<1	630	16	16	94	<100	1.5	420	3	1.3	1	18	2
599600	543350E	13	152	10	<0.1	2480	<1	280	46	41	356	<100	1.2	290	12	7.4	2.5	89	5
599600	543375E	23	101	20	<0.1	2470	<1	360	17	68	67	<100	2	230	13	6.6	2.9	29	3
599600	543425E	5	59	<10	<0.1	3530	<1	780	39	23	225	<100	2.5	220	6	3.3	2	17	1
599600	543450E	17	116	<10	<0.1	5520	<1	440	25	78	125	<100	3	310	25	12.4	6.4	41	3
599600	543475E	13	108	10	<0.1	1510	<1	380	49	79	145	<100	3.6	270	24	11.2	6.5	42	2
599600	543500E	18	57	<10	<0.1	2250	<1	540	48	30	73	<100	2.7	660	8	3.5	2.6	17	1
599600	543525E	4	34	<10	<0.1	1710	<1	360	114	9	255	<100	0.9	90	2	1.3	0.6	13	1
599600	543550E	2	76	<10	<0.1	2650	<1	600	213	21	164	<100	3.8	130	7	4.2	1.8	12	2
599600	543575E	12	63	<10	<0.1	2450	<1	520	68	23	49	<100	2.5	150	5	2.5	1.8	17	2
599600	543600E	12	116	10	<0.1	2340	<1	440	103	60	172	<100	3.2	260	21	10.9	5	33	2
599600	543625E	10	88	<10	<0.1	2330	<1	430	83	43	72	<100	10.5	190	19	9.4	5.1	23	1
599600	543650E	4	218	10	<0.1	2680	<1	100	102	28	981	<100	2.6	740	23	15	2.7	127	6
599600	543675E	4	104	<10	<0.1	3260	<1	410	83	49	175	<100	4.6	270	17	9.1	3.8	47	3
599600	543700E	6	183	<10	<0.1	1620	<1	270	26	63	185	<100	1.7	540	28	14.1	6.1	68	4
599600	543725E	27	67	<10	0.7	1380	<1	620	80	16	13	<100	1.1	980	12	7.1	3.1	12	<1
599600	543750E	3	139	<10	0.2	2720	<1	400	107	43	336	<100	2.8	390	19	10.4	4.1	98	2
599600	543775E	2	51	<10	<0.1	950	<1	530	112	10	14	<100	<0.5	160	5	3.4	1.2	9	<1
599600	543800E	8	78	<10	<0.1	1060	<1	510	85	83	123	<100	4.1	820	46	22.8	12.4	31	1
599600	543825E	29	61	<10	0.2	1850	<1	530	49	38	9	<100	1.1	430	22	10.4	6.9	15	<1
599600	543850E	5	164	<10	<0.1	2840	<1	240	151	33	533	<100	8	150	15	8.9	2.8	121	3
599600	543875E	9	258	10	0.2	1700	<1	140	12	82	603	<100	1.8	1040	202	106	20.7	83	2
599600	543900E	10	>300	30	<0.1	1550	<1	40	10	12	354	<100	0.7	290	13	9.6	1.3	68	3
599600	543925E	3	264	50	<0.1	1310	<1	90	14	35	534	<100	1.1	440	24	12.1	3.4	114	3
599600	543950E	8	101	20	0.2	1080	<1	350	58	44	123	<100	2.8	270	18	9.2	4.5	60	2
599600	543975E	5	49	<10	0.5	1080	<1	610	104	13	29	<100	0.9	590	26	18.7	5	12	<1
599600	544000E	5	>300	20	<0.1	930	<1	90	30	20	82	<100	0.8	370	9	4.7	1.6	83	4
599600	544025E	40	58	<10	0.4	1440	<1	660	42	16	14	<100	<0.5	650	13	7.1	3.7	13	<1
599600	544050E	3	60	<10	<0.1	1040	<1	510	146	22	48	<100	<0.5	470	15	9.4	3.6	35	<1
599600	544075E	7	71	<10	0.1	1260	<1	580	107	23	35	<100	0.6	380	17	9.1	4.4	18	<1
599600	544100E	8	91	<10	<0.1	1680	<1	550	61	51	41	<100	1.1	540	25	13.2	6.9	25	1
599600	544125E	2	50	<10	<0.1	740	<1	590	103	13	24	<100	<0.5	290	10	5.9	2.6	7	<1
599600	544150E	<1	14	<10	<0.1	740	<1	600	226	<5	45	<100	0.6	80	4	2.9	0.6	9	<1
599600	544175E	16	56	<10	0.2	1070	<1	520	34	11	20	<100	1	620	10	5.6	2.5	10	<1
599600	544200E	5	257	10	<0.1	2310	<1	270	26	<5	246	<100	<0.5	220	8	7.6	0.8	131	2
599600	544225E	3	86	<10	<0.1	800	<1	350	88	15	37	<100	<0.5	440	25	18.6	3.1	76	2
599600	544275E	9	>300	10	<0.1	1390	<1	50	33	13	175	<100	0.6	380	13	8.1	1.3	65	4
599600	544300E	11	>300	70	<0.1	1860	<1	60	11	164	311	<100	3.9	380	34	14.5	8.1	90	6
599700	543000E	16	7	<10	0.1	700	<1	600	49	<5	28	<100	11	1300	4	1.7	1.6	8	<1
599700	543025E	34	14	<10	0.3	1020	<1	710	77	8	36	<100	2	4460	13	5.8	4.2	6	<1
599700	543050E	17	3	<10	<0.1	600	<1	630	53	<5	11	<100	1.2	580	<1	0.5	<0.5	7	<1
599700	543075E	34	7	<10	0.5	500	<1	620	62	<5	17	<100	1.3	2730	4	2.1	1.2	5	<1
599700	543100E	39	6	<10	0.6	650	<1	590	33	<5	28	<100	3	3630	4	2.2	1.2	8	<1
599700	543125E	9	51	<10	<0.1	1160	<1	530	206	40	89	<100	6.4	490	8	4	2.5	37	3
599700	543150E	19	9	<10	0.4	490	<1	580	46	<5	39	<100	14.1	3110	8	4	2.3	5	<1
599700	543175E	2	60	<10	<0.1	1180	<1	410	63	27	54	<100	2	170	9	4.9	2.3	41	3
599700	543200E	25	24	<10	0.2	1430	<1	640	18	45	36	<100	1.4	680	12	5.5	3.5	19	1
599700	543225E	3	160	10	<0.1	1080	<1	280	19	30	169	<100	6.8	200	11	6.9	2.3	106	6
599700	543250E	11	94	<10	<0.1	1490	<1	400	21	259	51	<100	3.1	520	61	31.1	15.5	32	2
599700	543275E	27	118	<10	<0.1	1920	<1	370	17	71	117	<100	3	200	15	8.1	3.6	52	4

Llewellyn Property
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		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599600	543300E	9	<1	<0.5	93.1	16	<5	88	4350	<5	<0.5	23	85	0.8	350	<1	5	<1	89
599600	543325E	4	<1	<0.5	82	7	<5	77	2620	<5	<0.5	10	225	0.5	30	<1	2	<1	143
599600	543350E	10	<1	<0.5	39.9	15	<5	49	5760	<5	<0.5	24	203	1.3	300	<1	5	<1	64
599600	543375E	14	<1	<0.5	65	23	<5	34	4080	<5	<0.5	37	248	1.1	150	<1	8	<1	225
599600	543425E	8	<1	<0.5	78.2	9	<5	38	4350	<5	<0.5	15	365	1.4	50	<1	3	<1	112
599600	543450E	26	<1	<0.5	53.3	27	<5	64	3380	<5	<0.5	56	256	1.5	150	<1	10	<1	160
599600	543475E	28	<1	<0.5	144	27	<5	69	2180	<5	<0.5	60	362	1	150	<1	11	<1	135
599600	543500E	10	<1	<0.5	84.5	9	<5	39	2400	<5	<0.5	21	452	1	20	<1	4	<1	142
599600	543525E	2	<1	<0.5	53.8	3	<5	42	11300	<5	<0.5	5	149	1.2	70	<1	<1	<1	92
599600	543550E	8	<1	<0.5	170	8	<5	55	14400	<5	<0.5	14	183	1.5	70	<1	3	<1	289
599600	543575E	7	<1	<0.5	151	8	<5	56	3350	<5	<0.5	15	426	1.1	40	<1	3	<1	203
599600	543600E	22	<1	<0.5	77.3	22	<5	45	3840	<5	<0.5	44	225	1	120	<1	8	<1	192
599600	543625E	22	<1	<0.5	43.5	16	<5	36	3230	<5	<0.5	38	338	1.1	50	<1	7	<1	106
599600	543650E	12	<1	<0.5	31.9	8	13	24	11100	<5	0.6	18	212	4.7	280	<1	3	<1	89
599600	543675E	16	<1	<0.5	66.6	16	<5	39	7410	<5	<0.5	32	116	0.9	190	<1	6	<1	136
599600	543700E	26	<1	<0.5	18.5	29	<5	56	1980	<5	<0.5	56	216	1	300	<1	11	<1	43
599600	543725E	12	<1	<0.5	9.5	10	<5	127	1830	<5	<0.5	23	923	0.5	20	<1	4	<1	7
599600	543750E	15	<1	<0.5	39.5	15	6	62	3200	<5	<0.5	32	246	1.4	230	<1	6	<1	106
599600	543775E	5	<1	<0.5	8.3	4	<5	156	1840	<5	<0.5	9	128	0.2	30	<1	2	<1	<5
599600	543800E	51	<1	<0.5	22.1	35	<5	88	3380	<5	<0.5	91	331	0.6	90	<1	16	<1	79
599600	543825E	28	<1	<0.5	7.8	21	<5	121	1490	<5	<0.5	52	451	0.3	30	<1	9	<1	33
599600	543850E	12	<1	<0.5	80.7	11	10	24	6980	<5	<0.5	24	171	3.6	530	<1	5	<1	123
599600	543875E	104	<1	<0.5	16.5	19	<5	28	5930	<5	<0.5	118	155	0.3	260	<1	18	<1	147
599600	543900E	6	<1	<0.5	62.7	4	<5	24	910	<5	<0.5	11	262	0.8	210	<1	2	<1	33
599600	543925E	15	<1	<0.5	14.3	11	<5	20	7180	<5	<0.5	25	239	1.3	280	<1	5	<1	120
599600	543950E	19	<1	<0.5	29.2	17	6	80	1530	<5	<0.5	40	164	1.4	100	<1	7	<1	78
599600	543975E	21	<1	<0.5	10.6	11	12	71	1890	<5	<0.5	29	165	0.2	50	<1	5	<1	7
599600	544000E	7	<1	<0.5	15.8	7	<5	22	410	<5	<0.5	16	100	1.9	210	<1	3	<1	62
599600	544025E	14	<1	<0.5	4.6	10	<5	74	1410	<5	<0.5	24	484	0.1	30	<1	4	<1	13
599600	544050E	15	<1	<0.5	9	10	<5	49	2880	<5	<0.5	23	227	0.2	100	<1	4	<1	22
599600	544075E	19	<1	<0.5	11	14	5	52	2450	<5	<0.5	31	212	0.2	90	<1	5	<1	30
599600	544100E	28	<1	<0.5	14.9	24	7	40	2290	<5	<0.5	52	290	0.2	110	<1	10	<1	67
599600	544125E	11	<1	<0.5	11.1	6	<5	40	2240	<5	<0.5	15	120	0.1	40	<1	3	<1	20
599600	544150E	3	<1	<0.5	19.4	1	<5	48	3060	<5	<0.5	3	45	1.5	20	<1	<1	<1	16
599600	544175E	11	<1	<0.5	4.4	8	<5	54	530	<5	<0.5	18	265	0.1	40	<1	3	<1	33
599600	544200E	3	<1	<0.5	9.2	1	8	29	200	<5	<0.5	4	129	0.7	120	<1	<1	<1	17
599600	544225E	13	<1	<0.5	3.9	6	<5	45	1430	<5	<0.5	18	166	0.2	80	<1	3	<1	11
599600	544275E	6	<1	<0.5	16	5	<5	13	1120	<5	<0.5	11	144	1	190	<1	2	<1	65
599600	544300E	34	<1	<0.5	14.5	58	<5	13	1850	<5	1.1	103	180	3.7	300	<1	22	<1	179
599700	543000E	6	<1	<0.5	14.6	5	33	136	920	<5	<0.5	12	280	0.5	10	<1	2	<1	46
599700	543025E	18	<1	<0.5	28	10	34	95	3450	<5	<0.5	28	626	0.5	<10	<1	4	<1	50
599700	543050E	2	<1	<0.5	13.2	<1	34	161	920	<5	<0.5	3	186	0.6	10	<1	<1	<1	45
599700	543075E	6	<1	<0.5	14.6	2	36	165	1970	<5	<0.5	8	1080	0.3	<10	<1	1	<1	51
599700	543100E	5	<1	<0.5	11.6	2	42	144	1710	<5	<0.5	8	575	0.3	<10	<1	1	<1	67
599700	543125E	10	<1	<0.5	50.6	15	<5	54	2590	<5	<0.5	26	281	0.5	70	<1	5	<1	221
599700	543150E	10	<1	<0.5	13	4	32	149	3480	<5	<0.5	13	916	0.4	<10	<1	2	<1	46
599700	543175E	10	<1	<0.5	36.3	11	<5	99	2890	<5	<0.5	23	95	0.6	170	<1	5	<1	162
599700	543200E	16	<1	<0.5	26.9	17	9	119	3180	<5	<0.5	36	156	0.4	30	<1	7	<1	114
599700	543225E	9	<1	<0.5	76.7	12	<5	74	1540	<5	<0.5	21	106	0.9	410	<1	4	<1	154
599700	543250E	68	<1	<0.5	58.7	83	<5	55	3530	<5	<0.5	171	196	0.4	130	<1	33	<1	226
599700	543275E	16	<1	<0.5	113	28	<5	75	2140	<5	<0.5	44	200	0.8	290	<1	9	<1	220

Llewellyn Property
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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599600	543300E	<1	19	6	<1	2800	<1	1	<10	8.2	104	<0.5	5	<1	60	4	380	9
599600	543325E	<1	7	3	<1	5430	<1	<1	<10	4.9	26	<0.5	7	<1	18	<1	160	5
599600	543350E	<1	32	7	<1	2760	<1	2	<10	10.7	53	<0.5	7	<1	77	5	990	11
599600	543375E	<1	18	11	<1	3020	<1	2	<10	7.2	47	<0.5	9	<1	73	5	400	11
599600	543425E	<1	9	5	<1	4710	<1	1	<10	4.6	37	<0.5	9	<1	37	2	470	11
599600	543450E	<1	30	18	<1	2900	<1	4	<10	5.6	16	<0.5	8	<1	145	8	290	10
599600	543475E	<1	29	20	<1	2290	<1	4	<10	6.9	26	<0.5	8	<1	122	8	530	6
599600	543500E	<1	8	8	<1	3890	<1	1	<10	4.5	4	<0.5	5	<1	41	2	420	5
599600	543525E	<1	<5	1	<1	2600	<1	<1	<10	1.2	18	<0.5	3	<1	11	1	3950	<5
599600	543550E	<1	<5	4	<1	4390	<1	1	<10	0.9	9	<0.5	6	<1	43	3	2770	<5
599600	543575E	<1	<5	5	<1	3570	<1	<1	<10	2.2	9	<0.5	6	<1	27	1	860	<5
599600	543600E	<1	39	15	<1	3830	<1	3	<10	7.1	17	<0.5	14	<1	131	8	310	10
599600	543625E	<1	23	14	<1	3260	<1	3	<10	4.3	10	<0.5	12	<1	106	6	750	10
599600	543650E	2	92	7	<1	1180	<1	3	<10	22.2	123	<0.5	11	<1	128	11	3140	14
599600	543675E	<1	33	11	<1	2470	<1	3	<10	7.2	14	<0.5	7	<1	94	6	1530	<5
599600	543700E	<1	38	18	<1	2070	<1	4	<10	9.8	44	<0.5	8	<1	166	9	710	7
599600	543725E	21	31	8	<1	6430	<1	2	<10	4	<3	<0.5	41	<1	90	5	440	6
599600	543750E	<1	38	11	<1	3710	<1	3	<10	8.2	15	<0.5	7	<1	109	8	1520	8
599600	543775E	8	6	4	<1	7340	<1	<1	<10	0.6	<3	<0.5	42	<1	43	2	1500	<5
599600	543800E	3	39	33	<1	7740	<1	8	<10	2.4	6	<0.5	32	<1	297	15	360	<5
599600	543825E	4	13	19	<1	7860	<1	4	<10	1.9	5	<0.5	20	<1	137	7	120	<5
599600	543850E	4	56	8	<1	1860	<1	2	<10	19.3	40	<0.5	11	<1	77	7	2880	11
599600	543875E	2	111	53	<1	1310	<1	26	<10	18.8	9	<0.5	12	<1	990	60	240	6
599600	543900E	18	41	4	<1	840	<1	2	<10	15.2	85	<0.5	7	<1	76	7	210	10
599600	543925E	58	40	9	<1	1060	<1	3	<10	17.2	183	0.6	7	<1	126	7	400	12
599600	543950E	15	47	14	<1	2340	<1	3	<10	8	11	<0.5	12	<1	102	6	1050	11
599600	543975E	3	17	11	<1	5910	<1	3	<10	0.9	<3	<0.5	12	<1	275	14	1570	<5
599600	544000E	9	14	5	<1	1020	<1	1	<10	6.5	74	<0.5	4	<1	54	3	260	8
599600	544025E	4	11	9	<1	7250	<1	2	<10	0.8	<3	<0.5	15	<1	105	5	160	<5
599600	544050E	4	21	9	<1	5020	<1	2	<10	0.9	<3	<0.5	15	<1	119	7	1830	<5
599600	544075E	3	11	11	<1	5320	<1	3	<10	1	<3	<0.5	14	<1	127	7	1120	<5
599600	544100E	4	24	18	<1	4470	<1	4	<10	3.1	10	<0.5	11	<1	173	9	230	<5
599600	544125E	2	<5	6	<1	4570	<1	2	<10	<0.5	<3	<0.5	6	<1	78	4	1200	<5
599600	544150E	1	<5	1	<1	4670	<1	<1	<10	<0.5	<3	<0.5	<1	<1	28	2	7200	<5
599600	544175E	7	6	7	<1	4650	<1	2	<10	<0.5	<3	<0.5	13	<1	75	4	240	<5
599600	544200E	1	32	2	<1	3750	<1	<1	<10	7	29	<0.5	5	<1	48	7	460	6
599600	544225E	2	31	8	<1	3310	<1	3	<10	2.5	<3	<0.5	8	<1	207	14	1700	<5
599600	544275E	6	42	4	<1	710	<1	2	<10	11.9	105	<0.5	10	<1	67	6	410	12
599600	544300E	46	48	27	<1	840	<1	6	<10	26.7	526	0.6	11	<1	178	9	170	40
599700	543000E	1	6	4	<1	5310	<1	<1	<10	0.6	34	<0.5	3	<1	30	1	1090	<5
599700	543025E	<1	13	11	<1	6620	<1	2	<10	2.3	53	<0.5	3	<1	82	4	560	<5
599700	543050E	<1	<5	<1	<1	5620	<1	<1	<10	0.6	41	<0.5	3	<1	7	<1	320	<5
599700	543075E	1	5	3	<1	5710	<1	<1	<10	<0.5	40	<0.5	3	<1	31	2	500	<5
599700	543100E	1	7	4	<1	5220	<1	<1	<10	0.7	33	<0.5	3	<1	30	2	150	<5
599700	543125E	<1	16	8	<1	4440	<1	1	<10	4.2	37	<0.5	7	<1	44	3	1740	<5
599700	543150E	2	12	6	<1	5000	<1	1	<10	0.5	26	<0.5	3	<1	60	3	460	<5
599700	543175E	<1	15	7	<1	2870	<1	2	<10	3	48	<0.5	6	<1	54	4	1150	<5
599700	543200E	<1	17	12	<1	5760	<1	2	<10	7.5	16	<0.5	5	<1	70	4	60	<5
599700	543225E	<1	21	7	<1	2450	<1	2	<10	8.7	104	<0.5	5	<1	64	5	550	7
599700	543250E	<1	79	53	<1	3110	<1	10	<10	18.6	22	<0.5	14	<1	343	21	230	7
599700	543275E	<1	20	13	<1	2380	<1	3	<10	10.2	66	<0.5	12	<1	84	6	610	<5

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599700	543300E	18	46	<10	<0.1	1260	<1	500	24	16	33	<100	2	160	3	1.7	1	27	3
599700	543325E	18	108	<10	<0.1	1680	<1	390	48	147	81	<100	19.4	460	39	18.5	12.3	29	3
599700	543350E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543375E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543400E	14	68	<10	<0.1	3030	<1	490	31	43	52	<100	11	160	8	3.9	2.6	24	2
599700	543425E	27	72	<10	<0.1	3480	<1	480	21	36	137	<100	8.7	160	8	4.3	2.7	54	2
599700	543450E	17	106	<10	<0.1	3210	<1	390	8	96	161	<100	3.4	200	23	11.6	5.7	38	3
599700	543500E	16	84	<10	<0.1	2420	<1	450	23	67	156	<100	23.8	320	16	7.5	5	29	3
599700	543525E	18	68	<10	<0.1	2860	<1	500	36	28	87	<100	6.1	130	5	2.5	1.8	16	3
599700	543550E	22	107	<10	<0.1	3090	<1	340	35	137	101	<100	4.5	1000	37	17.6	9.9	27	2
599700	543575E	12	119	<10	<0.1	2400	<1	330	34	78	208	<100	15	260	22	10.6	5.2	51	3
599700	543600E	22	67	<10	<0.1	2830	<1	670	22	51	133	<100	1.4	270	15	7	4.5	18	2
599700	543625E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543650E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543675E	14	111	<10	<0.1	1790	<1	400	26	63	118	<100	7	320	18	8.2	4.8	54	2
599700	543700E	13	80	<10	<0.1	1180	<1	510	145	43	42	<100	2.1	670	27	14.3	7.8	18	<1
599700	543725E	6	145	<10	<0.1	1760	<1	280	45	46	461	<100	1.2	220	15	7.8	3.3	97	3
599700	543750E	5	223	<10	<0.1	1210	<1	210	26	92	179	<100	1.1	260	25	11.4	6.9	76	5
599700	543775E	17	257	30	<0.1	1270	<1	70	37	23	416	<100	1.6	610	20	9.6	2.5	153	4
599700	543800E	9	119	<10	<0.1	2420	<1	490	83	77	60	<100	2.3	550	34	19.8	8.6	59	2
599700	543825E	9	148	<10	<0.1	1560	<1	280	10	129	156	<100	4.3	290	43	18.4	10.1	53	2
599700	543850E	10	130	<10	<0.1	5660	<1	460	38	161	183	<100	1.2	560	69	35.8	17	75	2
599700	543875E	8	176	<10	<0.1	1550	<1	270	47	90	370	<100	1.7	390	41	20	8.9	127	3
599700	543900E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543925E	6	180	<10	<0.1	2110	<1	270	94	83	599	<100	22.8	390	39	20.5	8	102	4
599700	543950E	8	257	<10	<0.1	1870	<1	150	48	5	457	<100	<0.5	550	32	26.8	1.8	150	2
599700	543975E	14	289	30	0.6	1110	<1	40	26	105	289	<100	2.7	490	42	18.3	9.9	111	5
599700	544000E	1	60	30	0.6	1210	<1	260	4	<5	65	<100	1.7	430	2	1.5	<0.5	195	<1
599700	544050E	<1	33	10	0.3	860	<1	420	7	13	85	<100	0.6	1440	4	2.3	1.5	108	<1
599700	544075E	6	>300	10	<0.1	1010	<1	40	15	44	337	<100	0.5	420	32	18	5	62	4
599700	544100E	13	251	<10	<0.1	1660	<1	140	48	43	193	<100	0.7	340	22	11	4.2	95	4
599700	544125E	13	142	<10	0.2	1960	<1	180	3	11	183	<100	1.4	2590	4	2.8	0.9	254	1
599700	544150E	5	246	<10	<0.1	1360	<1	200	22	70	149	<100	1.2	450	33	15.4	5.5	76	4
599700	544175E	6	>300	40	<0.1	1370	<1	40	12	137	236	<100	1.5	540	72	28.8	14.8	72	5
599700	544200E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544250E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	542925E	45	104	40	<0.1	2760	<1	340	8	74	164	<100	8.4	210	15	7.6	4	53	4
599800	543000E	20	123	100	0.1	1020	<1	260	6	70	138	<100	5	290	12	5.8	3.1	84	7
599800	543025E	11	131	20	<0.1	1410	<1	260	39	74	1180	<100	12.8	300	16	9.3	3.8	110	4
599800	543050E	39	12	<10	1.2	1160	<1	550	11	<5	25	<100	1.2	7940	5	2.4	1.5	7	<1
599800	543075E	17	80	30	0.2	2300	<1	390	24	157	117	<100	2.9	400	31	14.7	8.7	33	2
599800	543100E	22	135	<10	<0.1	2300	<1	330	10	109	208	<100	3.8	340	32	16.3	8.1	65	3
599800	543125E	52	20	<10	0.5	1640	<1	630	35	11	81	<100	36.3	7140	23	10.9	7.9	9	<1
599800	543150E	2	9	<10	<0.1	290	<1	40	2	<5	18	<100	1	100	1	0.5	<0.5	5	<1
599800	543175E	14	58	10	0.2	3880	<1	560	76	60	232	<100	3.6	480	16	7.7	4.5	17	1
599800	543200E	14	164	40	<0.1	2330	<1	220	44	64	656	<100	8	250	13	7.5	3.1	107	6
599800	543225E	21	85	<10	<0.1	900	<1	460	157	69	89	<100	36.9	610	24	13.3	7.2	14	2
599800	543250E	30	90	<10	<0.1	2410	<1	320	35	74	83	<100	31.2	970	46	21.6	12.8	15	2
599800	543275E	27	84	20	<0.1	2820	<1	430	43	85	153	<100	4.3	250	15	7.7	4.1	37	3
599800	543300E	28	98	30	<0.1	2320	<1	340	7	98	69	<100	4.3	440	21	10.4	6.2	32	3

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599700	543300E	4	<1	<0.5	36.5	7	<5	17	640	<5	<0.5	11	211	0.4	70	<1	2	<1	149
599700	543325E	46	<1	<0.5	85.4	49	<5	61	3590	<5	<0.5	113	426	0.8	120	<1	21	<1	171
599700	543350E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543375E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543400E	10	<1	<0.5	45.7	14	<5	28	2740	<5	<0.5	26	250	0.8	80	<1	5	<1	160
599700	543425E	10	<1	<0.5	133	13	<5	85	3510	<5	<0.5	25	322	0.9	130	<1	5	<1	181
599700	543450E	25	<1	<0.5	104	34	<5	63	3480	<5	<0.5	61	167	0.9	200	<1	12	<1	150
599700	543500E	20	<1	<0.5	244	21	<5	50	3530	<5	<0.5	46	426	1.4	90	<1	9	<1	207
599700	543525E	7	<1	<0.5	113	9	<5	56	1060	<5	<0.5	17	190	0.8	70	<1	3	<1	187
599700	543550E	40	<1	<0.5	49.7	36	<5	47	3010	<5	<0.5	89	762	1.2	120	<1	16	<1	147
599700	543575E	23	<1	<0.5	108	24	<5	48	5050	<5	<0.5	52	267	1.2	230	<1	10	<1	143
599700	543600E	18	<1	<0.5	29.3	18	<5	154	1750	<5	<0.5	40	265	0.5	90	<1	7	<1	99
599700	543625E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543650E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543675E	19	<1	<0.5	94.3	21	<5	84	2220	<5	<0.5	47	361	1.1	170	<1	9	<1	94
599700	543700E	30	<1	<0.5	19.7	19	<5	94	3300	<5	<0.5	53	548	0.7	50	<1	9	<1	62
599700	543725E	14	<1	<0.5	17	16	<5	30	4270	<5	<0.5	34	159	1.3	260	<1	7	<1	69
599700	543750E	24	<1	<0.5	29.3	33	<5	29	1370	<5	<0.5	64	148	1.9	240	<1	12	<1	43
599700	543775E	11	<1	<0.5	25.8	9	<5	18	4030	<5	<0.5	18	189	2.5	240	<1	3	<1	65
599700	543800E	35	<1	<0.5	17.4	29	<5	73	2810	<5	<0.5	70	592	1.3	100	<1	13	<1	83
599700	543825E	42	<1	<0.5	42.7	49	<5	57	1740	<5	<0.5	100	183	1	230	<1	19	<1	111
599700	543850E	65	<1	<0.5	24.7	61	<5	60	8520	<5	<0.5	132	245	1.4	280	<1	25	<1	63
599700	543875E	37	<1	<0.5	19.3	33	<5	44	5680	<5	<0.5	76	233	1.3	290	<1	14	<1	59
599700	543900E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543925E	34	<1	<0.5	123	27	<5	68	5380	<5	<0.5	64	285	2.7	370	<1	12	<1	119
599700	543950E	8	<1	<0.5	9.6	2	<5	32	250	<5	<0.5	7	167	0.5	180	<1	<1	<1	27
599700	543975E	40	<1	<0.5	24.2	29	<5	11	3700	<5	<0.5	102	228	3.1	280	<1	18	<1	102
599700	544000E	1	<1	<0.5	1.9	<1	<5	55	2220	<5	<0.5	2	351	0.4	<10	<1	<1	<1	10
599700	544050E	5	<1	<0.5	6.1	8	<5	39	2720	<5	<0.5	15	285	0.2	10	<1	3	<1	39
599700	544075E	22	<1	<0.5	9.5	12	<5	13	230	<5	<0.5	45	285	0.8	220	<1	8	<1	115
599700	544100E	18	<1	<0.5	32.5	14	<5	33	760	<5	<0.5	42	151	2.4	200	<1	7	<1	86
599700	544125E	3	<1	<0.5	15.1	5	<5	29	4000	<5	<0.5	8	291	0.8	<10	<1	2	<1	78
599700	544150E	26	<1	<0.5	42.4	23	<5	25	1000	<5	<0.5	59	141	1.6	290	<1	11	<1	83
599700	544175E	66	<1	<0.5	23	37	<5	16	2910	<5	<0.5	146	149	1.4	330	<1	25	<1	86
599700	544200E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544250E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	542925E	17	<1	<0.5	72.1	28	<5	35	5370	<5	1.5	47	150	0.7	150	<1	10	<1	278
599800	543000E	13	<1	<0.5	234	28	<5	30	2270	<5	1.5	40	224	1.6	230	<1	9	<1	170
599800	543025E	15	<1	<0.5	129	22	<5	36	23900	<5	0.9	36	562	1.3	330	<1	7	<1	219
599800	543050E	6	1	<0.5	11.9	4	46	102	4700	6	<0.5	12	656	0.3	<10	<1	2	<1	50
599800	543075E	39	<1	<0.5	32.6	56	<5	44	5720	<5	<0.5	108	144	0.4	120	<1	21	<1	159
599800	543100E	33	<1	<0.5	37.6	45	<5	65	4270	<5	<0.5	79	223	0.6	230	<1	16	<1	154
599800	543125E	32	1	<0.5	37.6	30	40	112	5800	5	<0.5	63	725	0.7	10	<1	11	<1	101
599800	543150E	1	<1	<0.5	3.8	2	<5	4	590	<5	<0.5	4	24	<0.1	10	<1	<1	<1	13
599800	543175E	19	1	<0.5	103	21	<5	52	8200	<5	<0.5	43	220	0.5	60	<1	8	<1	103
599800	543200E	13	<1	<0.5	34.1	23	<5	21	13600	<5	1.2	37	232	2.5	290	<1	8	<1	151
599800	543225E	28	<1	<0.5	55.3	30	17	42	17100	<5	<0.5	63	478	0.7	40	<1	11	<1	186
599800	543250E	53	<1	<0.5	33.6	41	<5	32	2370	<5	<0.5	106	167	0.5	60	<1	18	<1	113
599800	543275E	18	<1	<0.5	38.5	29	<5	25	6500	<5	<0.5	50	210	0.5	130	<1	10	<1	161
599800	543300E	25	<1	<0.5	65.2	41	<5	28	3740	<5	<0.5	72	125	0.6	80	<1	14	<1	234

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599700	543300E	<1	<5	3	<1	3100	<1	<1	<10	2.6	20	<0.5	5	<1	17	1	300	<5
599700	543325E	<1	40	36	<1	2050	<1	7	<10	9.2	22	<0.5	12	<1	185	12	220	12
599700	543350E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543375E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543400E	<1	7	8	<1	3020	<1	1	<10	4	6	<0.5	7	<1	43	3	600	<5
599700	543425E	<1	14	8	<1	3240	<1	1	<10	4	11	<0.5	6	<1	44	3	210	<5
599700	543450E	<1	24	18	<1	2250	<1	4	<10	7.8	33	<0.5	10	<1	127	8	210	7
599700	543500E	<1	14	15	<1	2630	<1	3	<10	3.3	8	<0.5	8	<1	83	5	300	<5
599700	543525E	<1	<5	5	<1	3040	<1	<1	<10	2.4	10	<0.5	5	<1	29	2	160	<5
599700	543550E	<1	46	30	<1	2000	<1	6	<10	8.5	11	<0.5	10	<1	169	11	250	6
599700	543575E	<1	29	17	<1	1650	<1	4	<10	9.4	26	<0.5	8	<1	113	7	410	6
599700	543600E	<1	12	13	<1	6280	<1	3	<10	3.9	6	<0.5	10	<1	82	5	60	5
599700	543625E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543650E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543675E	<1	27	15	<1	2960	<1	3	<10	6.8	11	<0.5	7	<1	90	5	250	<5
599700	543700E	3	41	20	<1	5200	<1	5	<10	4	9	<0.5	27	<1	160	10	860	<5
599700	543725E	1	32	10	<1	3370	<1	2	<10	12.6	42	<0.5	11	<1	79	5	1000	8
599700	543750E	<1	34	18	<1	1200	<1	4	<10	11.4	65	<0.5	6	<1	125	7	330	7
599700	543775E	5	31	7	<1	810	<1	3	<10	12.4	145	<0.5	8	<1	99	5	1010	10
599700	543800E	3	68	24	<1	4880	<1	5	<10	10.8	15	<0.5	28	<1	216	14	1080	10
599700	543825E	1	38	32	<1	2100	<1	7	<10	14.8	29	<0.5	10	<1	218	11	130	7
599700	543850E	<1	114	45	<1	4510	<1	11	<10	14.6	15	<0.5	14	<1	389	26	350	8
599700	543875E	4	55	25	<1	1870	<1	6	<10	15.6	26	<0.5	12	<1	229	13	780	6
599700	543900E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	543925E	<1	66	23	<1	1870	<1	6	<10	17.5	29	<0.5	12	<1	206	14	810	11
599700	543950E	2	53	4	<1	1430	<1	3	<10	6.6	9	<0.5	9	<1	191	22	670	<5
599700	543975E	15	49	30	<1	540	<1	7	<10	18.9	189	0.6	9	<1	205	11	260	13
599700	544000E	100	32	<1	<1	3280	<1	<1	<10	1.7	4	<0.5	44	<1	13	1	110	<5
599700	544050E	11	22	4	<1	3520	<1	<1	<10	1.1	<3	<0.5	18	<1	29	2	180	<5
599700	544075E	9	55	14	<1	770	<1	4	<10	9.8	91	<0.5	6	<1	178	13	130	6
599700	544100E	8	49	13	<1	1250	<1	3	<10	11.4	66	<0.5	7	<1	119	8	820	7
599700	544125E	8	31	2	<1	1580	<1	<1	<10	8.8	32	<0.5	9	<1	21	2	30	7
599700	544150E	5	41	17	<1	1770	<1	5	<10	16.5	52	<0.5	11	<1	172	9	240	9
599700	544175E	21	66	45	<1	790	<1	12	<10	21	181	0.6	8	<1	331	15	230	14
599700	544200E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544225E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599700	544250E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	542925E	3	27	13	<1	2360	<1	3	<10	15.1	132	<0.5	10	<1	75	6	100	11
599800	543000E	6	22	11	<1	1450	<1	2	<10	15.7	424	<0.5	8	1	55	4	190	19
599800	543025E	1	40	11	<1	1700	<1	2	<10	14.7	166	<0.5	10	<1	87	7	740	17
599800	543050E	2	14	4	<1	5400	<1	<1	<10	1.6	8	<0.5	4	<1	34	2	30	<5
599800	543075E	1	32	31	<1	3660	<1	5	<10	15.8	48	<0.5	14	<1	162	10	420	9
599800	543100E	<1	39	24	<1	2990	<1	5	<10	10.9	70	<0.5	9	<1	173	12	280	11
599800	543125E	2	32	21	<1	6480	<1	4	<10	3.6	19	0.8	5	<1	169	8	360	<5
599800	543150E	<1	<5	1	<1	290	<1	<1	<10	0.6	15	<0.5	<1	<1	6	<1	20	<5
599800	543175E	<1	21	14	<1	5660	<1	3	<10	10.8	12	<0.5	11	<1	82	5	410	7
599800	543200E	2	32	11	<1	1810	<1	2	<10	18.9	335	<0.5	11	<1	70	6	750	21
599800	543225E	<1	21	20	<1	3350	<1	4	<10	6.5	28	0.8	8	<1	166	10	3980	9
599800	543250E	<1	29	36	<1	1740	<1	8	<10	6.2	51	0.8	8	<1	249	14	240	13
599800	543275E	1	23	14	<1	3300	<1	3	<10	11.5	51	<0.5	12	<1	78	5	1240	10
599800	543300E	2	28	20	<1	2190	<1	4	<10	13	61	<0.5	12	<1	110	8	110	10

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599800	543325E	12	107	<10	<0.1	2340	<1	290	37	77	394	100	20.6	280	16	8.3	4.1	59	3
599800	543350E	18	104	10	<0.1	2810	<1	420	13	88	124	<100	2.2	250	28	14.7	6.7	28	2
599800	543375E	13	90	<10	<0.1	2280	<1	370	7	52	86	<100	1.2	110	10	4.8	2.7	38	2
599800	543400E	61	43	<10	0.4	1890	<1	580	47	27	71	<100	1.4	1740	21	11	5.8	9	<1
599800	543425E	33	116	40	0.1	2760	<1	300	18	208	230	100	7.5	530	37	18.2	10.2	59	4
599800	543450E	16	149	20	<0.1	2700	<1	270	18	41	176	<100	4.4	270	14	7.5	3.1	91	4
599800	543475E	15	75	<10	<0.1	4580	<1	330	20	41	241	<100	7.5	190	10	5.2	2.5	30	2
599800	543500E	25	77	<10	<0.1	2700	<1	440	12	52	150	<100	3.2	400	16	7.3	4.7	16	1
599800	543525E	9	137	20	<0.1	1940	<1	390	66	50	303	<100	7	260	19	10.7	3.8	52	3
599800	543550E	18	121	10	<0.1	3430	<1	400	31	67	243	<100	5.6	580	18	9.4	4.2	26	2
599800	543575E	30	77	20	0.5	2990	<1	370	19	66	167	<100	2	560	12	6.6	3.3	46	2
599800	543600E	10	111	20	<0.1	4100	<1	340	55	70	370	<100	4.1	260	21	13.5	4.8	102	3
599800	543625E	7	137	20	<0.1	2180	<1	310	49	51	196	<100	4.2	410	20	11.3	4.3	60	3
599800	543650E	30	47	<10	0.2	1480	<1	580	99	9	26	<100	1.4	990	5	2.9	1.7	16	<1
599800	543675E	5	115	<10	<0.1	1050	<1	260	313	21	489	100	10.4	200	7	4.6	1.7	147	4
599800	543700E	13	178	10	<0.1	2170	<1	150	36	91	258	<100	4.6	460	41	21	9.2	137	5
599800	543725E	14	174	60	0.2	2570	<1	200	7	67	165	<100	4.4	350	17	7.8	4.2	104	5
599800	543750E	7	222	30	<0.1	1910	<1	200	60	14	153	<100	1	140	7	4.1	1	132	4
599800	543775E	8	44	<10	0.2	1490	<1	650	127	9	42	<100	<0.5	420	8	4.6	1.6	14	<1
599800	543800E	29	61	<10	0.4	3440	<1	590	67	116	59	<100	0.9	1510	43	21.6	12.7	44	<1
599800	543825E	23	89	<10	0.3	2000	<1	520	14	80	202	<100	1.6	1060	23	11.3	6.8	45	<1
599800	543850E	11	246	30	<0.1	2150	<1	120	37	53	285	<100	3.1	500	30	15.4	4.9	139	5
599800	543875E	9	89	<10	0.2	1540	<1	380	59	26	320	<100	0.7	1280	9	4.8	1.8	214	1
599800	543900E	8	>300	30	<0.1	1600	<1	60	15	26	125	<100	1	250	17	10.1	2.4	93	3
599800	543925E	10	272	20	<0.1	1660	<1	70	30	15	248	<100	0.8	230	15	10.5	1.8	143	3
599800	543950E	4	196	10	<0.1	1540	<1	50	14	<5	56	<100	0.9	470	<1	<0.5	<0.5	225	2
599800	543975E	24	239	50	0.2	2140	<1	100	64	125	229	<100	3.3	740	50	23.2	11.5	163	6
599800	544000E	11	269	40	<0.1	1300	<1	40	5	12	91	<100	0.7	420	2	1.4	0.5	206	4
599800	544025E	24	214	<10	0.2	2120	<1	220	14	153	186	<100	2	1280	77	38.9	13.5	105	4
599800	544050E	10	249	60	<0.1	1880	<1	110	48	32	328	<100	1.3	200	12	7.1	2.4	187	5
599800	544075E	11	263	60	0.1	1260	<1	20	24	23	166	<100	2.9	430	5	3.5	1.1	170	4
599800	544100E	5	269	20	<0.1	1250	<1	90	66	8	141	<100	0.6	210	6	4.4	0.6	132	3
599800	544125E	46	30	<10	0.2	2820	<1	460	24	28	190	<100	8.4	2300	17	7.4	6.7	13	<1
599800	544150E	12	273	<10	<0.1	1140	<1	40	16	25	133	<100	1	210	22	18	2.3	114	5
599800	544175E	4	>300	40	<0.1	1540	<1	70	20	92	159	<100	0.8	310	28	13.5	4.6	65	5
599800	544200E	6	272	40	<0.1	1350	<1	<10	18	43	90	<100	1.5	550	10	6.6	1.9	191	9
599800	544225E	11	295	20	<0.1	1440	<1	80	14	19	124	<100	0.9	260	8	5.2	1.1	121	4
599800	544250E	6	256	130	<0.1	2100	<1	50	27	54	220	<100	1.9	270	10	5.6	2.3	204	12
599800	544275E	5	>300	10	<0.1	1590	<1	120	13	13	109	<100	0.7	160	9	7.8	1	77	5
599800	544300E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544350E	4	262	30	<0.1	1170	<1	70	42	15	292	<100	1.3	290	10	6.8	1.1	158	4
599800	544375E	7	259	90	0.1	1360	<1	100	11	171	298	<100	4.5	530	30	14.2	7.5	132	13
599800	544400E	8	>300	<10	<0.1	2070	<1	50	6	<5	154	<100	<0.5	190	4	4.7	<0.5	53	4
599800	544425E	6	>300	<10	<0.1	2950	<1	60	5	<5	151	<100	<0.5	110	1	2.1	<0.5	51	4
599800	544450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544525E	37	89	<10	0.4	2250	<1	590	11	251	112	<100	2	920	60	29.5	17.4	48	1
599800	544550E	4	282	230	<0.1	1400	2	10	10	122	150	<100	3.9	610	39	21	8	240	17
599900	542475E	3	73	<10	<0.1	810	<1	320	85	50	191	<100	2.7	320	22	11.9	5.7	26	2

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599800	543325E	16	<1	<0.5	95.3	27	<5	26	8070	<5	0.5	45	185	1.2	140	<1	9	<1	127
599800	543350E	30	<1	<0.5	67.6	37	<5	69	7810	<5	<0.5	69	172	0.6	100	<1	13	<1	149
599800	543375E	11	<1	<0.5	117	18	<5	78	2200	<5	<0.5	30	119	0.5	110	<1	6	<1	101
599800	543400E	26	<1	<0.5	56.8	20	<5	55	6910	<5	<0.5	47	482	0.5	20	<1	8	<1	54
599800	543425E	42	<1	<0.5	91.5	63	6	44	2890	<5	<0.5	108	361	0.4	240	<1	21	<1	186
599800	543450E	13	<1	<0.5	38.5	17	<5	29	3100	<5	<0.5	31	264	1.4	210	<1	6	<1	146
599800	543475E	9	<1	<0.5	42.8	12	<5	26	4810	<5	<0.5	24	597	0.9	80	<1	5	<1	179
599800	543500E	19	<1	<0.5	94.2	18	<5	48	4890	<5	<0.5	41	367	0.6	50	<1	7	<1	152
599800	543525E	17	<1	<0.5	76.1	18	<5	41	13100	<5	<0.5	34	388	1	160	<1	6	<1	165
599800	543550E	19	<1	<0.5	96.9	22	<5	47	11200	<5	<0.5	42	569	1	120	<1	8	<1	231
599800	543575E	13	<1	<0.5	48.6	21	<5	59	3180	<5	<0.5	35	346	0.3	120	<1	7	<1	73
599800	543600E	19	<1	<0.5	80.3	35	<5	31	6930	<5	0.5	47	281	0.6	270	<1	10	<1	87
599800	543625E	19	<1	<0.5	33.6	18	<5	41	8760	<5	<0.5	36	307	1	170	<1	7	<1	157
599800	543650E	6	<1	<0.5	8.9	5	13	131	2480	<5	<0.5	12	547	0.3	20	<1	2	<1	45
599800	543675E	7	<1	<0.5	27	7	16	47	18700	<5	<0.5	16	244	2.3	130	<1	3	<1	147
599800	543700E	39	<1	<0.5	25.5	33	<5	34	2180	<5	<0.5	81	420	1.8	250	<1	14	<1	84
599800	543725E	17	<1	<0.5	15.9	28	<5	28	2400	<5	0.6	43	239	2.2	210	<1	9	<1	112
599800	543750E	5	<1	<0.5	35.3	5	8	40	1650	<5	0.6	10	106	2.1	290	<1	2	<1	42
599800	543775E	7	<1	<0.5	6.4	5	9	166	2220	<5	<0.5	11	284	0.3	60	<1	2	<1	9
599800	543800E	51	<1	<0.5	10	54	15	96	4430	<5	<0.5	113	634	0.3	100	<1	21	<1	28
599800	543825E	27	<1	<0.5	15.1	38	<5	64	5030	<5	<0.5	69	237	0.4	60	<1	13	<1	78
599800	543850E	22	<1	<0.5	34.2	18	<5	28	800	<5	<0.5	44	244	2.4	220	<1	8	<1	93
599800	543875E	8	<1	<0.5	15.5	11	<5	83	8830	<5	<0.5	19	291	0.8	70	<1	4	<1	36
599800	543900E	11	<1	<0.5	7.9	9	<5	12	190	<5	<0.5	23	156	1	170	<1	4	<1	102
599800	543925E	8	<1	<0.5	11.1	6	<5	21	310	<5	<0.5	15	188	1.5	150	<1	3	<1	71
599800	543950E	<1	<1	<0.5	17.9	2	9	12	1230	<5	<0.5	2	55	0.8	<10	<1	<1	<1	65
599800	543975E	46	<1	<0.5	9.9	50	<5	29	1160	<5	0.6	106	366	4.6	210	<1	20	<1	72
599800	544000E	2	<1	<0.5	16.8	6	<5	12	400	<5	0.8	7	132	2	<10	<1	2	<1	81
599800	544025E	60	<1	<0.5	5.4	61	<5	28	670	<5	<0.5	139	333	0.7	290	<1	26	<1	104
599800	544050E	10	<1	<0.5	16.6	11	<5	25	2620	<5	0.9	25	153	4.7	250	<1	5	<1	85
599800	544075E	4	<1	<0.5	21.9	10	<5	10	1290	<5	0.7	13	142	3.7	30	<1	3	<1	107
599800	544100E	3	<1	<0.5	46	3	<5	24	1210	<5	<0.5	6	128	2.6	160	<1	1	<1	30
599800	544125E	24	<1	<0.5	74.9	14	<5	70	7280	6	<0.5	46	554	1.4	10	<1	7	<1	57
599800	544150E	10	<1	<0.5	10.4	10	<5	9	270	<5	<0.5	19	164	3.3	120	<1	4	<1	77
599800	544175E	20	<1	<0.5	14.3	32	<5	16	920	<5	0.7	57	141	1.3	180	<1	12	<1	85
599800	544200E	8	<1	<0.5	16.5	21	<5	3	170	<5	3.8	23	171	7.7	100	<1	5	<1	113
599800	544225E	5	<1	<0.5	14.9	8	<5	11	490	<5	<0.5	13	135	2.6	100	<1	3	<1	72
599800	544250E	9	<1	<0.5	57.6	19	<5	20	16800	5	2.3	31	188	11.4	180	<1	6	<1	88
599800	544275E	5	<1	<0.5	18.6	5	<5	29	1510	<5	<0.5	11	92	1.2	190	<1	2	<1	58
599800	544300E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544350E	5	<1	<0.5	30.2	6	<5	25	1330	<5	<0.5	10	183	3.6	120	<1	2	<1	61
599800	544375E	31	<1	<0.5	28.9	66	<5	16	4390	<5	2.1	98	236	3.7	410	<1	21	<1	232
599800	544400E	1	<1	<0.5	45.4	2	<5	17	660	<5	<0.5	3	115	0.5	40	<1	<1	<1	47
599800	544425E	<1	<1	<0.5	45.2	1	<5	19	910	<5	<0.5	1	112	0.5	<10	<1	<1	<1	39
599800	544450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544525E	72	<1	<0.5	4	144	<5	48	3500	<5	<0.5	220	79	0.3	50	<1	45	<1	73
599800	544550E	32	<1	<0.5	16.1	47	<5	5	2620	7	3.8	90	125	4.7	520	<1	17	<1	142
599900	542475E	22	<1	<0.5	138	14	<5	36	14800	<5	<0.5	38	364	0.7	80	<1	6	<1	157

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599800	543325E	1	36	13	<1	1860	<1	3	<10	9.5	83	<0.5	9	<1	83	6	530	17
599800	543350E	1	39	22	<1	3380	<1	5	<10	9.6	27	<0.5	21	<1	160	11	160	7
599800	543375E	<1	18	9	<1	3120	<1	2	<10	5.9	21	<0.5	6	<1	50	3	140	7
599800	543400E	1	34	17	<1	5430	<1	4	<10	8.2	22	<0.5	6	<1	139	8	730	6
599800	543425E	3	51	32	<1	2560	<1	6	<10	13.7	126	<0.5	13	<1	206	13	170	13
599800	543450E	1	26	10	<1	2190	<1	2	<10	9.6	92	<0.5	7	<1	73	5	780	11
599800	543475E	<1	14	7	<1	2110	<1	2	<10	2.9	25	<0.5	5	<1	48	4	480	5
599800	543500E	<1	13	14	<1	3240	<1	3	<10	4.3	24	<0.5	8	<1	77	5	270	6
599800	543525E	1	33	12	<1	2360	<1	3	<10	7.9	41	<0.5	9	<1	98	8	670	9
599800	543550E	<1	39	14	<1	2370	<1	3	<10	9.7	37	<0.5	17	<1	92	7	720	10
599800	543575E	1	35	10	<1	2430	<1	2	<10	8.9	29	<0.5	7	<1	65	5	170	7
599800	543600E	1	70	13	<1	2940	<1	3	<10	13.4	99	<0.5	9	<1	135	11	1670	12
599800	543625E	1	55	12	<1	2440	<1	3	<10	8.2	46	<0.5	8	<1	109	8	2000	7
599800	543650E	2	10	4	<1	6200	<1	<1	<10	2.7	6	<0.5	17	<1	34	2	1190	<5
599800	543675E	2	37	5	<1	2410	<1	1	<10	8.6	83	<0.5	5	<1	41	4	3100	9
599800	543700E	2	37	27	<1	1510	<1	6	<10	10.2	119	<0.5	9	<1	219	14	860	7
599800	543725E	7	35	14	<1	1410	<1	3	<10	18	267	<0.5	10	<1	77	6	250	16
599800	543750E	2	20	3	<1	2790	<1	<1	<10	7.5	158	<0.5	6	<1	36	3	2610	9
599800	543775E	2	16	4	<1	12600	<1	1	<10	1.3	13	<0.5	17	<1	56	4	910	<5
599800	543800E	6	56	37	<1	8390	<1	7	<10	8	6	<0.5	19	<1	254	16	810	7
599800	543825E	5	35	20	<1	5580	<1	4	<10	6.8	11	<0.5	14	<1	127	8	130	5
599800	543850E	10	48	15	<1	1440	<1	4	<10	15.5	168	<0.5	9	<1	148	11	740	14
599800	543875E	6	43	6	<1	3310	<1	1	<10	8.4	45	<0.5	13	<1	48	4	590	6
599800	543900E	5	23	7	<1	790	<1	2	<10	6.7	155	<0.5	5	<1	92	7	370	9
599800	543925E	5	27	5	<1	950	<1	2	<10	15.3	143	<0.5	10	<1	79	9	490	9
599800	543950E	7	9	<1	<1	570	<1	<1	<10	4.3	56	<0.5	3	<1	<5	<1	90	6
599800	543975E	18	76	34	<1	880	<1	8	<10	19.7	220	0.5	14	<1	252	15	510	20
599800	544000E	15	17	2	<1	670	<1	<1	<10	10.8	297	<0.5	6	<1	10	1	40	17
599800	544025E	3	78	41	<1	2600	<1	11	<10	26.7	44	0.9	24	<1	440	26	150	14
599800	544050E	19	56	7	<1	1240	<1	2	<10	14.5	275	<0.5	8	<1	69	5	990	23
599800	544075E	27	36	3	<1	390	<1	<1	<10	20.4	319	<0.5	9	<1	22	3	280	30
599800	544100E	7	27	2	<1	1020	<1	<1	<10	8.4	135	<0.5	5	<1	30	4	1060	9
599800	544125E	<1	13	17	<1	3070	<1	3	<10	5.4	16	0.6	8	<1	82	5	320	<5
599800	544150E	3	48	6	<1	480	<1	2	<10	8.7	112	<0.5	8	<1	121	14	340	12
599800	544175E	23	56	15	<1	850	<1	4	<10	19.2	518	<0.5	9	<1	142	9	480	31
599800	544200E	9	59	6	<1	160	<1	1	<10	23.5	692	<0.5	10	<1	49	6	300	50
599800	544225E	3	30	4	<1	920	<1	<1	<10	10	155	<0.5	9	<1	41	4	320	14
599800	544250E	23	50	8	<1	360	<1	2	<10	20.9	1180	<0.5	9	2	52	5	1040	40
599800	544275E	4	28	3	<1	1370	<1	1	<10	7.7	213	<0.5	6	<1	57	6	570	12
599800	544300E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544325E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544350E	12	41	3	<1	770	<1	1	<10	12.7	174	<0.5	9	<1	46	6	770	19
599800	544375E	31	61	26	<1	540	<1	5	<10	33.1	1180	<0.5	12	1	142	10	290	55
599800	544400E	1	35	<1	<1	770	<1	<1	<10	6.2	54	<0.5	7	<1	19	6	130	9
599800	544425E	<1	31	<1	<1	980	<1	<1	<10	4.1	23	<0.5	5	<1	6	4	90	7
599800	544450E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544475E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544500E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
599800	544525E	4	74	57	<1	5930	<1	10	<10	18.3	33	0.6	28	<1	353	18	110	19
599800	544550E	49	96	26	<1	170	<1	6	<10	40.9	1980	0.6	19	2	188	16	310	52
599900	542475E	<1	26	15	<1	1660	<1	3	<10	4.8	22	<0.5	9	<1	105	10	1530	7

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599900	542525E	18	127	20	<0.1	1310	<1	290	28	49	211	<100	3.8	180	11	5.6	2.1	99	4
599900	542550E	6	111	<10	<0.1	1870	<1	360	11	32	193	<100	0.9	160	9	4.8	1.9	51	4
599900	542575E	12	84	10	<0.1	1950	<1	310	34	45	281	<100	1.8	70	4	2.4	1.1	88	5
599900	542600E	12	113	10	<0.1	1590	<1	280	13	65	142	<100	2.2	170	14	7	3.3	61	3
599900	542625E	21	97	10	<0.1	2630	<1	400	15	43	95	<100	1.4	160	7	3.5	1.6	31	2
599900	542650E	15	67	<10	<0.1	2210	<1	420	47	22	131	<100	2.2	220	5	2.4	1.2	24	2
599900	542675E	18	89	20	<0.1	1240	<1	260	10	48	161	100	6.2	120	7	3.7	1.8	46	4
599900	542700E	7	150	10	<0.1	3080	<1	280	41	39	436	<100	0.8	120	8	4.7	1.7	96	4
599900	542725E	6	160	30	<0.1	1490	<1	190	67	27	387	<100	1.1	140	7	4.6	1.3	157	6
599900	542750E	23	68	<10	0.1	2340	<1	390	21	28	75	<100	1.7	110	4	2.1	1.2	21	2
599900	542775E	13	12	<10	0.1	900	<1	690	50	10	26	<100	0.6	1490	4	1.9	1	5	<1
599900	542800E	17	60	<10	<0.1	1060	<1	480	36	64	45	<100	2	650	28	15.1	6.9	22	2
599900	542825E	<1	124	<10	<0.1	920	<1	210	60	10	261	<100	2.2	50	3	2.4	<0.5	143	10
599900	542850E	9	84	10	<0.1	980	<1	420	32	29	237	<100	4	210	9	4.6	1.9	40	2
599900	542875E	19	42	<10	1.1	770	<1	680	31	12	191	<100	1.8	5340	11	6.9	2.7	16	<1
599900	542900E	5	134	20	<0.1	1670	<1	240	46	58	466	<100	2	210	13	7.1	3	95	6
599900	542925E	4	15	<10	<0.1	310	<1	50	5	10	24	100	<0.5	20	2	1	<0.5	5	<1
599900	542950E	17	91	10	<0.1	1530	<1	350	18	27	183	100	3.1	130	8	4.6	1.7	41	2
599900	542975E	12	77	20	<0.1	1490	<1	250	12	47	176	200	1.2	240	13	7	2.8	34	2
599900	543000E	5	22	<10	0.1	740	<1	530	104	<5	18	100	0.9	1540	3	1.9	0.7	6	2
599900	543025E	9	124	10	0.2	980	<1	230	10	79	180	100	0.7	310	31	16.9	4.9	66	3
599900	543050E	8	114	40	<0.1	890	<1	180	14	45	154	<100	2.6	90	9	5	1.9	133	5
599900	543075E	14	70	10	<0.1	2360	<1	380	18	28	114	<100	2.8	90	6	2.8	1.5	23	2
599900	543100E	<1	19	<10	0.2	840	<1	590	30	<5	27	<100	<0.5	350	4	2.2	1	6	<1
599900	543125E	21	127	<10	<0.1	2410	<1	300	36	83	129	<100	3	500	25	14.8	4.2	37	3
599900	543175E	9	110	<10	<0.1	1720	<1	260	43	31	362	<100	5.5	190	15	9.2	2.6	60	3
599900	543200E	2	180	10	<0.1	3540	<1	270	71	59	672	<100	4.1	540	24	19.1	3.2	122	8
599900	543225E	16	67	<10	0.1	1610	<1	450	41	180	72	<100	1.6	990	82	46.1	20.3	11	2
599900	543250E	6	116	<10	<0.1	2070	<1	310	40	40	489	<100	3.8	140	11	6	2.3	56	4
599900	543275E	28	92	30	<0.1	1560	<1	420	12	34	128	<100	4.7	350	7	3.9	2	34	3
599900	543325E	12	134	40	<0.1	1700	<1	310	43	55	364	<100	5.2	180	16	8.2	3.4	97	4
599900	543375E	20	85	10	<0.1	3010	<1	470	52	92	124	<100	2.6	490	31	16.8	8.4	32	2
599900	543400E	8	87	30	0.1	1750	<1	470	38	28	250	<100	3.3	140	5	2.9	1.3	42	4
599900	543425E	17	74	10	<0.1	1810	<1	510	70	26	166	<100	2.9	130	6	3.1	1.6	29	2
599900	543450E	1	112	20	<0.1	3360	<1	430	57	53	606	<100	7.1	390	13	7.4	3.3	76	4
599900	543475E	25	82	10	<0.1	3020	<1	520	27	24	196	<100	4.1	1270	7	3.6	2.2	22	1
599900	543500E	<1	55	<10	<0.1	2890	<1	430	95	20	207	<100	4.2	260	8	5.9	1.3	40	2
599900	543825E	8	230	50	<0.1	2130	<1	100	95	16	575	<100	3.9	400	26	20.7	2.2	191	7
599900	543850E	11	274	40	0.2	2260	<1	100	51	12	299	<100	2.4	260	10	11.8	1.1	190	5
599900	543875E	12	233	60	0.1	2020	<1	110	40	55	415	<100	2.1	470	39	21.3	6.3	170	7
599900	543900E	8	274	20	<0.1	1660	<1	150	38	11	251	<100	1	250	13	9.5	1.4	142	5
599900	543925E	15	163	40	0.5	2390	<1	220	57	64	424	<100	1.7	620	43	23.7	7.6	178	3
599900	543950E	8	289	110	<0.1	1690	<1	40	45	21	269	<100	3.2	370	13	9.9	1.7	215	7
599900	543975E	6	168	<10	0.1	2770	<1	240	31	8	636	<100	0.9	480	40	45.4	2.1	144	2
599900	544000E	2	292	<10	<0.1	3270	<1	20	42	<5	581	<100	0.6	60	1	1.7	<0.5	134	2
599900	544025E	6	253	70	<0.1	1750	<1	100	40	20	259	<100	1.9	270	11	7	1.7	176	7
599900	544050E	4	67	<10	0.3	1490	<1	490	64	17	78	<100	1	310	11	7	2.4	14	<1
599900	544075E	23	186	<10	0.2	1910	<1	310	25	41	260	<100	0.9	1210	92	60.3	8.8	125	2
599900	544100E	2	215	20	<0.1	1930	<1	90	46	<5	376	<100	0.8	130	3	3.7	<0.5	208	3
599900	544125E	4	230	20	<0.1	2130	<1	70	48	7	449	<100	0.9	120	6	7.8	<0.5	188	4
599900	544150E	7	261	30	<0.1	2420	<1	80	32	16	926	<100	1	320	9	8.7	1.1	162	4

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599900	542525E	10	<1	<0.5	178	21	<5	46	6300	<5	0.8	28	244	0.9	220	<1	6	<1	286
599900	542550E	8	<1	<0.5	70.5	14	<5	58	8200	<5	<0.5	22	139	0.9	220	<1	5	<1	157
599900	542575E	5	<1	<0.5	155	14	<5	35	21000	<5	1.2	17	120	1.8	150	<1	4	<1	317
599900	542600E	14	<1	<0.5	80.9	22	<5	35	12100	<5	0.5	37	194	1.2	160	<1	7	<1	218
599900	542625E	7	<1	<0.5	152	14	<5	48	9720	<5	<0.5	20	178	0.8	70	<1	4	<1	225
599900	542650E	5	<1	<0.5	209	9	<5	63	9780	<5	<0.5	14	206	0.7	60	<1	3	<1	148
599900	542675E	9	<1	<0.5	53.3	17	<5	21	7780	<5	0.6	26	126	1.3	120	<1	6	<1	185
599900	542700E	8	<1	<0.5	53.5	18	<5	34	5890	<5	0.9	22	137	1.6	290	<1	5	<1	81
599900	542725E	6	<1	<0.5	36.1	11	<5	31	3940	<5	1.2	15	137	2.1	230	<1	3	<1	117
599900	542750E	5	<1	<0.5	63.2	10	<5	50	7870	<5	<0.5	15	89	0.6	70	<1	3	<1	171
599900	542775E	5	<1	<0.5	19.1	6	24	90	4350	<5	<0.5	10	164	0.6	10	<1	2	<1	53
599900	542800E	32	<1	<0.5	14.5	38	<5	50	5900	<5	<0.5	70	203	0.4	70	<1	13	<1	105
599900	542825E	2	<1	<0.5	162	4	11	61	2410	<5	1.9	7	53	4.7	70	<1	1	<1	112
599900	542850E	9	<1	<0.5	52.9	13	<5	54	2970	<5	0.6	20	176	0.4	140	<1	4	<1	170
599900	542875E	11	<1	<0.5	29.1	10	9	81	7430	<5	<0.5	21	1290	0.7	30	1	4	<1	27
599900	542900E	13	<1	<0.5	79.3	23	<5	37	11100	<5	1.2	36	97	2.1	330	<1	8	<1	126
599900	542925E	2	<1	<0.5	5.8	3	<5	5	2050	<5	<0.5	4	26	<0.1	20	<1	<1	<1	28
599900	542950E	8	<1	<0.5	46.4	10	<5	38	5870	<5	<0.5	17	138	0.5	150	<1	3	<1	195
599900	542975E	13	<1	<0.5	73	21	<5	32	5050	<5	<0.5	31	216	0.6	140	<1	6	<1	182
599900	543000E	3	<1	<0.5	4.8	2	25	100	40	<5	<0.5	5	151	0.3	40	<1	<1	<1	9
599900	543025E	25	1	<0.5	10.4	35	<5	36	2460	<5	<0.5	56	92	0.3	230	<1	11	<1	46
599900	543050E	8	<1	<0.5	73.4	19	<5	36	1640	<5	1.4	25	94	1.2	310	<1	5	<1	229
599900	543075E	7	<1	<0.5	108	11	<5	31	5080	<5	<0.5	17	89	0.5	130	<1	3	<1	156
599900	543100E	5	<1	<0.5	18.7	3	13	101	4010	<5	<0.5	7	284	0.4	20	<1	1	<1	16
599900	543125E	21	<1	<0.5	55.1	23	<5	28	10600	<5	<0.5	43	193	0.9	220	<1	8	<1	202
599900	543175E	12	<1	<0.5	43.4	11	5	25	11500	<5	<0.5	22	213	0.6	170	<1	4	<1	147
599900	543200E	15	<1	<0.5	49	21	6	31	19500	<5	1.8	32	122	3.7	210	<1	7	<1	107
599900	543225E	92	<1	<0.5	20.3	76	<5	33	9140	<5	<0.5	176	153	0.3	80	<1	32	<1	83
599900	543250E	10	<1	<0.5	73.3	16	<5	33	10200	<5	0.6	25	97	1.1	240	<1	5	<1	144
599900	543275E	8	<1	<0.5	67.3	12	<5	24	3070	<5	1.1	21	208	0.3	120	<1	4	<1	208
599900	543325E	15	<1	<0.5	44.1	19	7	41	5730	<5	0.9	36	259	1.1	230	<1	7	<1	143
599900	543375E	36	<1	<0.5	69.1	43	10	58	4320	<5	<0.5	84	257	0.5	100	<1	16	<1	103
599900	543400E	6	<1	<0.5	329	11	5	83	8350	<5	0.7	15	222	1.4	120	<1	3	<1	268
599900	543425E	7	<1	<0.5	48.2	9	<5	50	5430	<5	<0.5	16	378	0.5	100	<1	3	<1	165
599900	543450E	13	<1	<0.5	156	19	<5	77	8330	<5	<0.5	33	325	1.4	140	<1	7	<1	169
599900	543475E	8	<1	<0.5	199	9	<5	42	5740	6	<0.5	19	711	1	20	<1	4	<1	218
599900	543500E	6	<1	<0.5	93.9	6	<5	81	14200	<5	<0.5	11	82	1.3	70	<1	2	<1	158
599900	543825E	10	<1	<0.5	33.7	6	15	27	2300	<5	1	15	195	3.5	210	<1	3	<1	88
599900	543850E	4	<1	<0.5	29.1	5	19	27	1780	<5	0.7	9	199	2.4	60	<1	2	<1	58
599900	543875E	27	<1	<0.5	32.5	20	5	38	1880	<5	0.9	53	207	3.2	290	<1	9	<1	59
599900	543900E	7	<1	<0.5	25	4	5	29	920	<5	0.5	11	157	2	180	<1	2	<1	66
599900	543925E	33	<1	<0.5	14.5	26	<5	39	5070	<5	<0.5	61	268	2.2	210	<1	11	<1	75
599900	543950E	7	<1	<0.5	17.2	9	9	15	760	<5	1.1	16	200	2.6	130	<1	3	<1	80
599900	543975E	10	<1	<0.5	12.5	2	5	55	860	<5	<0.5	10	224	0.6	120	<1	2	<1	43
599900	544000E	<1	<1	<0.5	14.5	1	13	11	2440	<5	<0.5	2	102	0.7	<10	<1	<1	<1	67
599900	544025E	7	<1	<0.5	37.7	8	<5	21	1890	<5	1.2	16	175	3.8	270	<1	3	<1	67
599900	544050E	9	<1	<0.5	4.8	8	<5	42	11800	<5	<0.5	18	301	0.2	10	<1	3	<1	36
599900	544075E	44	<1	<0.5	7.1	12	<5	53	400	<5	<0.5	56	605	0.3	290	<1	8	<1	43
599900	544100E	1	<1	<0.5	23.5	2	20	21	1120	<5	<0.5	3	125	1.8	30	<1	<1	<1	48
599900	544125E	2	<1	<0.5	19.8	3	11	18	1130	<5	<0.5	5	144	2.3	60	<1	<1	<1	102
599900	544150E	5	<1	<0.5	26.7	6	<5	15	1180	<5	0.7	11	205	2.9	80	<1	2	<1	73

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599900	542525E	1	23	8	<1	1680	<1	2	<10	13	177	<0.5	9	<1	56	4	920	14
599900	542550E	<1	17	6	<1	2730	<1	1	<10	6.6	69	<0.5	6	<1	46	4	510	6
599900	542575E	<1	16	4	<1	1720	<1	<1	<10	10.3	156	<0.5	7	<1	22	2	900	15
599900	542600E	<1	28	11	<1	1350	<1	2	<10	10.6	87	<0.5	8	<1	67	6	180	11
599900	542625E	<1	16	6	<1	2190	<1	1	<10	7.2	28	<0.5	10	<1	35	3	240	12
599900	542650E	<1	9	4	<1	2500	<1	<1	<10	4.2	54	<0.5	7	<1	23	2	1070	<5
599900	542675E	<1	13	7	<1	1500	<1	1	<10	10	120	<0.5	6	<1	36	3	180	11
599900	542700E	<1	20	6	<1	2470	<1	1	<10	12.5	133	<0.5	9	<1	48	4	920	16
599900	542725E	1	24	4	<1	2250	<1	<1	<10	11.4	301	<0.5	7	<1	41	4	1000	13
599900	542750E	<1	7	4	<1	3200	<1	<1	<10	5.8	24	<0.5	6	<1	22	2	370	<5
599900	542775E	<1	11	3	<1	6780	<1	<1	<10	8.7	15	<0.5	3	<1	26	1	510	5
599900	542800E	<1	32	22	<1	4690	<1	4	<10	11.3	25	<0.5	20	<1	168	11	330	6
599900	542825E	<1	26	2	<1	2480	<1	<1	<10	13.5	403	<0.5	8	<1	17	3	2130	21
599900	542850E	<1	13	6	<1	3650	<1	1	<10	4.1	55	<0.5	6	<1	51	3	340	5
599900	542875E	1	22	7	<1	6840	<1	2	<10	3.2	11	<0.5	5	<1	86	6	260	<5
599900	542900E	<1	28	10	<1	2060	<1	2	<10	15.5	247	<0.5	10	<1	66	6	1530	16
599900	542925E	<1	<5	1	<1	430	<1	<1	<10	0.8	9	<0.5	2	<1	9	<1	80	<5
599900	542950E	<1	16	5	<1	3410	<1	1	<10	5.2	52	<0.5	7	<1	42	4	260	7
599900	542975E	1	18	9	<1	1910	<1	2	<10	5.6	80	<0.5	7	<1	71	5	350	14
599900	543000E	1	7	2	<1	5680	<1	<1	<10	1.8	60	<0.5	14	<1	22	1	20	<5
599900	543025E	<1	23	17	<1	2490	<1	4	<10	9.8	59	<0.5	9	<1	186	11	140	8
599900	543050E	1	20	6	<1	1520	<1	1	<10	13.2	273	<0.5	9	<1	45	4	100	19
599900	543075E	<1	8	5	<1	3390	<1	<1	<10	5.7	50	<0.5	6	<1	29	2	530	7
599900	543100E	<1	6	3	<1	6720	<1	<1	<10	1.6	8	<0.5	5	<1	29	2	370	<5
599900	543125E	<1	42	13	<1	2880	<1	3	<10	17.2	54	<0.5	22	<1	144	11	420	12
599900	543175E	<1	34	8	<1	1920	<1	2	<10	10	44	<0.5	7	<1	82	7	2070	8
599900	543200E	<1	61	10	<1	2940	<1	3	<10	33.7	208	<0.5	21	<1	155	16	850	30
599900	543225E	<1	58	60	<1	3710	<1	13	<10	9.1	16	<0.5	17	<1	522	33	590	5
599900	543250E	<1	22	7	<1	2260	<1	2	<10	7.9	135	<0.5	7	<1	61	4	2160	12
599900	543275E	2	13	7	<1	2910	<1	1	<10	7.9	72	<0.5	7	<1	35	3	210	9
599900	543325E	3	33	11	<1	2560	<1	2	<10	12	146	<0.5	8	<1	80	6	1000	13
599900	543375E	2	57	26	<1	4330	<1	5	<10	12.2	29	<0.5	8	<1	176	13	460	10
599900	543400E	3	17	4	<1	3220	<1	<1	<10	6.1	125	<0.5	8	<1	27	2	980	10
599900	543425E	1	12	5	<1	4010	<1	1	<10	4.3	24	<0.5	5	<1	31	2	870	<5
599900	543450E	<1	50	10	<1	2770	<1	2	<10	10.4	56	<0.5	11	<1	63	6	430	14
599900	543475E	<1	13	6	<1	2830	<1	1	<10	5.9	15	<0.5	7	<1	33	3	270	<5
599900	543500E	<1	23	4	<1	2910	<1	1	<10	4.5	47	<0.5	9	<1	43	6	2000	22
599900	543825E	14	61	6	<1	1170	<1	3	<10	11.6	285	<0.5	9	<1	146	17	1530	23
599900	543850E	17	70	3	<1	1020	<1	1	<10	11.2	153	<0.5	8	<1	57	13	930	14
599900	543875E	13	59	17	<1	1570	<1	5	<10	15.8	247	<0.5	12	<1	212	14	970	20
599900	543900E	3	32	4	<1	1530	<1	2	<10	7.4	137	<0.5	6	<1	72	8	610	10
599900	543925E	47	80	21	<1	1950	<1	6	<10	13.6	90	<0.5	12	<1	252	17	1010	12
599900	543950E	64	45	5	<1	580	<1	2	<10	12.3	361	0.5	6	<1	69	8	660	28
599900	543975E	4	73	5	<1	2950	<1	3	<10	6.3	21	<0.5	12	<1	246	46	580	<5
599900	544000E	2	27	<1	<1	410	<1	<1	<10	4.9	33	<0.5	4	<1	7	3	390	5
599900	544025E	16	36	5	<1	1340	<1	1	<10	13	374	<0.5	8	<1	64	5	1410	24
599900	544050E	4	26	6	<1	4950	<1	2	<10	1.9	<3	<0.5	22	<1	74	6	450	<5
599900	544075E	2	88	23	<1	3420	<1	10	<10	8	5	<0.5	16	<1	547	44	230	<5
599900	544100E	6	34	<1	<1	1260	<1	<1	<10	9.4	96	<0.5	8	<1	18	6	470	10
599900	544125E	7	41	1	<1	940	<1	<1	<10	7.4	128	<0.5	7	<1	35	11	950	10
599900	544150E	7	58	3	<1	1150	<1	1	<10	15.8	181	<0.5	11	<1	47	9	760	16

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
599900	544175E	14	240	10	<0.1	2800	<1	220	29	47	216	<100	1.3	280	16	8.6	2.8	92	4
599900	544200E	5	293	30	<0.1	1640	<1	40	13	26	159	<100	0.6	240	13	7.9	1.9	122	6
599900	544225E	16	283	20	<0.1	1600	<1	70	40	18	140	<100	1.2	260	7	4.4	1	131	7
599900	544250E	31	204	50	0.2	450	<1	150	40	153	448	<100	2.4	950	48	31.4	8.4	106	6
599900	544275E	25	97	<10	<0.1	3510	<1	470	6	71	18	<100	1.9	420	19	9.1	5.5	39	1
599900	544300E	12	289	20	<0.1	1070	<1	100	38	31	232	<100	0.6	480	16	9.8	2.1	78	7
599900	544325E	9	>300	40	0.1	1810	<1	60	41	112	274	<100	0.6	620	32	14.6	6.5	96	8
599900	544350E	40	210	10	<0.1	1900	<1	220	27	168	175	<100	2.5	650	93	45.6	16.9	85	5
599900	544375E	6	216	10	<0.1	1750	<1	270	85	37	299	<100	<0.5	280	29	20.3	3.8	118	4
599900	544400E	8	271	60	<0.1	920	<1	30	44	48	170	<100	3.3	470	18	10.3	2.7	117	13
599900	544425E	4	79	<10	0.3	840	<1	360	17	21	164	<100	<0.5	1030	45	37.3	3.9	40	2
599900	544450E	40	118	10	0.7	1010	<1	280	5	89	241	<100	1.8	2940	225	170	20	62	1
599900	544475E	4	288	<10	<0.1	2080	<1	320	38	45	215	<100	<0.5	170	18	10	2.9	62	4
599900	544500E	7	290	10	<0.1	1700	<1	260	33	33	213	<100	<0.5	160	16	9.6	2.4	84	4
599900	544525E	9	258	50	<0.1	1710	<1	60	10	92	52	<100	5.4	430	22	9.9	4.4	66	8
599900	544550E	2	162	20	<0.1	1450	<1	310	97	102	229	<100	1.6	400	62	69.8	7.8	68	2
599900	544575E	13	105	<10	0.2	1250	<1	620	140	50	90	<100	0.8	860	34	25.9	5.2	44	1
599900	544600E	23	88	<10	0.4	1050	<1	710	18	45	12	<100	0.8	1760	29	18.1	6.4	15	<1
599900	544625E	3	55	<10	0.1	480	<1	530	228	12	43	<100	1.6	990	10	8.4	1.5	5	<1
599900	544650E	2	45	<10	<0.1	920	<1	720	90	8	33	<100	0.6	150	5	3.4	1	5	<1
599900	544675E	91	30	<10	0.6	1250	<1	690	50	21	11	<100	0.5	6570	27	12.3	8.2	8	<1
599900	544700E	96	66	<10	0.6	1590	<1	490	94	150	21	<100	2.2	2400	52	24.1	16.1	7	1
599900	544725E	11	227	<10	<0.1	2830	<1	150	107	11	182	<100	2.1	320	20	17	1.2	120	5
599900	544750E	4	135	<10	<0.1	2330	<1	310	203	49	119	<100	1	300	40	27.2	4.5	67	3
600000	542375E	9	90	<10	<0.1	1630	<1	430	74	58	132	<100	7.2	190	18	9.7	4.3	28	1
600000	542400E	14	109	20	<0.1	1200	<1	270	33	132	230	<100	8.3	480	26	12.3	8.4	65	3
600000	542425E	15	102	<10	<0.1	2720	<1	370	49	77	152	<100	4.7	330	20	10.8	4.9	48	2
600000	542450E	40	79	10	<0.1	2380	<1	430	29	56	98	<100	3.3	440	11	5.4	3.1	34	2
600000	542475E	15	66	<10	<0.1	1660	<1	510	34	40	54	<100	1.5	170	10	5.2	2.4	20	1
600000	542500E	25	9	<10	1.1	640	<1	730	45	<5	30	<100	<0.5	2310	3	1.5	0.6	9	<1
600000	542525E	37	32	10	0.2	950	<1	650	53	16	42	<100	4.2	3270	16	7.6	4.7	11	2
600000	542550E	20	119	<10	<0.1	2070	<1	450	48	93	210	<100	2.7	370	19	11.5	4.3	51	4
600000	542575E	14	63	<10	<0.1	920	<1	440	89	40	99	<100	3.5	1250	12	6.8	3.6	30	4
600000	542600E	31	60	<10	0.2	2170	<1	610	31	85	69	<100	2.4	800	20	9.6	6	29	5
600000	542625E	21	121	30	<0.1	2440	<1	320	28	41	111	<100	5	210	6	3.2	1.6	64	9
600000	542650E	15	105	<10	<0.1	3230	<1	420	24	57	64	<100	1.9	180	10	5.2	2.6	35	6
600000	542675E	21	22	<10	<0.1	1760	<1	640	49	14	27	<100	1.5	580	5	2.3	1.7	15	4
600000	542700E	22	193	20	<0.1	2860	<1	200	158	90	240	<100	2.4	390	15	9.1	3.2	114	9
600000	542725E	20	110	20	<0.1	2170	<1	370	43	67	192	<100	4.7	210	9	4.9	2.1	69	8
600000	542750E	32	161	20	<0.1	460	<1	250	13	197	117	<100	11.6	880	55	28.2	16.5	53	7
600000	542775E	23	123	40	<0.1	3200	<1	290	12	89	122	<100	5.2	300	15	7.3	3.9	55	8
600000	542800E	25	93	<10	0.2	920	<1	460	81	68	62	<100	5.3	1670	36	20	9.1	17	2
600000	542825E	49	86	40	<0.1	2500	<1	350	11	44	71	<100	11.5	220	9	4.8	2.6	31	4
600000	542850E	20	102	<10	<0.1	2040	<1	360	62	79	128	<100	27.4	320	20	9.5	5.4	35	2
600000	542875E	11	131	<10	<0.1	2110	<1	390	77	49	225	<100	5.4	210	12	6.3	2.8	55	2
600000	542900E	31	103	20	<0.1	1460	<1	330	18	116	100	<100	5.2	390	32	17.3	8.3	37	2
600000	542950E	28	125	80	0.1	2230	<1	300	9	69	105	<100	3.5	310	16	8	4.2	59	3
600000	542975E	43	143	80	<0.1	2660	<1	290	21	60	237	<100	4.1	200	12	6.5	2.9	75	5
600000	543025E	7	122	30	<0.1	2800	<1	350	5	89	75	<100	2.7	230	17	8.9	4.3	53	3
600000	543050E	28	142	70	<0.1	2550	<1	320	9	68	120	<100	4.3	240	11	6.1	2.4	85	6
600000	543075E	34	68	10	0.5	3350	<1	590	7	142	58	<100	1	830	51	24.7	14.8	16	<1

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
599900	544175E	12	<1	<0.5	26	20	<5	36	1390	<5	<0.5	32	203	1.5	380	<1	6	<1	124
599900	544200E	8	<1	<0.5	33.4	9	<5	14	530	<5	0.9	19	136	3.2	210	<1	4	<1	34
599900	544225E	4	<1	<0.5	26.8	8	<5	13	830	<5	1.3	12	120	4.1	290	<1	3	<1	118
599900	544250E	37	<1	<0.5	20.7	54	<5	14	12800	<5	1	95	529	1.4	320	<1	19	<1	133
599900	544275E	23	<1	<0.5	3.7	30	<5	24	490	<5	<0.5	58	200	0.2	60	<1	11	<1	103
599900	544300E	10	<1	<0.5	27	11	<5	22	1030	<5	0.5	22	241	1.7	390	<1	4	<1	78
599900	544325E	27	<1	<0.5	29.7	39	<5	20	1230	<5	1.2	77	294	2.9	400	<1	15	<1	70
599900	544350E	74	<1	<0.5	14.4	66	<5	16	550	<5	<0.5	161	331	1.1	470	<1	29	<1	175
599900	544375E	18	<1	<0.5	23.3	15	<5	43	7010	<5	<0.5	34	141	2	170	<1	6	<1	60
599900	544400E	12	<1	<0.5	12.1	19	<5	5	980	<5	2.7	32	120	1.4	370	<1	7	<1	153
599900	544425E	20	<1	<0.5	2.9	10	<5	20	1890	<5	<0.5	27	148	0.2	150	<1	4	<1	9
599900	544450E	100	<1	<0.5	3.5	37	<5	31	600	<5	<0.5	136	393	0.3	250	<1	22	<1	41
599900	544475E	13	<1	<0.5	19.8	16	<5	55	6160	<5	<0.5	35	105	1.3	200	<1	7	<1	22
599900	544500E	11	<1	<0.5	16.3	11	<5	42	3660	<5	<0.5	29	102	1.8	220	<1	5	<1	35
599900	544525E	18	<1	<0.5	43.2	35	<5	11	2030	<5	1.3	56	108	2.4	430	<1	12	<1	217
599900	544550E	35	<1	<0.5	52.6	46	<5	27	10200	<5	<0.5	82	73	1.7	70	<1	17	<1	92
599900	544575E	25	<1	<0.5	15.8	26	<5	37	9930	<5	<0.5	48	434	0.5	110	<1	9	<1	52
599900	544600E	30	<1	<0.5	5	32	<5	39	560	<5	<0.5	64	402	0.2	40	<1	12	<1	30
599900	544625E	7	<1	<0.5	10.1	10	<5	32	2440	<5	<0.5	16	280	0.2	40	<1	3	<1	27
599900	544650E	5	<1	<0.5	13.2	4	<5	47	4100	<5	<0.5	9	87	0.4	40	<1	2	<1	24
599900	544675E	37	<1	<0.5	12.5	21	54	55	290	7	<0.5	65	1310	0.2	20	<1	10	<1	18
599900	544700E	72	<1	<0.5	7.5	95	<5	34	1400	<5	<0.5	184	356	0.3	80	<1	34	<1	49
599900	544725E	6	<1	<0.5	25.4	4	<5	26	1350	<5	<0.5	9	156	1.4	410	<1	2	<1	164
599900	544750E	22	<1	<0.5	37	19	<5	45	4140	<5	<0.5	39	119	0.8	230	<1	7	<1	161
600000	542375E	18	<1	<0.5	95.2	19	8	51	10600	<5	0.9	39	322	0.6	120	<1	8	<1	143
600000	542400E	31	<1	<0.5	81	50	6	36	11100	<5	0.9	89	268	1.9	120	<1	18	<1	138
600000	542425E	22	<1	<0.5	62.5	28	6	39	8910	<5	0.6	52	272	0.7	200	<1	10	<1	82
600000	542450E	14	<1	<0.5	182	20	<5	44	6700	5	0.6	35	201	0.8	100	<1	7	<1	135
600000	542475E	12	<1	<0.5	75.9	17	5	60	2930	<5	<0.5	28	160	0.4	90	<1	5	<1	279
600000	542500E	2	<1	<0.5	20.6	1	11	95	3300	<5	<0.5	3	914	0.4	20	1	<1	<1	11
600000	542525E	21	<1	<0.5	22.7	17	22	72	8830	8	<0.5	40	762	0.7	10	<1	7	<1	119
600000	542550E	20	<1	<0.5	40.5	33	<5	39	7810	<5	0.7	54	226	0.6	190	<1	11	<1	167
600000	542575E	14	<1	<0.5	40.9	18	13	33	11200	<5	<0.5	36	429	0.6	30	<1	7	<1	132
600000	542600E	27	<1	<0.5	20	37	<5	62	3160	<5	<0.5	71	192	0.5	50	<1	13	<1	93
600000	542625E	7	<1	<0.5	53.9	17	<5	39	5090	<5	0.6	22	128	1.7	160	<1	5	<1	91
600000	542650E	12	<1	<0.5	82.6	22	<5	57	5310	<5	<0.5	32	220	0.7	130	<1	7	<1	114
600000	542675E	7	<1	<0.5	16.9	7	57	64	2730	<5	<0.5	16	178	0.5	20	<1	3	<1	86
600000	542700E	14	<1	<0.5	82.1	24	<5	33	27100	<5	1	38	310	6.4	180	<1	8	<1	265
600000	542725E	9	<1	<0.5	86.2	24	<5	45	15400	<5	1.4	30	267	1.3	140	<1	6	<1	180
600000	542750E	63	<1	<0.5	45.9	93	<5	15	3500	<5	0.7	170	218	1.6	130	<1	32	<1	146
600000	542775E	18	<1	<0.5	85.8	45	<5	41	4360	<5	0.8	55	211	1.1	150	<1	12	<1	195
600000	542800E	38	<1	<0.5	32.1	35	7	39	8330	<5	<0.5	77	648	0.6	40	<1	14	<1	197
600000	542825E	11	<1	<0.5	67.8	19	<5	36	3110	<5	<0.5	31	100	0.6	70	<1	6	<1	263
600000	542850E	21	<1	<0.5	62.2	27	<5	28	7560	<5	<0.5	50	215	0.7	100	<1	10	<1	159
600000	542875E	11	<1	<0.5	36	17	<5	31	4350	<5	<0.5	30	180	0.9	200	<1	6	<1	71
600000	542900E	35	<1	<0.5	41.2	38	<5	20	6750	<5	<0.5	84	189	0.7	120	<1	15	<1	216
600000	542950E	18	<1	<0.5	37.6	32	<5	30	3120	<5	0.5	51	183	1.5	220	<1	11	<1	153
600000	542975E	13	<1	<0.5	191	29	<5	37	9590	<5	0.9	37	243	1.9	240	<1	8	<1	290
600000	543025E	18	<1	<0.5	19	40	<5	29	1570	<5	1	54	116	0.4	260	<1	11	<1	148
600000	543050E	12	<1	<0.5	67.1	29	<5	33	4060	<5	0.9	37	168	1.3	240	<1	8	<1	345
600000	543075E	65	<1	<0.5	38.9	79	<5	57	3180	<5	<0.5	154	205	0.4	50	<1	28	<1	64

Llewellyn Property
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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
599900	544175E	5	30	9	<1	2350	<1	2	<10	10.6	101	<0.5	7	<1	97	6	460	13
599900	544200E	11	31	6	<1	660	<1	2	<10	12.7	278	<0.5	7	<1	65	6	340	18
599900	544225E	5	26	3	<1	890	<1	<1	<10	9.7	359	<0.5	7	<1	37	4	1060	17
599900	544250E	15	91	27	<1	1330	<1	6	<10	27.3	345	<0.5	19	<1	272	23	460	29
599900	544275E	4	23	17	<1	3390	<1	3	<10	5.8	5	0.6	18	<1	98	6	50	<5
599900	544300E	5	37	6	<1	1240	<1	2	<10	14.5	231	<0.5	11	<1	91	7	710	14
599900	544325E	16	53	20	<1	970	<1	5	<10	17.7	496	<0.5	13	<1	160	9	570	25
599900	544350E	4	70	49	<1	2080	<1	13	<10	16.6	51	0.5	24	<1	512	27	130	13
599900	544375E	3	62	11	<1	2690	<1	4	<10	13.8	72	<0.5	19	<1	185	16	2720	9
599900	544400E	21	48	9	<1	300	<1	2	<10	22.2	1200	0.6	16	<1	92	8	640	50
599900	544425E	10	53	10	<1	2850	<1	5	<10	3.5	13	<0.5	80	<1	356	30	110	<5
599900	544450E	6	147	50	<1	2490	<1	24	<10	5.6	10	0.5	64	<1	1770	127	20	<5
599900	544475E	1	30	9	<1	3450	<1	2	<10	9.5	31	<0.5	7	<1	109	7	1260	<5
599900	544500E	2	37	8	<1	2370	<1	2	<10	8.9	83	<0.5	7	<1	100	7	830	8
599900	544525E	17	41	15	<1	420	<1	3	<10	22.3	601	0.6	11	<1	107	7	290	37
599900	544550E	5	65	24	<1	3610	<1	7	<10	12.3	30	<0.5	35	<1	435	65	2370	10
599900	544575E	4	76	15	<1	6990	<1	4	<10	9.4	13	<0.5	34	<1	240	22	390	8
599900	544600E	4	25	20	<1	6740	<1	4	<10	5.7	<3	<0.5	40	<1	193	14	60	<5
599900	544625E	4	14	5	<1	6220	<1	1	<10	4.4	6	<0.5	59	<1	86	7	380	<5
599900	544650E	<1	7	3	<1	8350	<1	<1	<10	3.1	8	<0.5	17	<1	29	3	1530	<5
599900	544675E	1	11	24	<1	7190	<1	5	<10	7.4	3	<0.5	14	<1	164	8	160	<5
599900	544700E	2	14	56	<1	3940	<1	9	<10	9.3	10	<0.5	20	<1	318	17	100	5
599900	544725E	2	49	3	<1	1700	<1	2	<10	13.6	48	<0.5	14	<1	106	15	1980	9
599900	544750E	<1	53	13	<1	2890	<1	5	<10	9.5	22	<0.5	24	<1	239	19	3400	7
600000	542375E	1	26	13	<1	2460	<1	3	<10	15.1	21	<0.5	12	<1	91	8	2750	6
600000	542400E	7	61	27	<1	1230	<1	5	<10	24.7	102	<0.5	11	<1	122	10	1620	16
600000	542425E	1	29	16	<1	2600	<1	3	<10	14	27	<0.5	12	<1	104	8	1520	9
600000	542450E	2	20	10	<1	3640	<1	2	<10	11.8	48	<0.5	9	<1	55	4	370	11
600000	542475E	<1	15	8	<1	5190	<1	2	<10	4.7	19	<0.5	8	<1	60	4	230	<5
600000	542500E	2	21	1	<1	8780	<1	<1	<10	0.6	4	<0.5	6	<1	20	1	60	<5
600000	542525E	2	22	14	<1	7030	<1	3	<10	5.2	13	<0.5	14	<1	106	5	230	<5
600000	542550E	1	34	16	<1	4750	<1	3	<10	19.4	40	<0.5	35	<1	114	9	400	12
600000	542575E	2	33	11	<1	4040	<1	2	<10	10.2	27	<0.5	9	<1	76	6	1210	6
600000	542600E	2	30	21	<1	7100	<1	4	<10	14.8	20	<0.5	26	<1	118	7	190	6
600000	542625E	3	21	6	<1	2070	<1	1	<10	10.2	161	<0.5	8	<1	30	2	660	14
600000	542650E	1	19	9	<1	3330	<1	2	<10	9.3	47	<0.5	10	<1	54	4	1050	9
600000	542675E	1	9	6	<1	7020	<1	<1	<10	3.1	9	<0.5	4	<1	30	2	520	<5
600000	542700E	2	57	11	<1	1770	<1	2	<10	24.3	226	<0.5	11	<1	82	8	3780	24
600000	542725E	2	26	7	<1	2400	<1	1	<10	17.2	197	<0.5	13	<1	49	4	580	25
600000	542750E	3	69	49	<1	970	<1	9	<10	19.7	358	<0.5	13	1	301	20	220	30
600000	542775E	4	26	14	<1	2030	<1	3	<10	15.8	305	<0.5	9	<1	82	5	450	18
600000	542800E	1	48	26	<1	5170	<1	6	<10	10.7	7	<0.5	25	<1	230	15	580	9
600000	542825E	2	9	9	<1	2370	<1	2	<10	9.4	106	<0.5	7	<1	51	3	260	11
600000	542850E	1	23	16	<1	1960	<1	3	<10	7.3	46	<0.5	8	<1	100	8	900	12
600000	542875E	<1	21	9	<1	2370	<1	2	<10	7.8	30	<0.5	8	<1	61	5	1280	12
600000	542900E	2	41	27	<1	2310	<1	5	<10	12.2	59	<0.5	18	<1	164	13	140	9
600000	542950E	5	22	14	<1	2600	<1	3	<10	13.9	192	<0.5	10	<1	83	6	160	13
600000	542975E	4	21	10	<1	2330	<1	2	<10	11.4	318	<0.5	10	<1	74	5	1410	21
600000	543025E	2	26	14	<1	1930	<1	3	<10	13.1	367	<0.5	11	<1	92	6	70	20
600000	543050E	4	21	10	<1	2450	<1	2	<10	16.1	318	<0.5	8	<1	59	5	210	20
600000	543075E	1	49	49	<1	7800	<1	9	<10	26.2	<3	<0.5	18	<1	303	17	60	8

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
600000	543100E	33	119	50	0.2	2120	<1	340	16	82	58	<100	3.4	370	19	9.4	5.1	49	2
600000	543125E	22	113	30	<0.1	3620	<1	370	18	54	157	<100	8.6	200	10	5.1	2.5	52	3
600000	543150E	34	115	30	<0.1	3060	<1	370	36	93	256	<100	10.4	340	24	11.7	6.5	67	3
600000	543175E	7	114	<10	<0.1	3110	<1	320	27	38	861	<100	1.6	150	7	3.8	1.5	66	4
600000	543200E	5	106	<10	<0.1	2390	<1	400	138	46	307	<100	57.5	300	17	8.6	3.9	62	1
600000	543225E	27	106	70	<0.1	1440	<1	280	4	114	117	<100	8.7	310	18	7.9	5.1	89	6
600000	543250E	29	173	50	<0.1	1290	<1	230	12	213	320	<100	4.2	360	46	21.4	11.3	79	5
600000	543275E	56	75	30	0.2	1410	<1	410	8	27	44	<100	8.4	380	6	2.8	1.8	25	2
600000	543300E	21	110	<10	<0.1	2680	<1	400	40	107	155	<100	6.5	320	27	12.8	7.7	29	2
600000	543325E	18	76	10	<0.1	3070	<1	510	30	40	88	<100	1.4	120	8	3.6	2.1	20	2
600000	543350E	9	46	<10	<0.1	2620	<1	570	83	35	125	<100	0.9	310	19	9.5	5.1	14	<1
600000	543375E	22	168	40	<0.1	3190	<1	270	27	119	584	<100	2.6	270	23	11.4	5.3	78	5
600000	543400E	10	142	40	<0.1	1710	<1	240	79	60	1050	<100	5.1	370	14	8.2	3.2	119	5
600000	543425E	25	118	10	<0.1	2920	<1	450	36	72	137	<100	4.6	220	25	13.1	5.7	30	<1
600000	543450E	16	132	<10	<0.1	3130	<1	460	21	66	88	<100	6.1	400	22	11.1	5	31	<1
600000	543475E	5	122	<10	<0.1	2870	<1	350	45	57	200	<100	13	390	17	9.8	3.7	51	3
600000	543500E	9	76	<10	<0.1	1440	<1	430	20	35	172	<100	43.6	650	8	3.9	2.5	21	3
600000	543525E	8	126	10	<0.1	2930	<1	260	66	59	399	<100	14.4	260	17	9	3.7	89	4
600000	543550E	12	124	10	<0.1	3780	<1	350	37	108	194	<100	33.4	370	36	17.1	10.6	38	2
600000	543575E	10	161	30	<0.1	2290	<1	300	14	48	107	<100	4.8	220	12	6.4	2.5	107	4
600000	543600E	11	257	50	0.3	2450	<1	90	14	89	127	<100	2.6	430	24	9.5	5.4	70	4
600000	543625E	9	280	60	0.1	2430	<1	20	29	91	137	<100	3.5	470	30	12.6	6.2	110	5
600000	543650E	27	128	40	0.1	3680	<1	340	16	67	145	<100	1.6	310	16	9	3.8	49	4
600000	543675E	27	30	<10	0.6	1320	<1	550	148	<5	<5	<100	0.6	290	4	2.4	1.1	5	<1
600000	543700E	25	190	<10	0.2	3970	<1	260	38	198	227	<100	0.8	610	83	39.6	18.9	101	2
600000	543725E	17	193	<10	0.1	1580	<1	230	24	53	134	<100	0.9	540	31	17.1	5.9	109	3
600000	543750E	9	115	<10	0.1	5230	<1	440	28	51	175	<100	<0.5	490	31	18.5	6.4	136	2
600000	543775E	14	190	20	0.1	2700	<1	220	65	87	474	<100	1.2	500	56	29.6	10.1	136	4
600000	543800E	9	230	10	<0.1	1970	<1	130	48	17	377	<100	0.6	420	23	15.7	2.8	141	3
600000	543825E	11	216	50	0.3	2500	<1	80	70	82	279	<100	7.3	680	44	20.6	8.7	165	4
600000	543850E	14	227	40	0.3	2270	<1	90	35	113	382	<100	5.9	810	53	26.6	11.3	121	4
600000	543875E	5	208	40	0.1	2940	<1	70	86	64	564	<100	7.4	670	52	29.2	7.8	181	3
600000	543900E	47	27	<10	0.4	1290	<1	460	239	87	89	<100	6.2	1940	38	17.6	15.1	8	<1
600000	543925E	31	121	10	0.5	2650	<1	270	84	122	294	<100	8.1	950	65	35.6	14.5	68	1
600000	543950E	22	96	40	0.5	2320	<1	290	58	315	202	<100	1.9	700	90	45.7	28.6	81	2
600000	543975E	7	235	30	0.1	1980	<1	70	74	27	462	<100	1.2	360	30	16.6	3.8	135	3
600000	544000E	28	45	<10	0.3	1890	<1	710	75	6	8	<100	<0.5	270	7	4.2	1.9	7	<1
600000	544025E	9	35	<10	0.2	1020	<1	590	113	<5	<5	<100	<0.5	300	4	2.6	1.1	6	<1
600000	544075E	20	133	30	0.3	1620	<1	270	39	141	311	<100	4.1	570	52	25.8	12.3	107	2
600000	544100E	6	222	40	0.2	1930	<1	140	13	209	347	<100	0.7	840	101	47.9	20	106	4
600000	544125E	33	126	10	0.4	2020	<1	390	20	207	179	<100	1.1	530	88	45.4	19.8	52	1
600000	544150E	12	162	20	<0.1	1260	<1	250	38	75	178	<100	4	280	27	13.9	5.2	59	4
600000	544175E	8	228	70	<0.1	1930	<1	50	9	121	225	<100	2.2	710	56	30.5	9	100	8
600000	544200E	7	237	70	<0.1	1640	1	40	10	86	67	<100	3.6	290	21	10.6	4.3	128	13
600000	544225E	22	275	80	<0.1	3580	<1	50	14	126	326	<100	5.9	520	39	19.2	7	144	10
600000	544250E	13	75	<10	0.1	2410	<1	600	24	65	37	<100	2.2	400	18	9.5	4.6	28	<1
600000	544275E	8	37	<10	<0.1	1230	<1	680	29	8	13	<100	1.4	240	3	1.6	0.9	9	<1
600000	544300E	28	60	<10	<0.1	1400	<1	680	44	15	19	<100	1	680	9	4.6	2.4	15	<1
600000	544325E	21	69	<10	<0.1	1400	<1	620	47	13	<5	<100	1.3	150	8	4	1.6	7	<1
600000	544350E	21	209	10	<0.1	1300	<1	120	18	57	69	<100	2.4	350	26	13.7	4.1	120	6
600000	544375E	6	245	60	<0.1	1980	<1	70	32	40	139	<100	1.3	340	23	12.5	3	108	7

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
600000	543100E	22	<1	<0.5	60.5	32	<5	26	2240	<5	<0.5	58	221	1.1	160	<1	11	<1	163
600000	543125E	11	<1	<0.5	129	22	<5	47	7920	<5	0.5	30	243	1.1	170	<1	6	<1	284
600000	543150E	28	<1	<0.5	65.4	36	<5	58	7210	<5	<0.5	66	516	0.9	170	<1	13	<1	185
600000	543175E	7	<1	<0.5	45.7	14	<5	41	21400	<5	0.5	19	108	1.2	200	<1	4	<1	47
600000	543200E	16	<1	<0.5	95.8	18	<5	36	6210	<5	<0.5	34	217	0.7	230	<1	7	<1	162
600000	543225E	20	<1	<0.5	51.5	42	<5	38	1640	<5	0.7	64	161	1.9	210	<1	13	<1	149
600000	543250E	48	<1	<0.5	42.8	73	<5	35	5360	<5	0.6	128	205	2.1	260	<1	26	<1	204
600000	543275E	8	<1	<0.5	188	11	<5	51	1120	<5	<0.5	20	138	1.1	50	<1	4	<1	262
600000	543300E	31	<1	<0.5	74.3	46	<5	39	7850	<5	<0.5	83	472	0.9	90	<1	16	<1	211
600000	543325E	9	<1	<0.5	325	14	<5	84	2980	<5	<0.5	25	157	0.9	110	<1	5	<1	178
600000	543350E	23	<1	<0.5	25	16	28	99	7370	<5	<0.5	41	263	0.5	60	<1	7	<1	74
600000	543375E	23	<1	<0.5	66.2	45	<5	36	3880	<5	0.7	67	301	1.7	260	<1	14	<1	145
600000	543400E	12	<1	<0.5	198	19	6	49	10500	<5	0.8	31	371	3.2	210	<1	7	<1	98
600000	543425E	25	<1	<0.5	56.9	31	<5	56	2240	<5	<0.5	58	270	0.5	170	<1	11	<1	225
600000	543450E	22	<1	<0.5	113	23	<5	61	1950	<5	<0.5	46	296	0.5	160	<1	9	<1	169
600000	543475E	16	<1	<0.5	104	17	<5	44	10300	<5	<0.5	33	324	1.2	140	<1	6	<1	214
600000	543500E	11	<1	<0.5	78.5	15	<5	29	6120	<5	<0.5	28	252	1.3	20	<1	5	<1	179
600000	543525E	16	<1	<0.5	45.8	21	<5	37	4070	<5	<0.5	37	367	1.1	230	<1	7	<1	83
600000	543550E	43	<1	<0.5	25.1	36	<5	39	5340	<5	<0.5	89	274	1.2	130	<1	15	<1	170
600000	543575E	11	<1	<0.5	74.6	24	<5	40	3620	<5	0.6	29	205	1.2	350	<1	6	<1	163
600000	543600E	22	<1	<0.5	29.8	36	<5	16	960	<5	1.1	58	208	3	290	<1	12	<1	92
600000	543625E	25	<1	<0.5	12.9	33	<5	6	590	<5	1.4	62	118	4.3	250	<1	13	<1	138
600000	543650E	17	<1	<0.5	83.9	26	<5	43	6030	<5	0.5	42	184	0.8	210	<1	8	<1	182
600000	543675E	5	<1	<0.5	9.8	2	18	142	990	<5	<0.5	7	742	0.1	10	<1	1	<1	32
600000	543700E	79	<1	<0.5	15.2	84	<5	63	430	<5	<0.5	182	349	0.9	240	<1	34	<1	43
600000	543725E	26	<1	<0.5	16.3	23	<5	62	410	<5	<0.5	51	403	0.8	200	<1	9	<1	55
600000	543750E	27	<1	<0.5	11.2	24	<5	93	2090	<5	<0.5	50	195	0.6	180	<1	9	<1	21
600000	543775E	44	<1	<0.5	33	34	<5	44	6160	<5	<0.5	85	267	1.9	290	<1	15	<1	79
600000	543800E	13	<1	<0.5	18.1	6	11	33	240	<5	<0.5	21	208	1.4	210	<1	3	<1	59
600000	543825E	36	<1	<0.5	22.7	33	<5	19	4310	<5	0.6	73	306	3.9	220	<1	14	<1	72
600000	543850E	47	<1	<0.5	24.2	44	<5	17	1100	<5	0.6	102	434	2.7	230	<1	18	<1	113
600000	543875E	34	<1	<0.5	24.9	25	6	24	9640	<5	0.5	58	278	4.8	270	<1	11	<1	99
600000	543900E	56	<1	<0.5	19.4	36	7	41	1840	<5	<0.5	109	367	0.2	30	<1	17	<1	39
600000	543925E	60	<1	<0.5	15.2	49	<5	36	13800	<5	<0.5	113	510	0.5	90	<1	21	<1	86
600000	543950E	102	<1	<0.5	20.4	149	16	43	9120	<5	<0.5	271	380	2.2	150	<1	54	<1	41
600000	543975E	17	<1	<0.5	19.1	9	16	25	2150	<5	<0.5	28	246	2.6	280	<1	5	<1	63
600000	544000E	8	<1	<0.5	12.3	4	6	66	1300	<5	<0.5	12	327	0.1	20	<1	2	<1	34
600000	544025E	4	<1	<0.5	6.2	2	<5	55	1380	<5	<0.5	6	378	<0.1	10	<1	<1	<1	16
600000	544075E	51	<1	<0.5	18.2	66	<5	24	3440	<5	<0.5	117	350	1.4	210	<1	23	<1	114
600000	544100E	88	<1	<0.5	13.7	76	<5	38	3250	<5	<0.5	195	266	1.9	510	<1	36	<1	50
600000	544125E	84	<1	<0.5	45.9	108	<5	54	2360	<5	<0.5	178	331	0.6	400	<1	35	<1	35
600000	544150E	23	<1	<0.5	53.3	29	<5	17	3750	<5	<0.5	53	142	1.5	310	<1	10	<1	158
600000	544175E	42	<1	<0.5	20.5	39	<5	15	1450	<5	0.8	100	229	1.3	370	<1	18	<1	107
600000	544200E	19	<1	<0.5	18	36	<5	5	1340	<5	2.5	55	72	3.2	260	<1	11	<1	165
600000	544225E	31	<1	<0.5	85.7	45	<5	19	4060	<5	2.2	77	244	4	360	<1	15	<1	252
600000	544250E	20	<1	<0.5	11	22	<5	27	1420	<5	<0.5	46	109	0.4	40	<1	9	<1	113
600000	544275E	4	<1	<0.5	8.2	3	10	45	930	<5	<0.5	8	107	0.3	10	<1	1	<1	47
600000	544300E	10	<1	<0.5	11.2	11	<5	46	2880	<5	<0.5	22	164	0.4	30	<1	4	<1	87
600000	544325E	8	<1	<0.5	6.2	7	<5	44	960	<5	<0.5	15	155	0.2	30	<1	3	<1	83
600000	544350E	19	<1	<0.5	16.8	22	<5	21	510	<5	0.7	43	143	3	240	<1	8	<1	120
600000	544375E	14	<1	<0.5	63.5	14	<5	17	2400	<5	1.3	30	155	2.4	300	<1	6	<1	103

Llewellyn Property
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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
600000	543100E	4	28	17	<1	3010	<1	3	<10	13.2	71	<0.5	11	<1	97	6	420	10
600000	543125E	2	16	9	<1	2510	<1	2	<10	8.4	133	<0.5	8	<1	57	4	630	13
600000	543150E	4	50	21	<1	2790	<1	4	<10	13.7	126	<0.5	11	<1	116	8	450	17
600000	543175E	1	21	5	<1	3210	<1	1	<10	8.5	98	<0.5	7	<1	37	3	1090	9
600000	543200E	<1	31	12	<1	3360	<1	3	<10	6.7	28	<0.5	8	<1	85	6	2300	<5
600000	543225E	8	26	18	<1	2110	<1	3	<10	15.8	265	<0.5	5	<1	82	6	100	19
600000	543250E	5	50	38	<1	1690	<1	8	<10	20.9	193	<0.5	11	<1	229	14	280	18
600000	543275E	2	5	6	<1	3100	<1	1	<10	5.3	40	<0.5	4	<1	31	2	120	5
600000	543300E	1	23	25	<1	2870	<1	4	<10	8.5	50	<0.5	12	<1	144	9	2070	11
600000	543325E	<1	6	7	<1	4570	<1	1	<10	6.1	44	<0.5	9	<1	38	3	300	<5
600000	543350E	<1	13	15	<1	6120	<1	3	<10	3.5	<3	<0.5	6	<1	100	7	800	<5
600000	543375E	3	32	19	<1	2510	<1	4	<10	18.5	224	<0.5	11	<1	121	9	280	18
600000	543400E	3	54	10	<1	2130	<1	2	<10	14.3	161	<0.5	9	<1	71	7	3270	15
600000	543425E	<1	30	18	<1	3830	<1	4	<10	7.1	12	<0.5	12	<1	143	9	920	7
600000	543450E	<1	26	16	<1	4210	<1	3	<10	7.1	10	<0.5	15	<1	113	7	240	6
600000	543475E	<1	57	11	<1	2370	<1	3	<10	10.2	42	<0.5	11	<1	89	7	710	20
600000	543500E	1	15	9	<1	1920	<1	1	<10	10	40	<0.5	6	<1	41	3	350	12
600000	543525E	2	38	12	<1	1980	<1	3	<10	10.2	57	<0.5	7	<1	92	7	990	9
600000	543550E	1	37	31	<1	2460	<1	6	<10	9.8	35	<0.5	10	<1	185	11	210	13
600000	543575E	4	27	8	<1	2120	<1	2	<10	13.8	163	<0.5	7	<1	69	4	500	13
600000	543600E	4	30	17	<1	1140	<1	4	<10	16	181	<0.5	8	<1	103	6	320	15
600000	543625E	5	43	19	<1	370	<1	5	<10	21.4	286	1	9	<1	120	8	560	21
600000	543650E	2	28	13	<1	3170	<1	3	<10	12.6	120	<0.5	10	<1	89	7	260	11
600000	543675E	2	7	3	<1	8280	<1	<1	<10	<0.5	<3	<0.5	6	<1	31	2	1120	<5
600000	543700E	2	71	56	<1	2790	<1	13	<10	10.9	32	<0.5	10	<1	486	25	930	5
600000	543725E	2	40	17	<1	2890	<1	5	<10	8	49	<0.5	7	<1	181	13	550	5
600000	543750E	2	64	17	<1	4810	<1	5	<10	8.1	27	<0.5	9	<1	199	14	480	7
600000	543775E	2	57	29	<1	2110	<1	8	<10	10.8	74	<0.5	9	<1	346	20	990	6
600000	543800E	2	30	8	<1	1510	<1	3	<10	6.1	62	<0.5	5	<1	130	12	1200	<5
600000	543825E	9	64	25	<1	750	<1	7	<10	20.3	184	0.6	10	<1	214	14	1130	17
600000	543850E	7	66	33	<1	980	<1	8	<10	17.5	182	0.7	9	<1	294	19	570	16
600000	543875E	9	72	21	<1	810	<1	7	<10	20.2	141	0.6	8	<1	286	20	1330	14
600000	543900E	4	34	40	<1	3210	<1	7	<10	11.8	<3	1.1	5	<1	233	13	1300	<5
600000	543925E	9	120	40	<1	1930	<1	10	<10	11.6	18	0.9	16	<1	369	26	1140	7
600000	543950E	15	125	80	<1	2050	<1	15	<10	16.1	50	0.6	8	<1	539	33	730	15
600000	543975E	12	59	11	<1	1050	<1	4	<10	15.6	125	<0.5	8	<1	153	12	2120	11
600000	544000E	3	10	5	<1	7880	<1	1	<10	0.9	<3	<0.5	10	<1	54	3	330	<5
600000	544025E	3	<5	2	<1	6190	<1	<1	<10	<0.5	<3	<0.5	12	<1	36	2	800	<5
600000	544075E	10	65	37	<1	2210	<1	8	<10	14	43	<0.5	14	<1	275	18	560	10
600000	544100E	9	98	60	<1	1340	<1	15	<10	29.6	167	<0.5	14	<1	563	31	310	18
600000	544125E	2	93	57	<1	3370	<1	14	<10	16.1	9	<0.5	16	<1	559	29	310	10
600000	544150E	3	36	16	<1	1890	<1	4	<10	13.8	136	<0.5	13	<1	138	9	640	17
600000	544175E	21	65	29	<1	730	<1	8	<10	22.8	448	0.6	16	<1	313	21	230	19
600000	544200E	12	58	15	<1	300	<1	3	<10	30.7	1060	0.5	17	1	105	7	370	37
600000	544225E	17	75	22	<1	690	<1	6	<10	34.6	1090	<0.5	13	1	187	14	760	33
600000	544250E	2	48	14	<1	6090	<1	3	<10	15.4	16	<0.5	14	<1	103	8	200	6
600000	544275E	1	5	3	<1	6250	<1	<1	<10	2.6	<3	<0.5	4	<1	18	1	170	<5
600000	544300E	2	13	7	<1	6620	<1	1	<10	4.5	<3	<0.5	23	<1	58	3	200	<5
600000	544325E	1	7	5	<1	6210	<1	1	<10	1.2	<3	<0.5	17	<1	48	3	270	<5
600000	544350E	3	26	13	<1	1380	<1	4	<10	11	188	<0.5	9	<1	139	9	250	12
600000	544375E	19	52	10	<1	1120	<1	3	<10	14.3	656	<0.5	12	<1	117	9	660	35

Llewellyn Property
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		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
600000	544400E	15	282	<10	<0.1	1920	<1	120	14	<5	118	<100	0.5	220	4	4	<0.5	116	4
600000	544425E	9	>300	10	<0.1	2190	<1	50	20	38	101	<100	1.2	270	18	10.5	2.5	51	3
600000	544450E	11	>300	<10	<0.1	1590	<1	80	16	<5	177	<100	<0.5	150	5	4.7	<0.5	70	2
600000	544475E	43	88	<10	0.3	4150	<1	750	11	61	36	<100	0.5	1450	30	16.4	7.1	17	<1
600000	544500E	11	265	60	<0.1	1830	2	20	6	200	95	<100	4.1	440	53	23.1	9.6	64	7
600000	544525E	20	248	100	0.3	3320	<1	90	9	141	139	<100	3.6	300	28	13.3	6	67	7
600000	544550E	8	245	<10	<0.1	2710	<1	280	11	25	77	<100	0.7	190	16	9.4	2.1	75	3
600000	544575E	13	23	<10	<0.1	2050	<1	910	63	<5	13	<100	<0.5	500	2	1.3	0.6	6	<1
600000	544600E	40	179	<10	<0.1	3550	<1	350	25	95	74	<100	0.7	500	37	17.5	6.1	74	3
600000	544625E	2	142	<10	0.1	3240	<1	300	16	13	277	<100	3.2	360	12	33.8	0.8	115	2
600000	544650E	11	82	<10	0.2	2640	<1	830	49	55	23	<100	<0.5	800	17	8.9	4.2	18	<1
600000	544675E	8	204	10	<0.1	2140	<1	150	56	25	119	<100	1	330	18	10.1	1.8	130	6
600000	544700E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
600000	544725E	26	207	20	<0.1	2340	<1	200	18	118	220	<100	2	400	31	13.9	5.6	67	5
600100	542350E	9	55	<10	<0.1	1530	<1	450	68	24	69	<100	0.9	90	4	2.1	1.3	33	3
600100	542375E	12	69	<10	0.2	1450	<1	360	70	82	43	<100	3	170	13	6.3	4	31	2
600100	542400E	15	98	10	<0.1	1440	<1	330	82	100	89	<100	1.6	360	25	12.1	6.2	48	3
600100	542425E	6	111	10	<0.1	1600	<1	330	79	146	219	<100	1.3	540	36	19.3	9	71	3
600100	542450E	10	72	10	<0.1	1500	<1	380	27	86	207	<100	1.2	230	19	9.7	4.8	42	3
600100	542475E	20	58	<10	0.1	1310	<1	440	24	80	47	<100	1.9	730	21	9.3	7	22	2
600100	542500E	20	66	<10	0.2	2130	<1	400	13	204	41	<100	2.5	1050	46	22.1	16	22	2
600100	542525E	14	88	<10	<0.1	960	<1	450	310	96	79	<100	6.8	1380	32	18.1	8.7	15	2
600100	542550E	15	83	20	<0.1	1010	<1	370	80	104	253	<100	26.8	410	18	8.6	4.4	83	4
600100	542575E	26	65	10	0.3	1290	<1	470	14	123	103	<100	1.3	930	31	14.6	11	36	2
600100	542600E	27	53	<10	0.7	1200	<1	420	15	90	31	<100	3	1110	38	18.6	11.3	20	2
600100	542625E	65	29	<10	0.6	1820	<1	610	12	50	19	<100	0.6	1560	42	18.1	16.3	14	1
600100	542650E	52	44	<10	0.3	1480	<1	530	27	81	23	<100	2.5	920	38	16	14.9	14	2
600100	542675E	42	51	<10	0.2	1200	<1	460	22	70	45	<100	6.1	1000	24	10.3	9	16	2
600100	542700E	38	90	10	0.2	1040	<1	330	11	139	56	<100	5.5	580	30	14.2	9.5	40	3
600100	542725E	32	94	20	<0.1	2470	<1	340	8	59	51	<100	4.2	240	9	4.2	2.5	47	4
600100	542750E	22	43	<10	<0.1	2510	<1	620	42	14	53	<100	1.6	110	3	1.2	1	17	2
600100	542775E	35	125	30	<0.1	2420	<1	290	17	99	185	<100	4.1	240	18	9	5.2	73	7
600100	542800E	34	66	<10	0.2	1660	<1	490	48	78	32	<100	2.3	1100	35	17.2	12	17	2
600100	542825E	21	165	100	0.2	1290	<1	190	8	121	64	<100	11.2	450	21	9.2	5.2	62	6
600100	542850E	21	89	30	0.2	1750	<1	370	31	71	56	<100	3.6	260	14	7	3.7	29	3
600100	542875E	22	103	40	0.1	2490	<1	320	11	87	94	<100	5.7	200	14	6.3	3.7	38	3
600100	542900E	11	176	20	<0.1	2340	<1	270	26	86	278	<100	2.7	140	14	7	3.2	93	7
600100	542925E	12	121	<10	<0.1	2650	<1	360	30	58	184	<100	3.1	280	15	7.1	3.5	63	3
600100	542950E	8	261	<10	<0.1	1010	<1	160	39	52	275	<100	1.4	490	31	16.7	5.1	103	5
600100	542975E	8	130	<10	<0.1	2900	<1	420	72	37	462	<100	4.3	180	11	6.4	2.6	92	3
600100	543000E	6	152	20	<0.1	1670	<1	290	52	52	165	<100	3.3	250	16	10	2.9	59	5
600100	543025E	33	101	20	<0.1	1930	<1	420	9	29	96	<100	1.1	140	5	2.7	1.4	37	3
600100	543050E	2	78	<10	<0.1	1390	<1	440	152	18	538	<100	8.7	100	5	3.1	1.1	47	3
600100	543075E	18	152	10	<0.1	2090	<1	310	15	66	295	<100	3	240	18	10.3	4.1	62	4
600100	543100E	3	143	<10	<0.1	1130	<1	320	80	34	271	<100	2.3	270	16	10.9	2.6	82	4
600100	543125E	24	193	60	0.1	1750	<1	140	10	120	90	<100	4.3	390	24	11.2	5.1	65	6
600100	543150E	26	87	30	0.2	2700	<1	310	14	85	49	<100	3.5	240	10	4.6	3.1	31	2
600100	543175E	15	5	<10	0.1	1080	<1	620	34	<5	8	<100	<0.5	630	<1	<0.5	<0.5	6	<1
600100	543200E	14	149	20	<0.1	1450	<1	240	32	42	216	<100	2.2	270	10	5.3	2.4	83	4
600100	543225E	24	106	70	<0.1	3180	<1	340	63	65	164	<100	3.9	330	12	6.4	3	77	4
600100	543250E	17	85	10	<0.1	1600	<1	450	11	140	83	<100	4.4	210	37	17.7	10.8	51	3

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
600000	544400E	1	<1	<0.5	47.7	2	<5	37	440	<5	0.5	3	126	1.2	60	<1	<1	<1	35
600000	544425E	11	<1	<0.5	10.6	14	<5	15	240	<5	<0.5	29	101	0.9	350	<1	6	<1	122
600000	544450E	1	<1	<0.5	21.2	1	<5	20	330	<5	<0.5	2	141	0.4	80	<1	<1	<1	40
600000	544475E	30	<1	<0.5	5.1	40	<5	50	870	<5	<0.5	67	468	0.1	60	<1	13	<1	14
600000	544500E	42	<1	<0.5	23	78	<5	6	830	<5	2.3	129	112	1.3	410	<1	27	<1	213
600000	544525E	25	<1	<0.5	21.5	59	<5	15	4230	<5	2.3	82	92	1.6	360	<1	17	<1	206
600000	544550E	10	<1	<0.5	8.7	9	<5	36	1780	<5	<0.5	23	101	0.8	340	<1	4	<1	48
600000	544575E	3	<1	<0.5	7	2	<5	51	590	<5	<0.5	5	208	0.2	10	<1	<1	<1	10
600000	544600E	27	<1	<0.5	110	43	<5	54	1620	<5	<0.5	68	145	0.7	400	<1	14	<1	61
600000	544625E	4	<1	<0.5	22.5	5	<5	39	2980	<5	<0.5	9	102	0.4	30	<1	2	<1	134
600000	544650E	19	<1	<0.5	5	27	<5	49	1550	<5	<0.5	45	367	0.2	80	<1	9	<1	14
600000	544675E	10	<1	<0.5	34.3	9	<5	22	1280	<5	<0.5	20	134	1.8	590	<1	4	<1	61
600000	544700E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
600000	544725E	24	<1	<0.5	30.9	47	<5	30	1870	<5	0.6	63	209	1.4	560	<1	13	<1	107
600100	542350E	5	<1	<0.5	232	8	<5	63	4890	<5	<0.5	13	170	2.1	100	<1	3	<1	146
600100	542375E	16	<1	<0.5	76	23	<5	35	3720	<5	<0.5	46	247	2	80	<1	9	<1	86
600100	542400E	28	<1	<0.5	64.3	30	<5	36	5000	<5	<0.5	67	327	0.9	130	<1	13	<1	102
600100	542425E	37	<1	<0.5	88.1	37	6	41	11100	<5	<0.5	82	245	2.5	200	<1	16	<1	62
600100	542450E	22	<1	<0.5	66.9	27	<5	51	4320	<5	<0.5	53	217	1	170	<1	11	<1	78
600100	542475E	28	<1	<0.5	41.5	29	<5	42	2330	<5	<0.5	69	396	0.9	40	<1	13	<1	99
600100	542500E	63	<1	<0.5	47	78	<5	55	1590	<5	<0.5	167	300	0.5	80	<1	32	<1	110
600100	542525E	41	<1	<0.5	72.9	35	<5	47	6190	<5	<0.5	79	1680	0.5	40	<1	15	<1	182
600100	542550E	21	<1	<0.5	60	30	<5	69	7580	<5	1.3	53	499	0.5	280	<1	11	<1	127
600100	542575E	43	<1	<0.5	79	55	<5	44	2190	<5	<0.5	119	414	0.8	60	<1	23	<1	104
600100	542600E	50	<1	<0.5	35.6	47	<5	41	930	<5	<0.5	121	254	0.6	60	<1	22	<1	65
600100	542625E	68	<1	<0.5	40.3	49	<5	74	450	<5	<0.5	156	215	0.7	10	<1	25	<1	22
600100	542650E	60	<1	<0.5	75.9	53	<5	69	670	<5	<0.5	143	235	0.7	20	<1	25	<1	65
600100	542675E	37	<1	<0.5	67.4	35	<5	59	1500	<5	<0.5	88	244	0.7	40	<1	15	<1	113
600100	542700E	39	<1	<0.5	51.9	48	<5	53	1590	<5	<0.5	104	254	0.9	130	<1	20	<1	159
600100	542725E	11	<1	<0.5	110	25	<5	65	1670	<5	<0.5	33	176	1.2	140	<1	7	<1	155
600100	542750E	4	<1	<0.5	262	7	<5	65	6720	<5	<0.5	9	281	1	30	<1	2	<1	298
600100	542775E	21	<1	<0.5	132	41	<5	58	2940	<5	0.8	62	254	1.7	160	<1	13	<1	175
600100	542800E	50	<1	<0.5	63.3	46	<5	46	3790	<5	<0.5	111	369	0.5	40	<1	19	<1	165
600100	542825E	23	<1	<0.5	66.6	48	<5	18	1080	<5	0.7	71	333	1.3	270	<1	16	<1	197
600100	542850E	17	<1	<0.5	74.2	23	<5	46	3290	<5	<0.5	41	265	0.3	110	<1	8	<1	234
600100	542875E	16	<1	<0.5	74	35	<5	37	1400	<5	<0.5	50	186	0.5	180	<1	11	<1	214
600100	542900E	14	<1	<0.5	58.5	33	<5	43	7060	<5	1	43	214	2.2	270	<1	10	<1	132
600100	542925E	15	<1	<0.5	48.6	22	<5	51	2130	<5	<0.5	38	209	0.6	200	<1	8	<1	127
600100	542950E	23	<1	<0.5	22.6	17	<5	52	2000	<5	<0.5	48	296	1	270	<1	9	<1	62
600100	542975E	11	<1	<0.5	63	15	<5	58	11600	<5	<0.5	25	207	1.2	160	<1	5	<1	102
600100	543000E	14	<1	<0.5	121	18	<5	48	7250	<5	<0.5	31	158	0.8	260	<1	6	<1	256
600100	543025E	6	<1	<0.5	163	11	<5	48	1780	<5	<0.5	16	144	0.5	170	<1	3	<1	194
600100	543050E	4	<1	<0.5	114	7	5	55	15400	<5	<0.5	12	68	1.4	110	<1	2	<1	189
600100	543075E	19	<1	<0.5	120	29	<5	40	4930	<5	0.6	43	302	1.3	250	<1	9	<1	249
600100	543100E	12	<1	<0.5	65.6	11	<5	47	8300	<5	<0.5	23	245	0.8	250	<1	4	<1	97
600100	543125E	25	<1	<0.5	25.4	56	<5	25	1360	<5	1.1	72	186	1.2	260	<1	16	<1	146
600100	543150E	13	<1	<0.5	52.1	35	<5	54	970	<5	<0.5	42	95	0.3	170	<1	9	<1	167
600100	543175E	<1	<1	<0.5	6.5	<1	40	123	470	<5	<0.5	2	452	0.2	20	<1	<1	<1	31
600100	543200E	10	<1	<0.5	40.7	19	<5	46	1790	<5	0.7	28	258	0.9	270	<1	6	<1	63
600100	543225E	12	<1	<0.5	67.9	27	<5	49	3230	<5	0.6	37	409	0.7	260	<1	8	<1	202
600100	543250E	48	<1	<0.5	34.9	64	<5	46	1280	<5	<0.5	122	234	0.6	120	<1	24	<1	129

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
600000	544400E	2	16	<1	<1	1900	<1	<1	<10	5.8	113	<0.5	7	<1	23	4	380	6
600000	544425E	4	23	8	<1	820	<1	3	<10	8.3	236	<0.5	7	<1	105	7	400	10
600000	544450E	1	19	<1	<1	1200	<1	<1	<10	3.3	65	<0.5	4	<1	27	5	260	<5
600000	544475E	5	36	21	<1	8140	<1	5	<10	4.6	<3	<0.5	29	<1	215	12	30	<5
600000	544500E	16	62	33	<1	370	<1	8	<10	28.2	1090	0.6	18	<1	251	15	220	42
600000	544525E	22	45	20	<1	990	<1	4	<10	21.2	1310	<0.5	9	<1	154	9	280	42
600000	544550E	2	16	7	<1	4520	<1	2	<10	6.3	52	<0.5	6	<1	97	7	180	6
600000	544575E	2	<5	2	<1	10900	<1	<1	<10	1.8	<3	<0.5	7	<1	15	<1	400	<5
600000	544600E	1	30	20	<1	4120	<1	5	<10	7.8	21	<0.5	12	<1	191	10	480	5
600000	544625E	2	72	3	<1	3460	<1	<1	<10	13.6	15	<0.5	22	<1	67	58	180	6
600000	544650E	3	16	15	<1	9910	<1	3	<10	3.9	<3	<0.5	69	<1	117	6	120	<5
600000	544675E	1	21	6	<1	2170	<1	2	<10	11.9	91	<0.5	9	<1	91	7	1410	10
600000	544700E	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
600000	544725E	4	46	18	<1	1660	<1	5	<10	20.6	305	<0.5	11	<1	149	9	240	25
600100	542350E	<1	7	4	<1	1930	<1	<1	<10	3.5	25	<0.5	5	<1	20	1	2220	<5
600100	542375E	<1	15	13	<1	1580	<1	2	<10	7.6	21	<0.5	9	<1	62	5	2080	6
600100	542400E	1	37	21	<1	1550	<1	4	<10	13.3	22	<0.5	11	<1	114	9	570	11
600100	542425E	1	66	28	<1	1470	<1	6	<10	20.5	37	<0.5	13	<1	164	15	1460	11
600100	542450E	<1	23	17	<1	1960	<1	3	<10	8.5	27	<0.5	9	<1	92	7	400	6
600100	542475E	<1	16	22	<1	1860	<1	4	<10	10.2	8	<0.5	9	<1	102	7	100	6
600100	542500E	1	39	52	<1	1930	<1	9	<10	22.7	8	<0.5	14	<1	228	15	80	9
600100	542525E	<1	17	26	<1	2130	<1	6	<10	7.1	12	<0.5	18	<1	216	12	5650	11
600100	542550E	2	36	16	<1	1930	<1	3	<10	26.2	78	<0.5	20	<1	85	6	1920	15
600100	542575E	2	35	36	<1	2060	<1	6	<10	22.2	16	<0.5	13	<1	161	11	40	19
600100	542600E	1	25	40	<1	2050	<1	7	<10	15.9	6	<0.5	8	<1	211	14	30	<5
600100	542625E	<1	18	53	<1	3460	<1	8	<10	11.3	5	<0.5	13	<1	241	13	30	<5
600100	542650E	<1	12	48	<1	2690	<1	8	<10	8.1	<3	<0.5	10	<1	203	10	140	<5
600100	542675E	<1	14	28	<1	2500	<1	5	<10	9.7	6	<0.5	10	<1	122	7	90	<5
600100	542700E	2	35	31	<1	1750	<1	5	<10	15.4	39	<0.5	10	<1	147	10	50	10
600100	542725E	2	18	9	<1	2050	<1	2	<10	11.2	119	<0.5	7	<1	43	3	100	12
600100	542750E	<1	6	3	<1	3530	<1	<1	<10	3.1	20	<0.5	5	<1	17	1	790	<5
600100	542775E	3	38	17	<1	1750	<1	3	<10	17.1	222	<0.5	12	<1	94	7	130	14
600100	542800E	<1	19	37	<1	4340	<1	6	<10	8.8	20	<0.5	15	<1	216	12	260	5
600100	542825E	6	30	20	<1	880	<1	3	<10	26.3	259	<0.5	9	<1	92	7	110	19
600100	542850E	2	20	13	<1	1970	<1	2	<10	9.2	75	<0.5	10	<1	69	5	350	7
600100	542875E	2	20	13	<1	1760	<1	2	<10	12	128	<0.5	8	<1	65	5	140	10
600100	542900E	2	31	12	<1	1770	<1	2	<10	23.9	218	<0.5	13	<1	76	5	590	13
600100	542925E	<1	25	12	<1	2960	<1	2	<10	8.4	34	<0.5	6	<1	80	5	600	6
600100	542950E	<1	41	16	<1	2230	<1	5	<10	8.3	60	<0.5	6	<1	172	12	460	8
600100	542975E	<1	27	7	<1	4020	<1	2	<10	8.2	50	<0.5	9	<1	69	5	3510	7
600100	543000E	<1	34	10	<1	2340	<1	2	<10	10.9	112	<0.5	8	<1	105	7	970	8
600100	543025E	<1	12	5	<1	3080	<1	<1	<10	5.5	79	<0.5	7	<1	29	2	250	5
600100	543050E	<1	14	3	<1	3430	<1	<1	<10	3.7	124	<0.5	7	<1	25	3	7550	9
600100	543075E	<1	27	13	<1	1840	<1	3	<10	10.4	193	<0.5	8	<1	106	7	400	9
600100	543100E	<1	39	8	<1	1770	<1	2	<10	10.5	135	<0.5	8	<1	103	9	3120	17
600100	543125E	4	33	20	<1	910	<1	4	<10	28.5	456	0.7	12	<1	117	7	240	26
600100	543150E	2	11	11	<1	2380	<1	2	<10	8.1	60	<0.5	5	<1	54	3	130	8
600100	543175E	1	<5	<1	<1	5960	<1	<1	<10	<0.5	<3	<0.5	3	<1	<5	<1	230	<5
600100	543200E	1	16	8	<1	1950	<1	2	<10	7.4	136	<0.5	4	<1	53	4	470	7
600100	543225E	3	30	10	<1	2500	<1	2	<10	11.9	158	<0.5	9	<1	66	5	450	11
600100	543250E	<1	39	36	<1	4040	<1	7	<10	8.7	27	<0.5	10	<1	216	12	60	<5

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
600100	543275E	12	37	<10	<0.1	1830	<1	650	136	29	43	<100	1	320	8	3.3	2.4	16	<1
600100	543300E	37	18	<10	0.4	900	<1	690	122	<5	20	<100	1	3550	8	4.2	2.3	6	<1
600100	543325E	7	93	20	<0.1	1430	<1	390	174	42	411	<100	3.3	130	8	4.1	2	54	4
600100	543350E	8	107	<10	<0.1	1610	<1	410	59	65	136	<100	2.3	310	12	6.4	2.3	39	2
600100	543375E	26	55	10	<0.1	2170	<1	480	36	35	45	<100	4.9	130	6	2.9	2	15	2
600100	543400E	20	114	10	0.5	1910	<1	460	40	210	347	<100	<0.5	1180	102	54.7	21.5	78	2
600100	543425E	3	120	<10	<0.1	630	<1	240	55	56	216	<100	4.3	390	38	22.6	7	90	4
600100	543450E	17	152	<10	<0.1	1990	<1	320	13	48	263	<100	11.7	390	22	11.2	4.9	57	4
600100	543475E	6	79	<10	<0.1	1710	<1	460	59	46	174	<100	20.9	190	13	6.5	3.3	35	2
600100	543500E	11	108	10	<0.1	1920	<1	430	21	96	47	<100	5.5	210	25	11.4	7.7	32	2
600100	543550E	10	151	50	<0.1	2000	<1	290	29	50	253	<100	1.1	340	18	8.9	3.9	108	6
600100	543575E	10	245	40	<0.1	1640	<1	70	33	49	288	<100	1	400	28	16.1	4.9	118	4
600100	543600E	16	162	30	<0.1	1560	<1	220	66	76	301	<100	3.7	380	33	16.8	7.2	116	4
600100	543625E	15	76	30	0.2	2160	<1	560	172	55	304	<100	1.5	850	18	10.7	5	38	1
600100	543650E	14	225	20	<0.1	1750	<1	160	16	74	256	<100	3	350	25	10.6	5.7	85	4
600100	543675E	7	69	<10	<0.1	1100	<1	430	61	58	131	<100	1.2	170	20	9.3	5.1	57	2
600100	543700E	30	36	<10	0.2	1890	<1	540	35	86	72	<100	1.7	660	31	14.3	11.6	24	<1
600100	543725E	6	86	<10	0.3	1390	<1	490	54	70	41	<100	1.5	540	40	21.5	10.4	47	1
600100	543750E	33	28	<10	0.5	1610	<1	480	15	139	29	<100	<0.5	1140	66	30.7	23.8	17	1
600100	543775E	40	33	<10	0.5	2300	<1	490	17	138	27	<100	<0.5	1540	58	27.6	20.5	17	1
600100	543800E	102	42	<10	1.3	1410	<1	420	13	118	104	<100	1.3	870	64	30.6	22.8	9	1
600100	543825E	18	114	10	<0.1	2430	<1	310	10	172	154	<100	3.2	350	36	17.2	9.6	56	2
600100	543850E	17	104	<10	<0.1	1260	<1	380	8	108	80	<100	1.6	230	24	10.9	6.8	39	2
600100	543875E	37	73	<10	0.3	2940	<1	540	17	161	30	<100	<0.5	780	66	30.7	20.1	15	2
600100	543925E	52	17	<10	0.3	1920	<1	610	17	236	115	<100	<0.5	1390	88	44.8	29.5	11	2
600100	543950E	15	102	<10	0.1	3100	<1	650	18	157	176	<100	0.9	400	55	28.2	13.9	48	2
600100	543975E	12	83	<10	<0.1	1910	<1	760	57	78	98	<100	0.7	370	37	19.5	9.7	33	2
600100	544000E	12	51	<10	0.2	3340	<1	860	20	116	43	<100	<0.5	370	42	19.8	12.5	23	1
600100	544025E	16	38	<10	0.4	3470	<1	1030	23	44	25	<100	<0.5	960	32	15.2	9.4	14	1
600100	544050E	<1	70	<10	<0.1	2110	<1	730	211	23	529	<100	<0.5	570	18	17.6	3.3	103	3
600100	544075E	25	32	<10	0.1	2570	<1	860	36	28	19	<100	<0.5	430	29	14.1	9.3	18	<1
600100	544100E	27	39	<10	0.5	2760	<1	820	66	65	30	<100	<0.5	1080	41	20.5	11.8	15	1
600100	544125E	7	95	<10	<0.1	2570	<1	510	52	124	65	<100	1.8	230	34	17.2	8.1	37	2
600100	544150E	9	154	10	<0.1	1810	<1	390	44	76	262	<100	9.5	450	29	16.2	5.8	71	3
600100	544175E	5	204	10	<0.1	2080	<1	250	32	52	203	<100	1.9	260	16	8.7	3.1	118	7
600100	544200E	34	57	<10	0.3	3970	<1	900	9	72	29	<100	<0.5	300	24	11.4	6.8	26	2
600100	544225E	5	253	60	0.4	2390	<1	50	7	664	72	<100	5.1	460	130	49.1	36.1	67	7
600100	544250E	44	43	<10	0.4	1970	<1	780	22	21	9	<100	0.6	1240	23	11.1	7.4	15	1
600100	544275E	27	74	<10	0.5	960	<1	610	56	27	36	<100	<0.5	1430	31	19.1	6.5	14	<1
600100	544350E	19	88	20	<0.1	2820	<1	470	51	66	132	<100	3.5	170	13	6.8	3.6	31	3
600100	544375E	10	45	<10	0.1	890	<1	680	171	8	12	<100	<0.5	350	8	4.7	1.7	8	<1
600100	544400E	2	>300	10	<0.1	3310	<1	60	28	<5	246	<100	<0.5	160	6	6	<0.5	96	3
600100	544425E	29	130	<10	0.2	3450	<1	520	21	206	128	<100	0.8	620	111	58.7	21.1	82	2
600100	544450E	8	>300	10	<0.1	1480	<1	120	24	22	174	<100	0.8	210	23	14.1	2.3	81	4
600100	544475E	3	289	30	<0.1	3020	<1	80	35	65	69	<100	2.8	220	15	7.1	3.1	66	8
600100	544500E	29	71	10	0.2	1450	<1	680	19	179	12	<100	1.6	230	32	14.9	8.1	5	1
600100	544525E	4	299	50	<0.1	2120	<1	30	19	81	66	<100	2.8	210	24	11	3.7	90	11
600100	544550E	13	208	20	<0.1	2890	<1	360	11	59	80	<100	1.3	190	11	5.3	2.6	101	7
600100	544575E	13	90	<10	<0.1	1970	<1	720	18	121	25	<100	1.4	240	23	10.1	6.6	38	2
600100	544600E	11	139	<10	<0.1	1890	<1	440	19	203	70	<100	2.5	330	63	28.6	13.1	58	4
600100	544625E	10	86	<10	<0.1	1240	<1	670	212	97	14	<100	10.4	340	44	24.4	9.8	11	1

Llewellyn Property
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		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
600100	543275E	10	<1	<0.5	24.9	10	32	73	2690	<5	<0.5	22	331	0.3	30	<1	4	<1	74
600100	543300E	10	<1	<0.5	17	6	36	125	3250	<5	<0.5	16	1070	0.6	<10	<1	3	<1	37
600100	543325E	9	<1	<0.5	53.2	15	<5	49	6530	<5	<0.5	24	323	0.6	160	<1	5	<1	85
600100	543350E	12	<1	<0.5	52.1	16	<5	31	4310	<5	<0.5	27	391	0.3	190	<1	6	<1	121
600100	543375E	8	<1	<0.5	202	10	<5	50	5510	<5	<0.5	21	201	0.7	50	<1	4	<1	283
600100	543400E	97	<1	<0.5	25.5	98	5	70	2210	<5	<0.5	188	700	0.6	230	<1	37	<1	32
600100	543425E	31	<1	<0.5	40.9	18	9	47	3970	<5	<0.5	47	243	0.7	210	<1	8	<1	171
600100	543450E	21	<1	<0.5	76.9	17	<5	87	1690	<5	<0.5	39	370	0.8	180	<1	7	<1	158
600100	543475E	14	<1	<0.5	129	15	<5	49	4670	<5	<0.5	31	258	0.8	110	<1	6	<1	198
600100	543500E	30	<1	<0.5	309	38	<5	50	3670	<5	<0.5	72	257	0.9	100	<1	14	<1	230
600100	543550E	16	<1	<0.5	191	20	<5	59	2520	<5	0.7	36	272	2.1	350	<1	7	<1	78
600100	543575E	21	<1	<0.5	18.2	16	<5	27	570	<5	<0.5	46	275	2.6	260	<1	8	<1	51
600100	543600E	30	<1	<0.5	23.3	28	<5	37	4080	<5	<0.5	65	286	2.6	210	<1	12	<1	99
600100	543625E	21	<1	<0.5	88.9	20	<5	98	14500	<5	<0.5	42	913	0.4	50	<1	8	<1	59
600100	543650E	24	<1	<0.5	92	29	<5	37	1060	<5	<0.5	56	392	2.2	230	<1	10	<1	33
600100	543675E	21	<1	<0.5	17.4	19	16	38	3210	<5	<0.5	40	214	0.6	200	<1	8	<1	33
600100	543700E	42	<1	<0.5	17.8	35	31	29	4240	<5	<0.5	85	1180	0.3	80	<1	15	<1	21
600100	543725E	42	<1	<0.5	21.1	29	20	48	2820	<5	<0.5	72	841	0.4	110	<1	13	<1	31
600100	543750E	93	<1	<0.5	41.4	89	9	115	1140	<5	<0.5	216	394	0.4	30	<1	38	<1	10
600100	543775E	81	<1	<0.5	55.3	67	<5	72	890	<5	<0.5	182	685	0.3	30	<1	31	<1	11
600100	543800E	87	<1	<0.5	102	52	<5	53	8080	<5	<0.5	155	853	0.4	40	<1	25	<1	53
600100	543825E	43	<1	<0.5	145	54	<5	68	3240	<5	<0.5	100	385	0.7	240	<1	20	<1	57
600100	543850E	31	<1	<0.5	129	41	<5	75	1590	<5	<0.5	70	282	0.7	190	<1	14	<1	108
600100	543875E	90	<1	<0.5	114	75	<5	100	1240	<5	<0.5	188	813	0.2	110	<1	34	<1	41
600100	543925E	114	<1	<0.5	30.3	72	24	209	6140	5	0.7	211	450	0.1	70	<1	32	<1	10
600100	543950E	59	<1	<0.5	19.5	55	<5	65	4890	<5	<0.5	119	358	0.5	160	<1	22	<1	65
600100	543975E	42	<1	<0.5	19.8	36	<5	41	3240	<5	<0.5	80	287	0.4	110	<1	15	<1	50
600100	544000E	53	<1	<0.5	10.4	54	<5	66	1900	<5	<0.5	111	181	0.2	70	<1	20	<1	46
600100	544025E	38	<1	<0.5	6.1	22	<5	90	1690	<5	<0.5	62	272	0.2	30	<1	10	<1	12
600100	544050E	14	<1	<0.5	41.8	12	6	49	12200	<5	<0.5	26	103	1.4	130	<1	5	<1	21
600100	544075E	38	<1	<0.5	5.4	29	<5	70	2170	<5	<0.5	67	188	0.2	40	<1	11	<1	17
600100	544100E	53	<1	<0.5	10.9	38	<5	50	3250	<5	<0.5	94	394	0.3	60	<1	16	<1	28
600100	544125E	37	<1	<0.5	17.6	46	<5	42	6070	<5	<0.5	86	102	0.7	130	<1	17	<1	127
600100	544150E	26	<1	<0.5	134	30	<5	48	8000	<5	<0.5	54	170	1.2	230	<1	11	<1	206
600100	544175E	13	<1	<0.5	38.4	18	<5	34	8320	<5	0.9	32	95	3.1	250	<1	6	<1	81
600100	544200E	29	<1	<0.5	11.8	32	<5	89	1230	<5	<0.5	65	123	0.3	40	<1	12	<1	28
600100	544225E	140	<1	<0.5	25.1	287	<5	10	1770	<5	1.6	428	76	2.1	340	<1	91	<1	200
600100	544250E	30	<1	<0.5	3.9	20	<5	64	860	<5	<0.5	57	346	0.1	20	<1	9	<1	32
600100	544275E	29	<1	<0.5	3.2	21	<5	48	3360	<5	<0.5	49	600	0.1	70	<1	9	<1	18
600100	544350E	15	<1	<0.5	118	20	<5	48	6320	<5	<0.5	38	224	0.6	140	<1	7	<1	246
600100	544375E	8	<1	<0.5	4	5	<5	49	1660	<5	<0.5	11	346	<0.1	50	<1	2	<1	8
600100	544400E	1	<1	<0.5	17	2	8	15	630	<5	<0.5	3	76	0.5	190	<1	<1	<1	42
600100	544425E	100	<1	<0.5	5	115	<5	47	640	<5	<0.5	211	302	0.3	610	<1	41	<1	27
600100	544450E	11	<1	<0.5	16.1	7	<5	21	910	<5	<0.5	21	78	1	310	<1	4	<1	43
600100	544475E	12	<1	<0.5	21	24	<5	18	2520	<5	1.7	44	105	1.3	480	<1	9	<1	185
600100	544500E	40	<1	<0.5	6.6	50	<5	43	2890	<5	<0.5	100	285	0.2	60	<1	19	<1	24
600100	544525E	18	<1	<0.5	19.4	27	<5	5	2060	<5	2	50	60	1.6	570	<1	10	<1	118
600100	544550E	11	<1	<0.5	38.4	26	<5	60	5800	<5	1.1	34	127	3.1	310	<1	7	<1	116
600100	544575E	29	<1	<0.5	8.7	59	<5	116	730	<5	<0.5	82	99	0.4	130	<1	17	<1	76
600100	544600E	62	<1	<0.5	28.1	80	<5	32	1920	<5	<0.5	139	157	0.7	370	<1	27	<1	142
600100	544625E	45	<1	<0.5	36.3	43	<5	38	2770	<5	<0.5	85	185	0.4	80	<1	16	<1	179

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		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
600100	543275E	<1	10	8	<1	6050	<1	1	<10	6.4	14	<0.5	2	<1	40	3	230	<5
600100	543300E	1	22	6	<1	6320	<1	1	<10	1.7	4	<0.5	2	<1	66	3	500	<5
600100	543325E	1	20	7	<1	3290	<1	1	<10	7.2	81	<0.5	6	<1	45	3	2740	10
600100	543350E	<1	27	8	<1	2820	<1	2	<10	10.1	25	<0.5	8	<1	68	5	2990	7
600100	543375E	<1	6	6	<1	3100	<1	1	<10	4	29	<0.5	6	<1	29	2	570	<5
600100	543400E	3	130	63	<1	3440	<1	16	<10	23.1	7	<0.5	22	<1	584	38	1350	13
600100	543425E	<1	75	19	<1	1280	<1	6	<10	8.7	15	<0.5	5	<1	229	17	680	7
600100	543450E	<1	41	14	<1	1740	<1	4	<10	7.2	18	<0.5	6	<1	112	8	440	<5
600100	543475E	<1	30	10	<1	2600	<1	2	<10	4.4	18	<0.5	8	<1	70	5	1330	<5
600100	543500E	1	26	22	<1	1910	<1	4	<10	4.8	40	<0.5	10	<1	137	8	490	<5
600100	543550E	5	35	11	<1	2010	<1	3	<10	11.6	213	<0.5	7	<1	90	6	590	13
600100	543575E	5	36	14	<1	910	<1	4	<10	12.1	149	<0.5	6	<1	137	10	700	15
600100	543600E	3	58	22	<1	1590	<1	5	<10	15.6	80	<0.5	11	<1	164	12	1070	10
600100	543625E	2	63	14	<1	7160	<1	3	<10	6.3	11	<0.5	17	<1	122	9	280	6
600100	543650E	5	30	17	<1	1000	<1	4	<10	15.4	112	<0.5	6	<1	118	7	170	12
600100	543675E	<1	32	15	<1	1720	<1	3	<10	5.4	9	<0.5	3	<1	92	6	590	<5
600100	543700E	1	30	30	<1	2640	<1	6	<10	6.4	<3	<0.5	9	<1	189	11	120	<5
600100	543725E	<1	50	26	<1	2150	<1	6	<10	5.1	7	<0.5	6	<1	256	16	480	<5
600100	543750E	3	36	68	<1	3090	<1	12	<10	13.8	5	<0.5	9	<1	410	22	280	5
600100	543775E	<1	48	61	<1	2870	<1	11	<10	17.8	<3	<0.5	7	<1	338	20	80	7
600100	543800E	1	26	59	<1	1950	<1	12	<10	13.9	<3	<0.5	10	<1	352	22	60	6
600100	543825E	2	40	31	<1	1660	<1	6	<10	14	44	<0.5	9	<1	188	11	220	10
600100	543850E	<1	25	22	<1	1830	<1	5	<10	7.9	15	<0.5	8	<1	118	7	130	<5
600100	543875E	1	18	64	<1	3270	<1	12	<10	6.2	<3	<0.5	15	<1	404	20	200	<5
600100	543925E	2	41	78	<1	5560	<1	15	<10	13.4	5	<0.5	14	<1	558	31	160	<5
600100	543950E	3	71	42	<1	7190	<1	9	<10	10.8	10	<0.5	18	<1	313	20	240	9
600100	543975E	1	47	28	<1	7830	<1	6	<10	6.4	10	<0.5	15	<1	236	13	340	5
600100	544000E	2	29	37	<1	9700	<1	7	<10	6.5	4	<0.5	17	<1	260	13	230	5
600100	544025E	2	27	25	<1	11000	<1	6	<10	6	4	<0.5	36	<1	183	11	30	6
600100	544050E	<1	65	9	<1	8320	<1	3	<10	10.4	20	<0.5	36	<1	138	20	3680	9
600100	544075E	1	13	25	<1	9190	<1	5	<10	2.2	<3	<0.5	18	<1	180	9	160	<5
600100	544100E	2	36	35	<1	9240	<1	7	<10	7.1	4	<0.5	27	<1	267	15	150	7
600100	544125E	2	30	26	<1	5190	<1	6	<10	7.4	16	<0.5	14	<1	199	12	190	6
600100	544150E	1	47	17	<1	3680	<1	4	<10	12.1	52	<0.5	14	<1	178	11	720	10
600100	544175E	3	35	9	<1	2550	<1	2	<10	13.9	204	<0.5	10	<1	91	6	800	21
600100	544200E	1	19	21	<1	8540	<1	4	<10	5	4	<0.5	11	<1	147	8	140	<5
600100	544225E	25	155	112	<1	400	<1	22	<10	46.2	617	1.4	16	1	598	27	100	53
600100	544250E	3	15	21	<1	8250	<1	4	<10	3.3	5	<0.5	24	<1	142	8	<20	<5
600100	544275E	5	28	18	<1	5470	<1	5	<10	1	<3	<0.5	59	<1	256	15	50	<5
600100	544350E	<1	20	11	<1	4980	<1	2	<10	6.5	55	<0.5	7	<1	70	5	330	7
600100	544375E	3	<5	4	<1	8000	<1	1	<10	<0.5	<3	<0.5	73	<1	61	3	160	<5
600100	544400E	3	22	<1	<1	1020	<1	<1	<10	6.7	81	<0.5	5	<1	33	6	560	7
600100	544425E	3	120	66	<1	7220	<1	17	<10	13.2	14	<0.5	56	<1	774	39	70	6
600100	544450E	1	25	7	<1	2030	<1	3	<10	9.1	89	<0.5	7	<1	121	9	620	10
600100	544475E	10	28	11	<1	1120	<1	2	<10	17.1	626	<0.5	8	<1	74	5	870	35
600100	544500E	2	10	30	<1	6590	<1	5	<10	2.1	4	<0.5	18	<1	190	10	70	<5
600100	544525E	6	30	13	<1	500	<1	4	<10	27.1	622	<0.5	14	<1	110	8	670	30
600100	544550E	4	22	9	<1	3100	<1	2	<10	8.1	178	<0.5	6	<1	65	3	630	11
600100	544575E	2	20	22	<1	9320	<1	4	<10	6.7	16	<0.5	10	<1	133	6	270	5
600100	544600E	2	33	41	<1	5820	<1	10	<10	9.9	27	<0.5	15	<1	344	16	230	6
600100	544625E	<1	34	28	<1	8970	<1	7	<10	3.8	11	<0.5	34	<1	296	16	1330	<5

Llewellyn Property
MMI Data

		Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
600100	544650E	2	72	<10	<0.1	2110	<1	480	187	27	155	<100	3	140	9	7.6	1.6	38	2
600100	544675E	19	90	20	<0.1	1860	<1	440	64	247	39	<100	4.1	250	30	13.1	8.2	33	3
600100	544700E	14	79	20	0.1	3540	<1	540	56	83	83	<100	5.7	550	14	6.7	4.1	47	3
600100	544725E	3	258	20	<0.1	5200	<1	110	356	45	457	<100	1.4	420	58	33.1	5.8	124	5
600100	544750E	7	94	20	<0.1	3150	<1	400	78	103	87	<100	2.4	120	20	9.5	5.1	43	4

Llewellyn Property
MMI Data

		Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb
600100	544650E	7	<1	<0.5	78.5	12	<5	28	13400	<5	<0.5	16	38	0.9	140	<1	3	<1	109
600100	544675E	36	<1	<0.5	57.1	55	<5	44	2910	<5	<0.5	108	193	0.8	170	<1	21	<1	116
600100	544700E	18	<1	<0.5	60.7	30	<5	29	11500	<5	0.6	51	230	0.8	110	<1	10	<1	217
600100	544725E	29	<1	<0.5	19.9	12	<5	28	9390	<5	<0.5	42	118	2.2	410	<1	7	<1	71
600100	544750E	22	<1	<0.5	132	40	<5	44	6560	<5	<0.5	58	74	1.6	280	<1	12	<1	167

Llewellyn Property
MMI Data

		Sb	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
600100	544650E	2	29	4	<1	7090	<1	1	<10	5.9	28	<0.5	14	<1	61	6	1180	9
600100	544675E	1	29	29	<1	4670	<1	5	<10	12.5	17	<0.5	16	<1	133	9	200	13
600100	544700E	3	18	14	<1	5120	<1	2	<10	6.4	23	<0.5	15	<1	77	5	200	9
600100	544725E	1	59	16	<1	1590	<1	7	<10	17.6	87	<0.5	9	<1	330	21	2530	10
600100	544750E	<1	23	17	<1	2960	<1	3	<10	8.7	86	<0.5	11	<1	95	6	1610	12

MOMENTUM MINERALS INC.

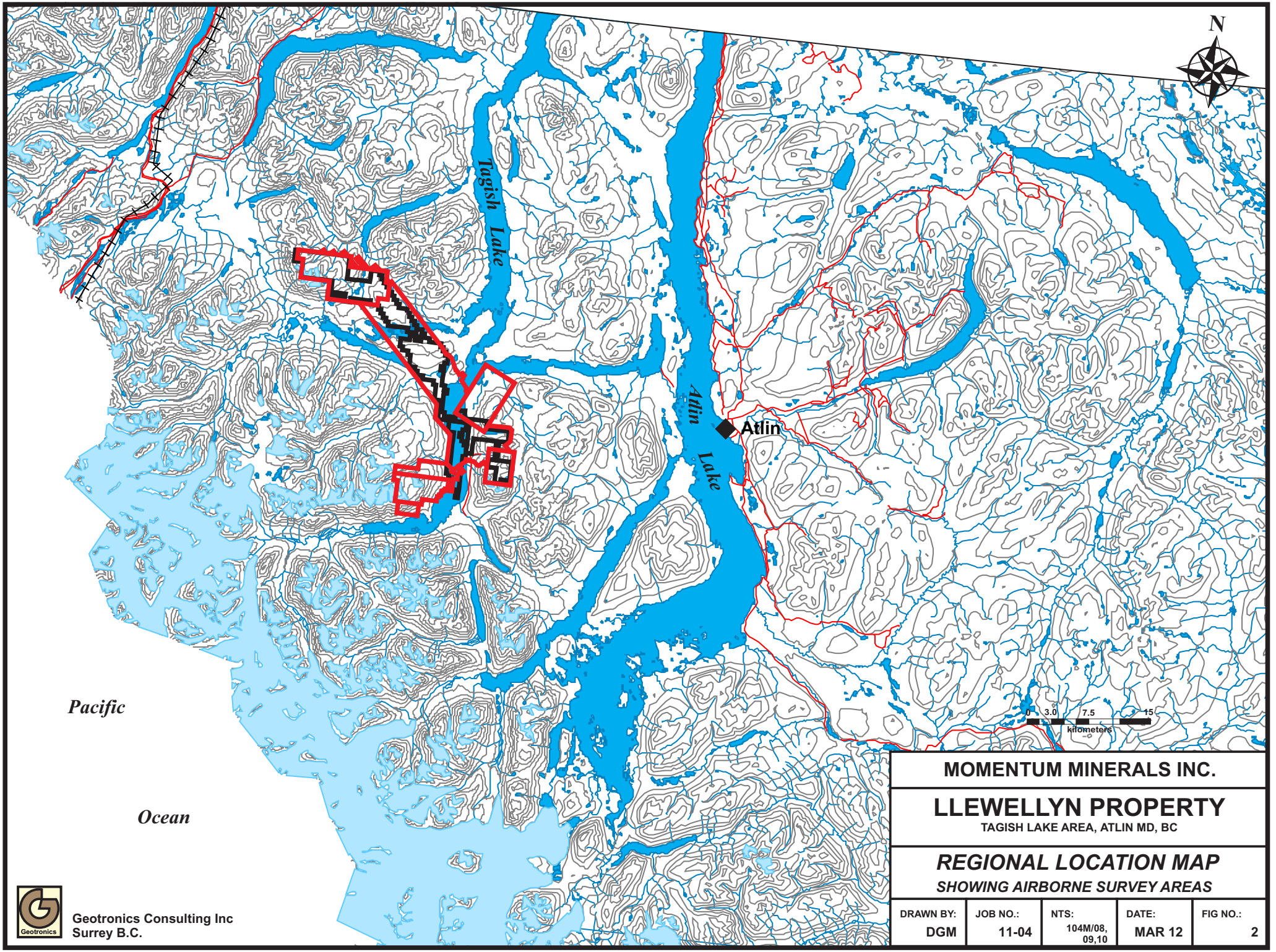
LLEWELLYN PROPERTY

TAGISH LAKE AREA, ATLIN MD, BC

BC LOCATION MAP

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
DGM	11-04	104M/08, 09,10	MAR 12	1

Geotronics Consulting Inc
Surrey B.C.



MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY

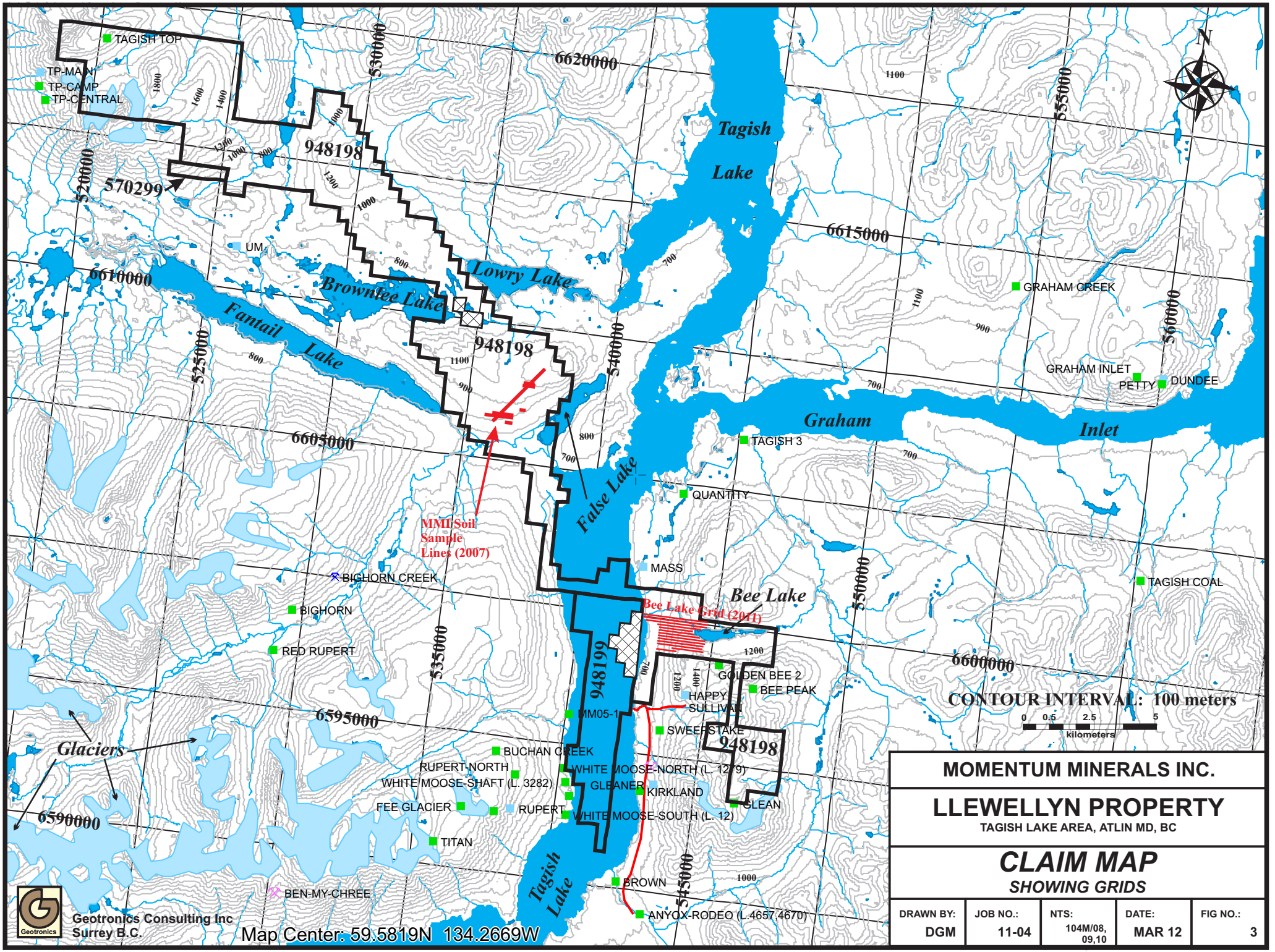
TAGISH LAKE AREA, ATLIN MD, BC

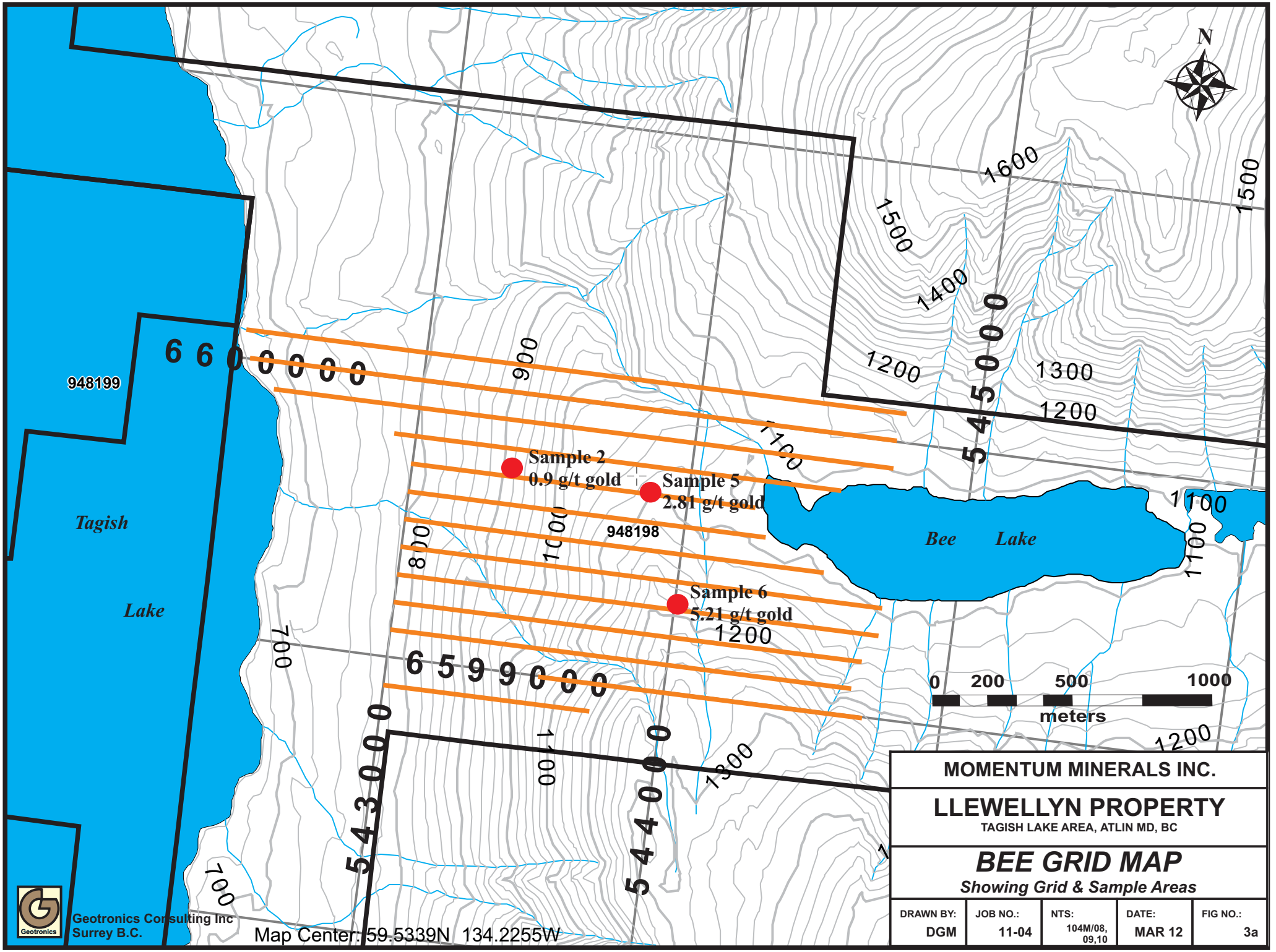
REGIONAL LOCATION MAP

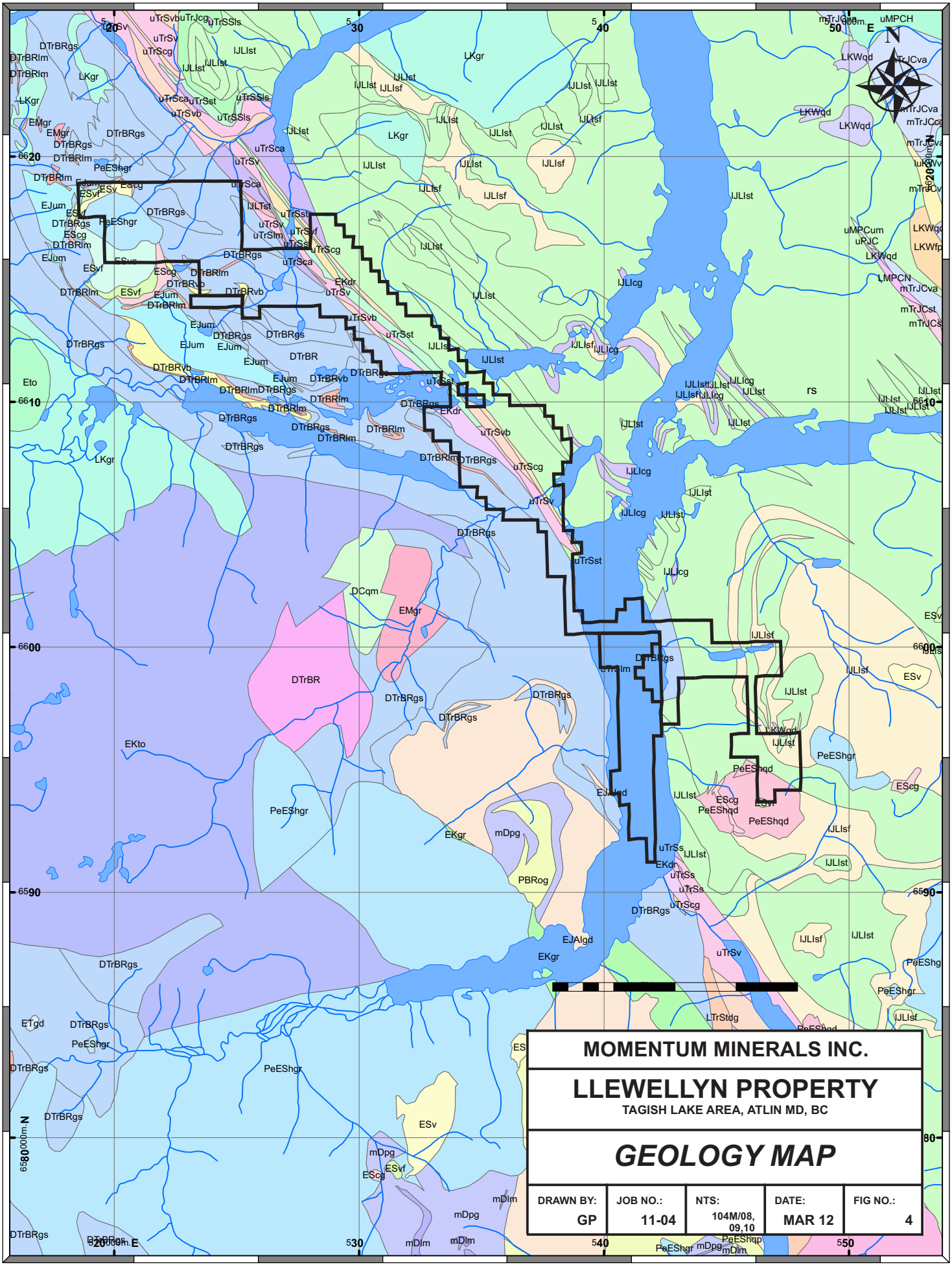
SHOWING AIRBORNE SURVEY AREAS

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
DGM	11-04	104M/08, 09,10	MAR 12	2

Geotronics Consulting Inc
Surrey B.C.


TAGISH TOP
TP-MAIN
TP-CAMP
TP-CENTRAL
UM
570299
948198
948199
Tagish Lake
Lowry Lake
Brownlee Lake
Fantail Lake
False Lake
Graham Inlet
Bee Lake
MMII Soil Sample Lines (2007)
Bee Lake Grid (2011)
GRAHAM CREEK
GRAHAM INLET
PETTY
DUNDEE
TAGISH 3
QUANTITY
MASS
TAGISH COAL
BIGHORN CREEK
BIGHORN
RED RUPERT
GOLDEN BEE 2
BEE PEAK
HAPPY SULLIVAN
MM05-1
SWEEPSTAKE
BUCHAN CREEK
RUPERT-NORTH
WHITE MOOSE-NORTH (L. 1279)
WHITE MOOSE-SHAFT (L. 3282)
GLEANER
KIRKLAND
GLEAN
FEE GLACIER
RUPERT
WHITE MOOSE-SOUTH (L. 12)
TITAN
BEN-MY-CHREE
BROWN
ANYOX-RODEO (L.4657,4670)
Glaciers
6620000
6615000
6610000
6605000
6600000
6595000
6590000
520000
525000
530000
535000
540000
545000
550000
555000
560000
CONTOUR INTERVAL: 100 meters
0 0.5 2.5 5
kilometers
N
Geotronics Consulting Inc
Surrey B.C.
Map Center: 59.5819N 134.2669W
MOMENTUM MINERALS INC.
LLEWELLYN PROPERTY
TAGISH LAKE AREA, ATLIN MD, BC
CLAIM MAP
SHOWING GRIDS
DRAWN BY: DGM
JOB NO.: 11-04
NTS: 104M/08, 09,10
DATE: MAR 12
FIG NO.: 3


N
948199
948198
Tagish
Lake
Bee Lake
Sample 2
0.9 g/t gold
Sample 5
2.81 g/t gold
Sample 6
5.21 g/t gold
6600000
6599000
5430000
5440000
5450000
900
1000
1100
1200
1300
1400
1500
1600
700
800
0 200 500 1000
meters
Geotronics Consulting Inc
Surrey B.C.
Map Center: 59.5339N 134.2255W
MOMENTUM MINERALS INC.
LLEWELLYN PROPERTY
TAGISH LAKE AREA, ATLIN MD, BC
BEE GRID MAP
Showing Grid & Sample Areas
DRAWN BY: DGM
JOB NO.: 11-04
NTS: 104M/08, 09,10
DATE: MAR 12
FIG NO.: 3a


MOMENTUM MINERALS INC.
LLEWELLYN PROPERTY
TAGISH LAKE AREA, ATLIN MD, BC
GEOLOGY MAP
DRAWN BY: GP
JOB NO.: 11-04
NTS: 104M/08, 09,10
DATE: MAR 12
FIG NO.: 4

Legend

Unit

- DCqm - Paleozoic - Unnamed quartz monzonitic intrusive rocks
- DTrBR - Paleozoic to Mesozoic - Boundary Ranges Metamorphic Suite metamorphic rocks, undivided
- DTrBRgs - Paleozoic to Mesozoic - Boundary Ranges Metamorphic Suite greenstone, greenschist metamorphic rocks
- DTrBRlm - Paleozoic to Mesozoic - Boundary Ranges Metamorphic Suite limestone, marble, calcareous sedimentary rocks
- DTrBRvb - Paleozoic to Mesozoic - Boundary Ranges Metamorphic Suite basaltic volcanic rocks
- EJAlgd - Mesozoic - Aishihik Plutonic Suite granodioritic intrusive rocks
- EJum - Mesozoic - Unnamed ultramafic rocks
- EKdr - Mesozoic - Unnamed dioritic intrusive rocks
- EKgr - Mesozoic - Unnamed granite, alkali feldspar granite intrusive rocks
- EKto - Mesozoic - Unnamed tonalite intrusive rocks
- EMgr - Paleozoic - Unnamed granite, alkali feldspar granite intrusive rocks
- EScg - Cenozoic - Sloko Group conglomerate, coarse clastic sedimentary rocks
- ESv - Cenozoic - Sloko Group undivided volcanic rocks
- ESvb - Cenozoic - Sloko Group basaltic volcanic rocks
- ESvc - Cenozoic - Sloko Group volcaniclastic rocks
- ESvf - Cenozoic - Sloko Group rhyolite, felsic volcanic rocks
- ETgd - Cenozoic - Unnamed granodioritic intrusive rocks
- Eto - Cenozoic - Unnamed tonalite intrusive rocks
- LKWfp - Mesozoic - Windy Table Complex feldspar porphyritic intrusive rocks
- LKWqd - Mesozoic - Windy Table Complex quartz dioritic intrusive rocks
- LKgd - Mesozoic - Unnamed granodioritic intrusive rocks
- LKgr - Mesozoic - Unnamed granite, alkali feldspar granite intrusive rocks
- LMPCN - Paleozoic - Cache Creek Complex - Nakina Formation gabbroic to dioritic intrusive rocks
- LTrStdg - Mesozoic - Stikine Plutonic Suite monzodioritic to gabbroic intrusive rocks
- PBRog - Paleozoic - Boundary Ranges Metamorphic Suite orthogneiss metamorphic rocks
- PeEShgr - Cenozoic - Sloko-Hyder Plutonic Suite granite, alkali feldspar granite intrusive rocks
- PeEShqd - Cenozoic - Sloko-Hyder Plutonic Suite quartz dioritic intrusive rocks
- PeEShqp - Cenozoic - Sloko-Hyder Plutonic Suite high level quartz phyric, felsitic intrusive rocks
- lJLlcg - Mesozoic - Laberge Group - Inklin Formation conglomerate, coarse clastic sedimentary rocks
- lJLlsf - Mesozoic - Laberge Group - Inklin Formation mudstone, siltstone, shale fine clastic sedimentary rocks
- lJLlst - Mesozoic - Laberge Group - Inklin Formation argillite, greywacke, wacke, conglomerate turbidites
- lJLTst - Mesozoic - Laberge Group - Takwahoni Formation argillite, greywacke, wacke, conglomerate turbidites
- luKWvf - Mesozoic - Windy Table Complex rhyolite, felsic volcanic rocks
- mDlm - Paleozoic - Unnamed limestone, marble, calcareous sedimentary rocks
- mDpg - Paleozoic - Unnamed paragneiss metamorphic rocks
- mTrJCcg - Mesozoic - Cache Creek Complex conglomerate, coarse clastic sedimentary rocks
- mTrJCst - Mesozoic - Cache Creek Complex argillite, greywacke, wacke, conglomerate turbidites
- mTrJCva - Mesozoic - Cache Creek Complex andesitic volcanic rocks
- mTrJCvf - Mesozoic - Cache Creek Complex rhyolite, felsic volcanic rocks
- uMPCH - Paleozoic - Cache Creek Complex - Horsefeed Formation limestone, marble, calcareous sedimentary rocks
- uMPCum - Paleozoic - Cache Creek Complex ultramafic rocks
- uPJC - Paleozoic to Mesozoic - Cache Creek Complex mudstone/laminite fine clastic sedimentary rocks
- uTrJcg - Mesozoic - Unnamed conglomerate, coarse clastic sedimentary rocks
- uTrSSls - Mesozoic - Stuhini Group - Sinwa Formation limestone bioherm/reef
- uTrSca - Mesozoic - Stuhini Group calc-alkaline volcanic rocks
- uTrScg - Mesozoic - Stuhini Group conglomerate, coarse clastic sedimentary rocks
- uTrSlm - Mesozoic - Stuhini Group limestone, marble, calcareous sedimentary rocks
- uTrSs - Mesozoic - Stuhini Group undivided sedimentary rocks
- uTrSst - Mesozoic - Stuhini Group argillite, greywacke, wacke, conglomerate turbidites
- uTrSv - Mesozoic - Stuhini Group undivided volcanic rocks
- uTrSvb - Mesozoic - Stuhini Group basaltic volcanic rocks
- uTrSvf - Mesozoic - Stuhini Group rhyolite, felsic volcanic rocks

- Atlin_Claims
- Fault
- Normal Fault
- Thrust

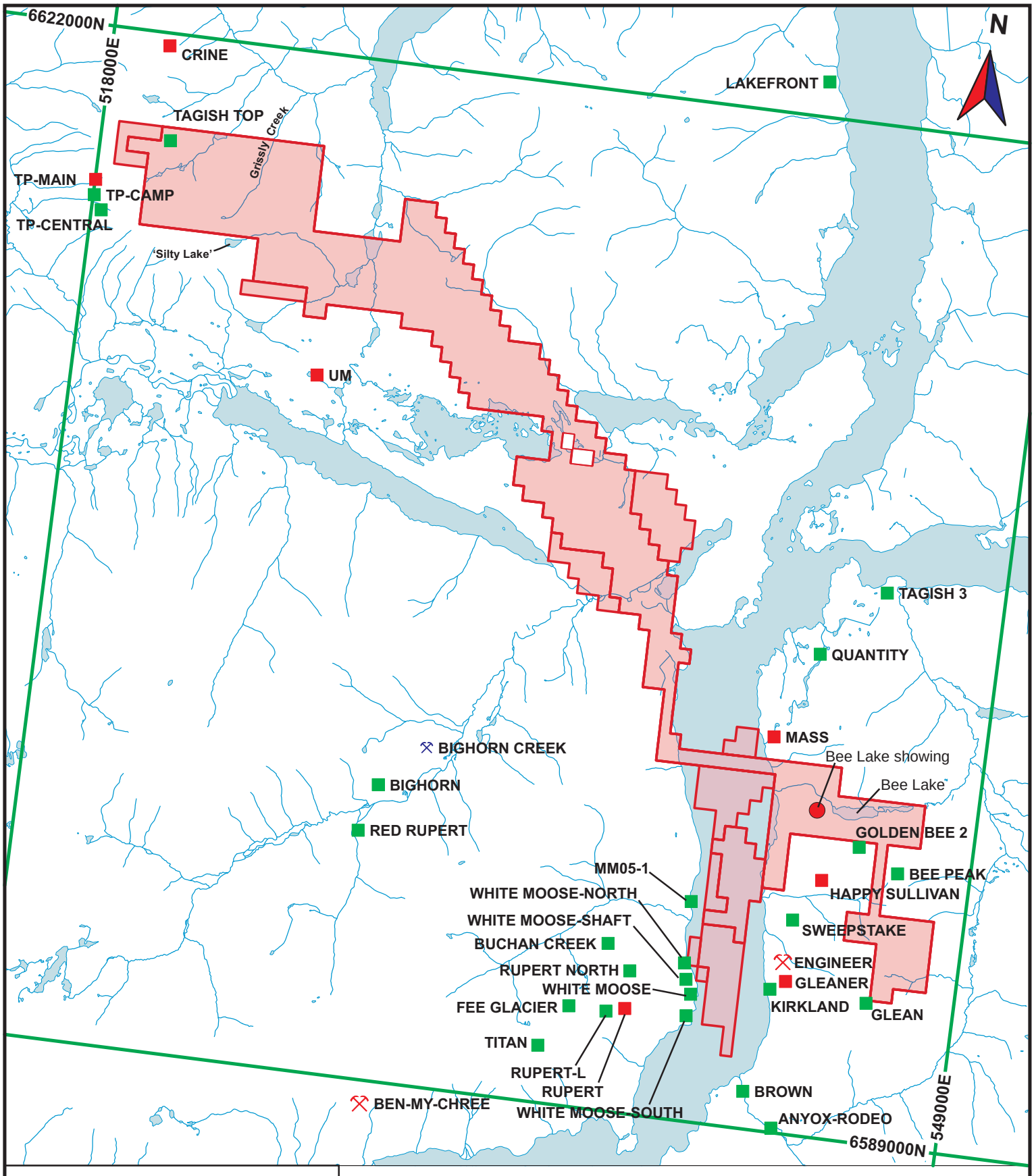
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY

TAGISH LAKE AREA, ATLIN MD, BC

GEOLOGY LEGEND

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
DGM	11-04	104M/08, 09,10	MAR 12	4a



Llewellyn Property

Mineral Occurrences* Map

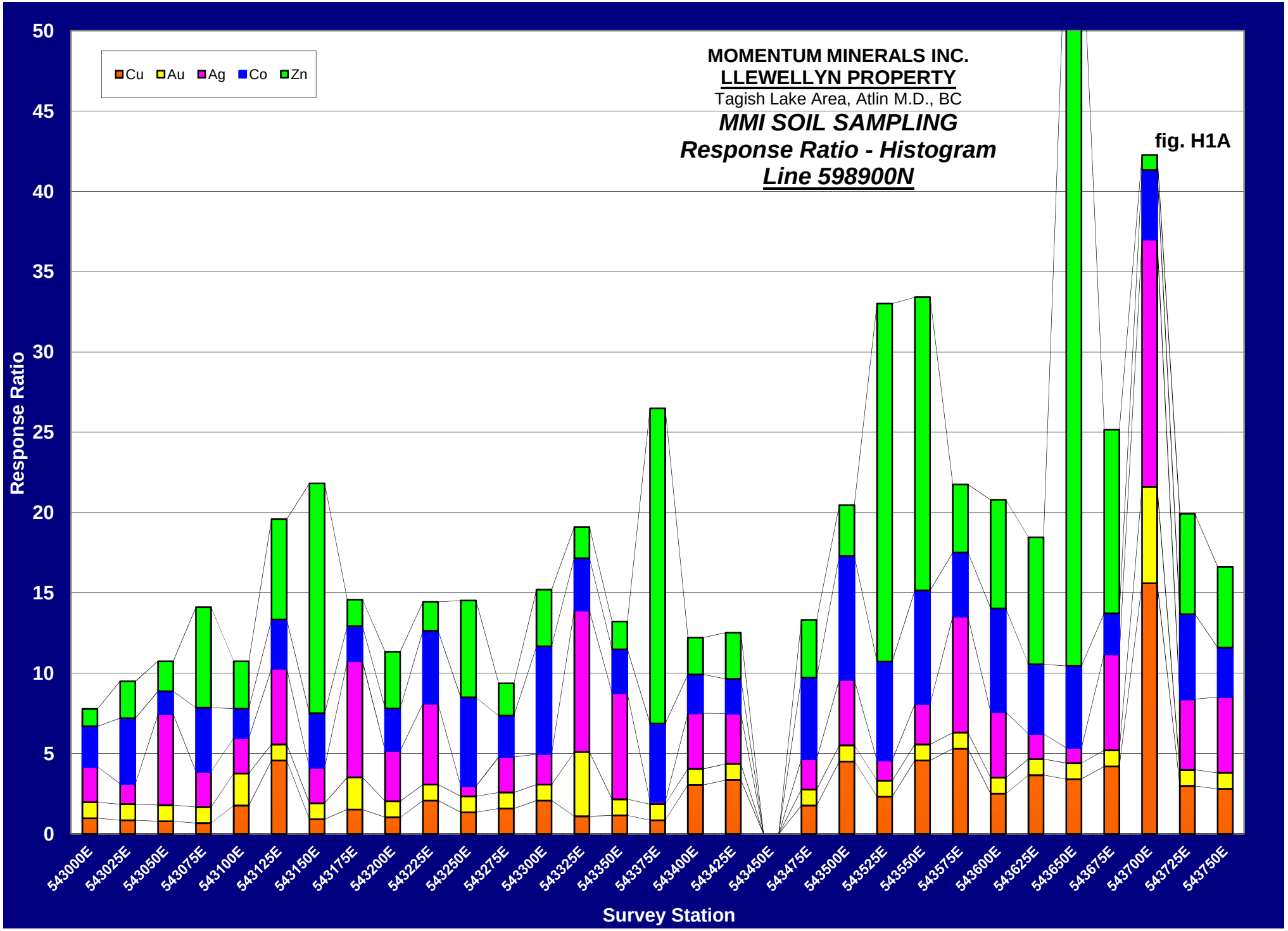
Figure 5
April, 2011

- Past Producer
- Developed Prospect
- Prospect
- Showing

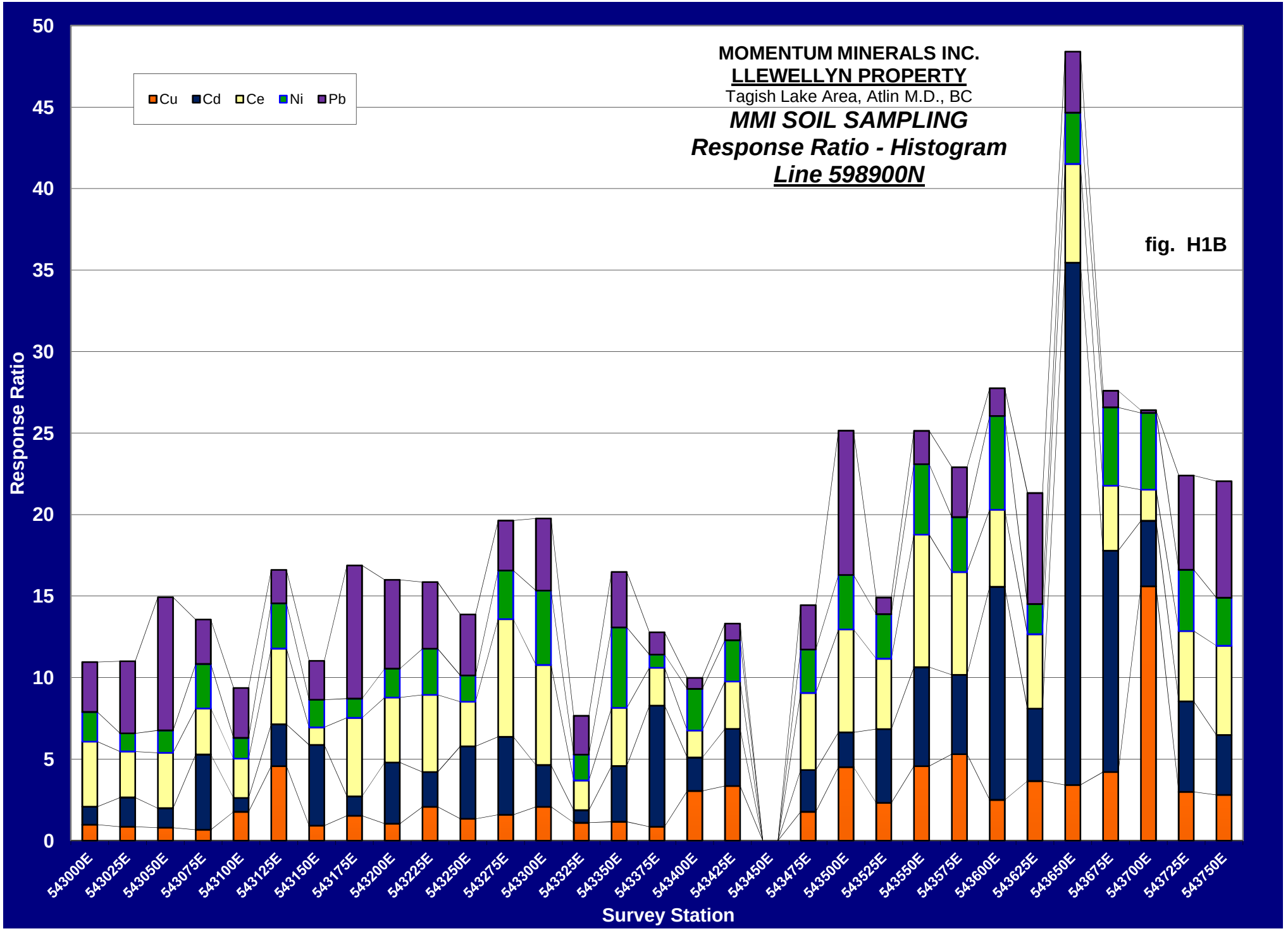
Llewellyn Property Claim Boundary

2 0 2 4 6
KILOMETERS

*Refer to Table 2 for description of plotted mineral occurrences. Data from MINFILE and MapPlace (Ministry of Energy and Mines).



Data Reduced by : **GEOTRONICS CONSULTING INC**



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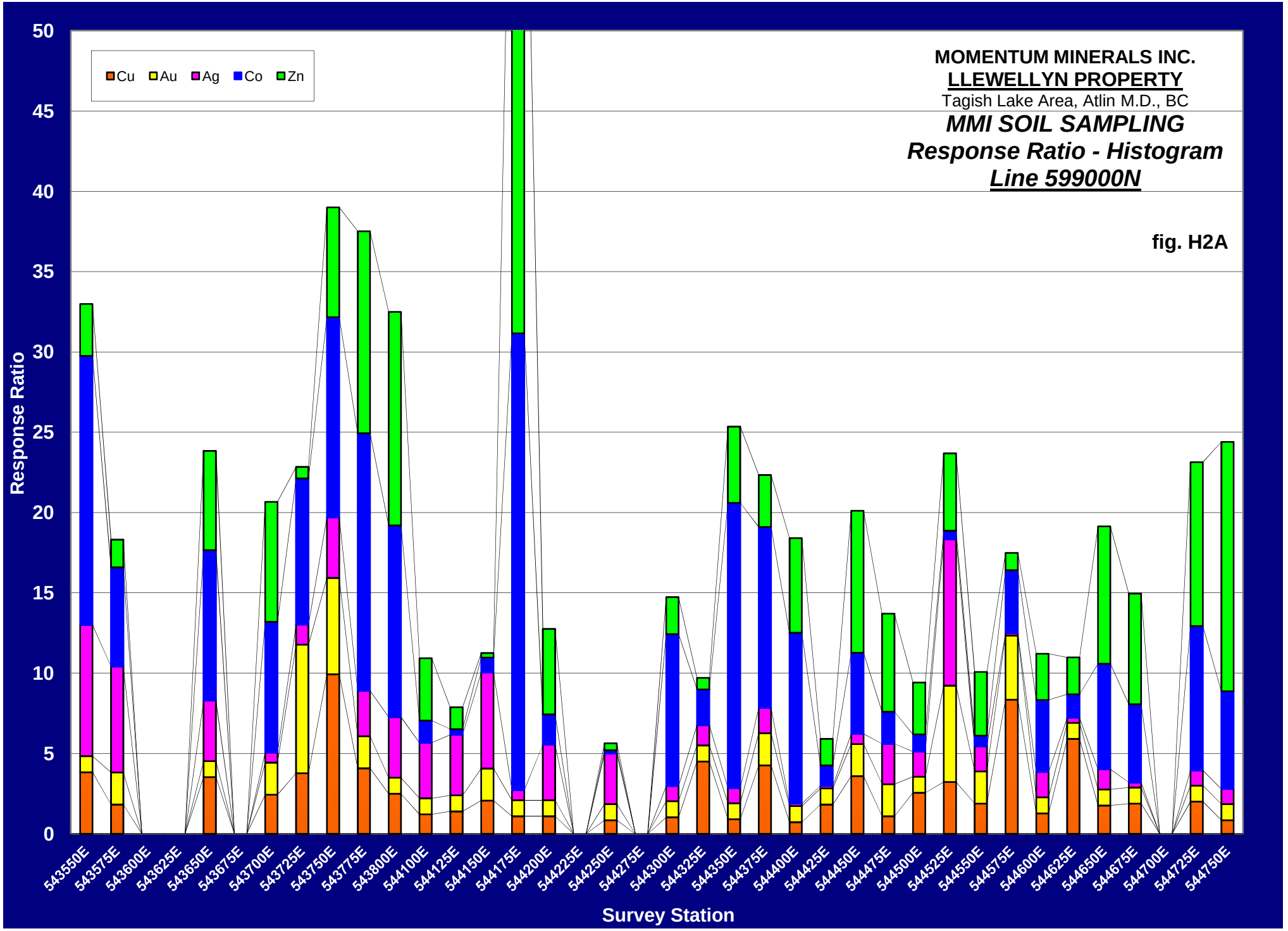

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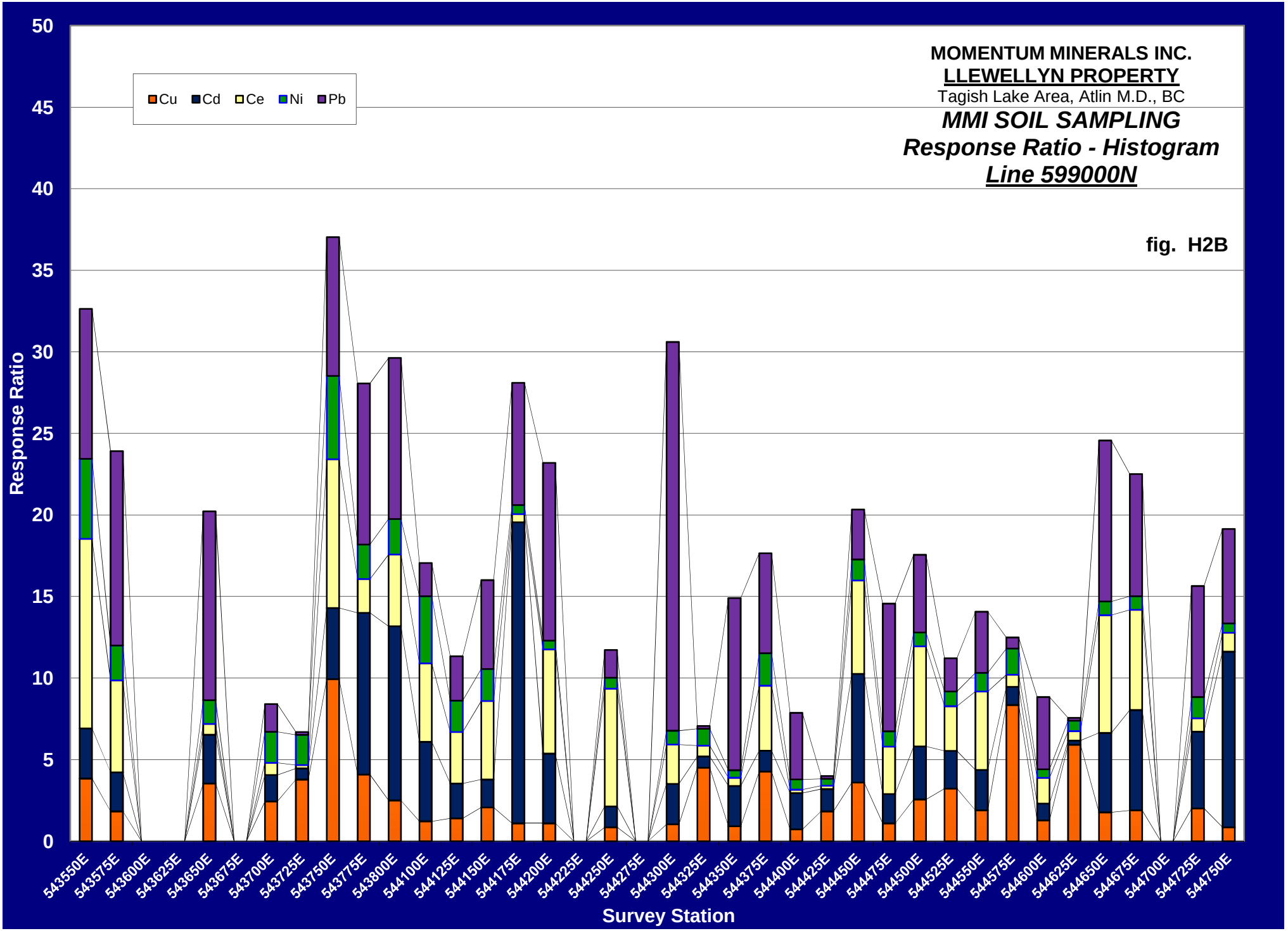

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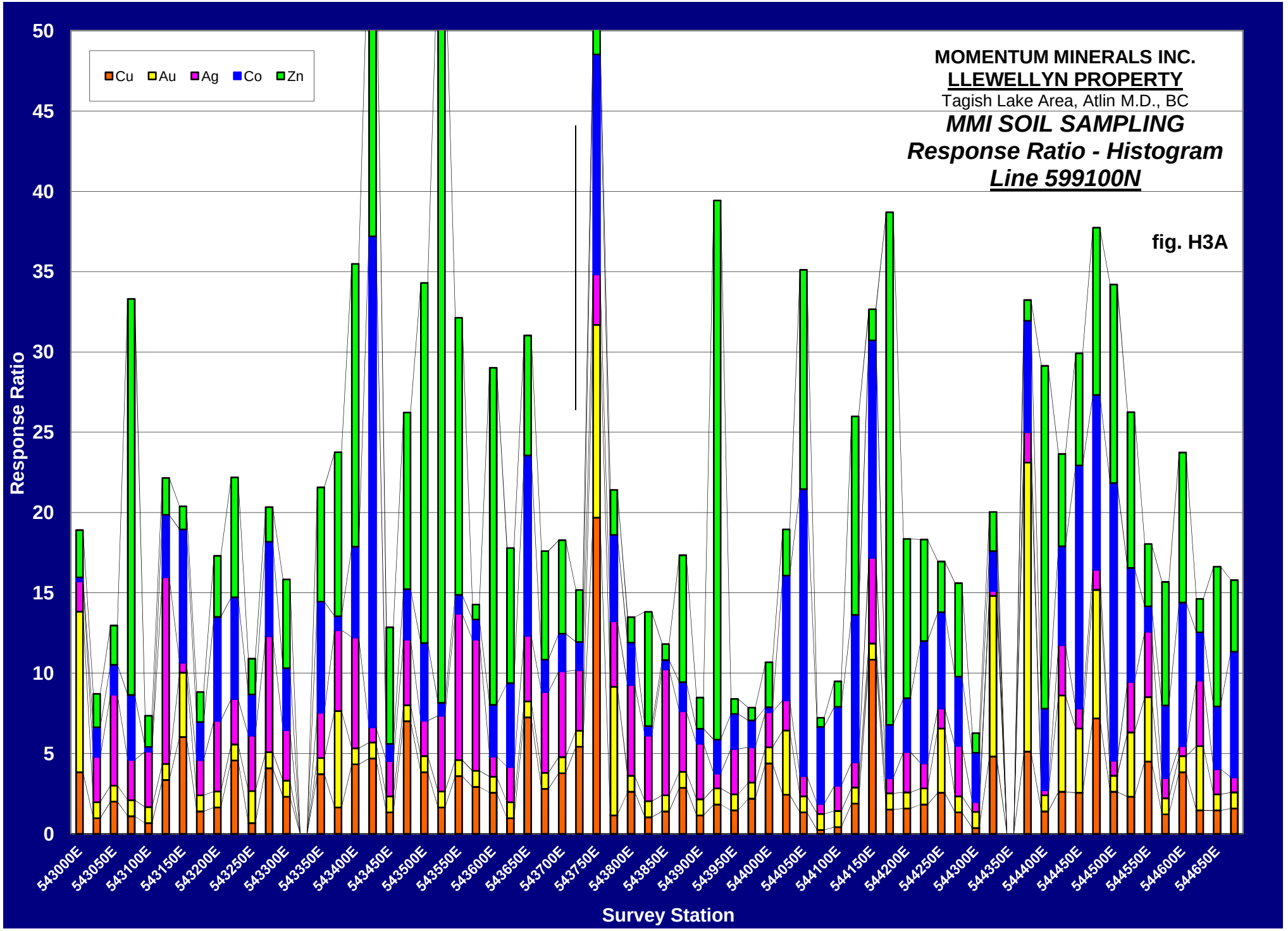

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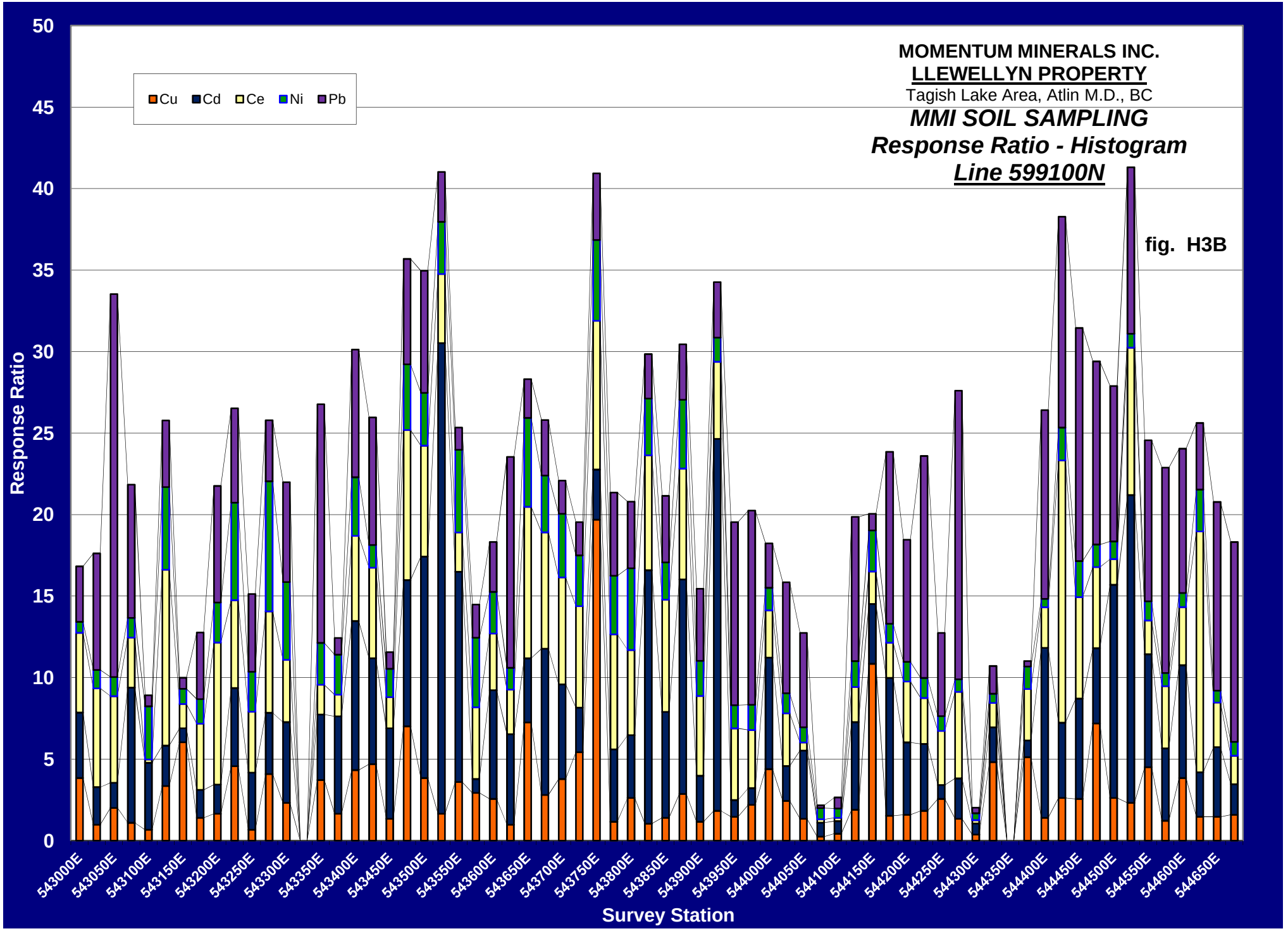

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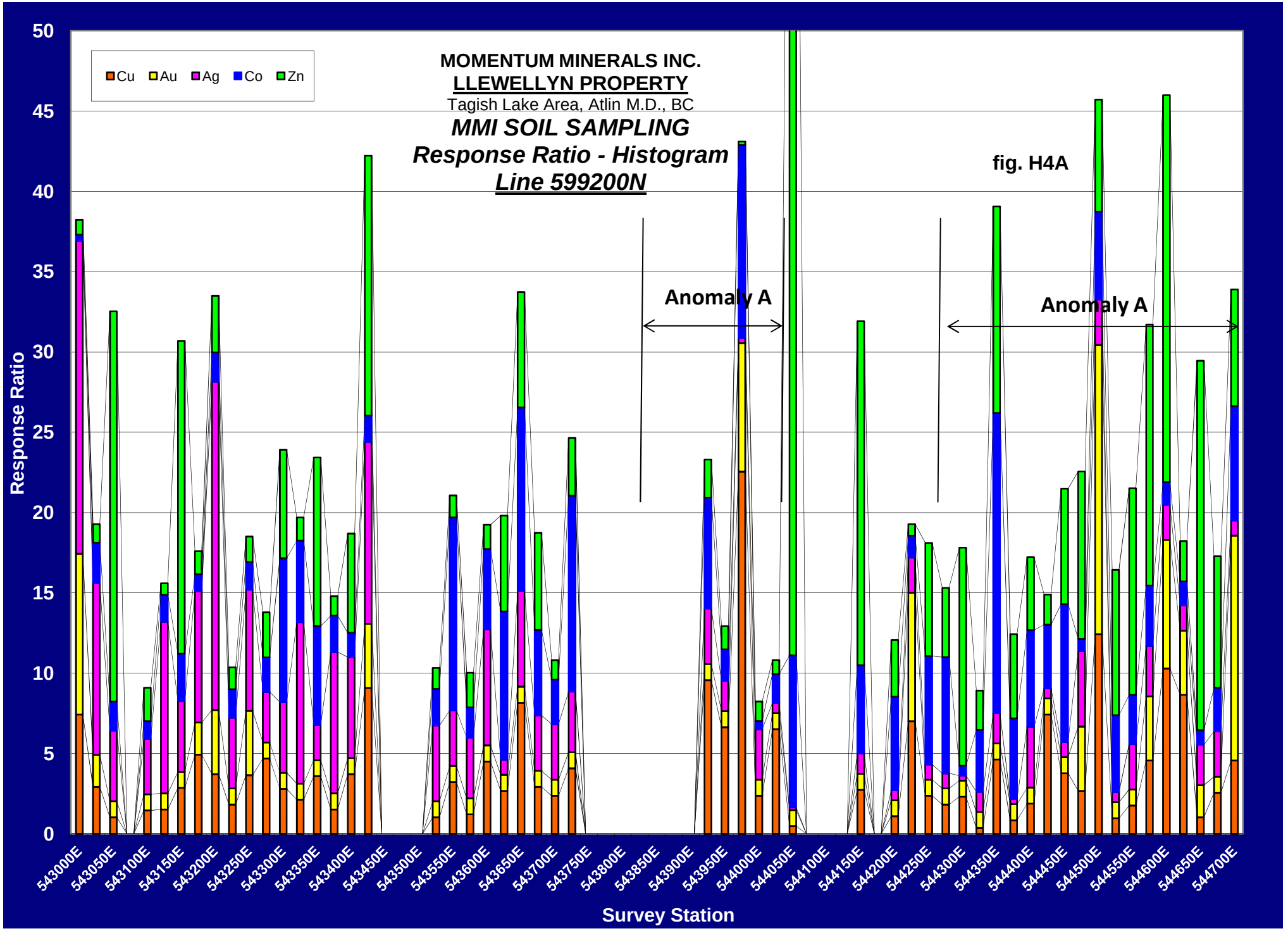

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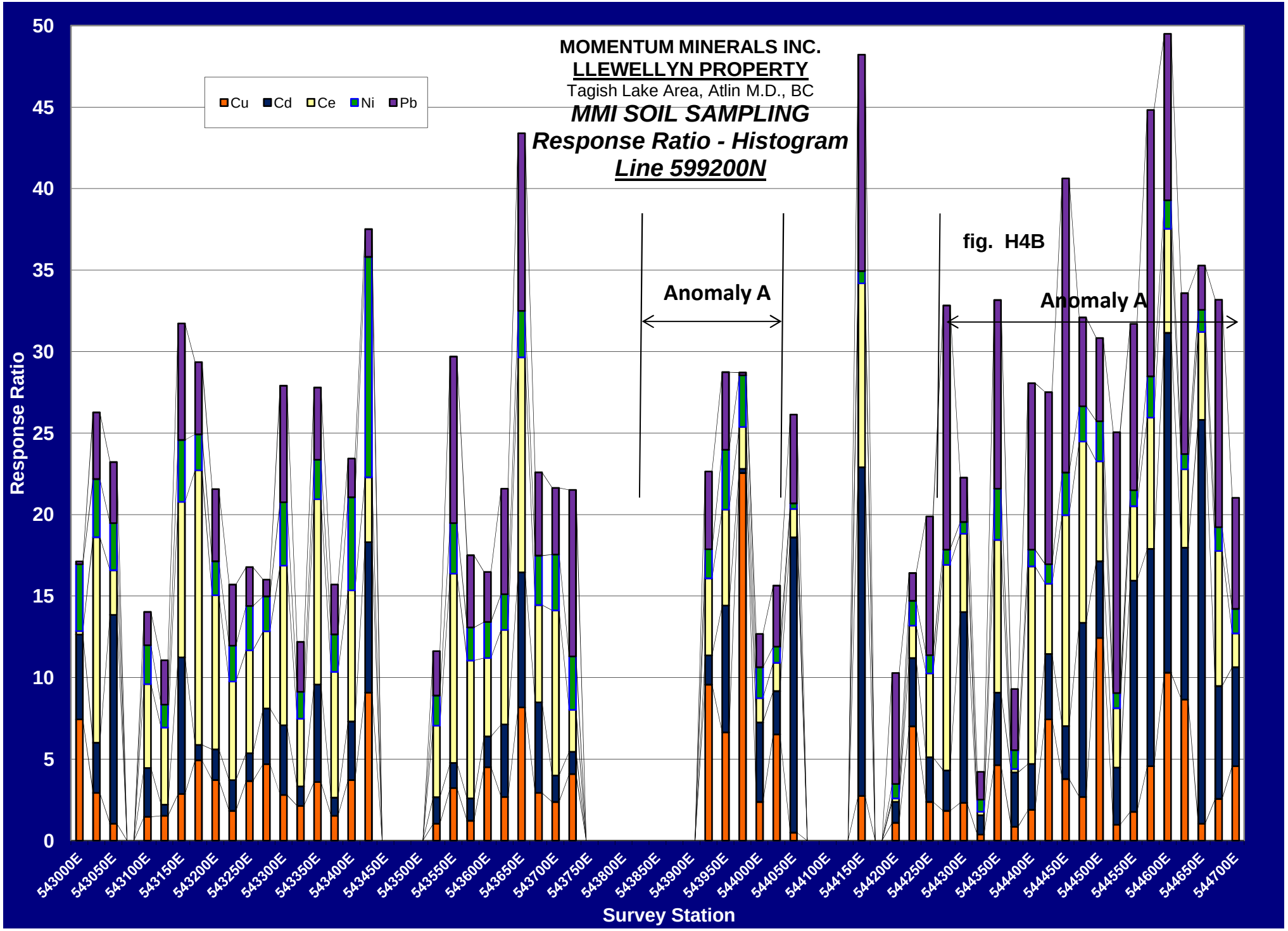

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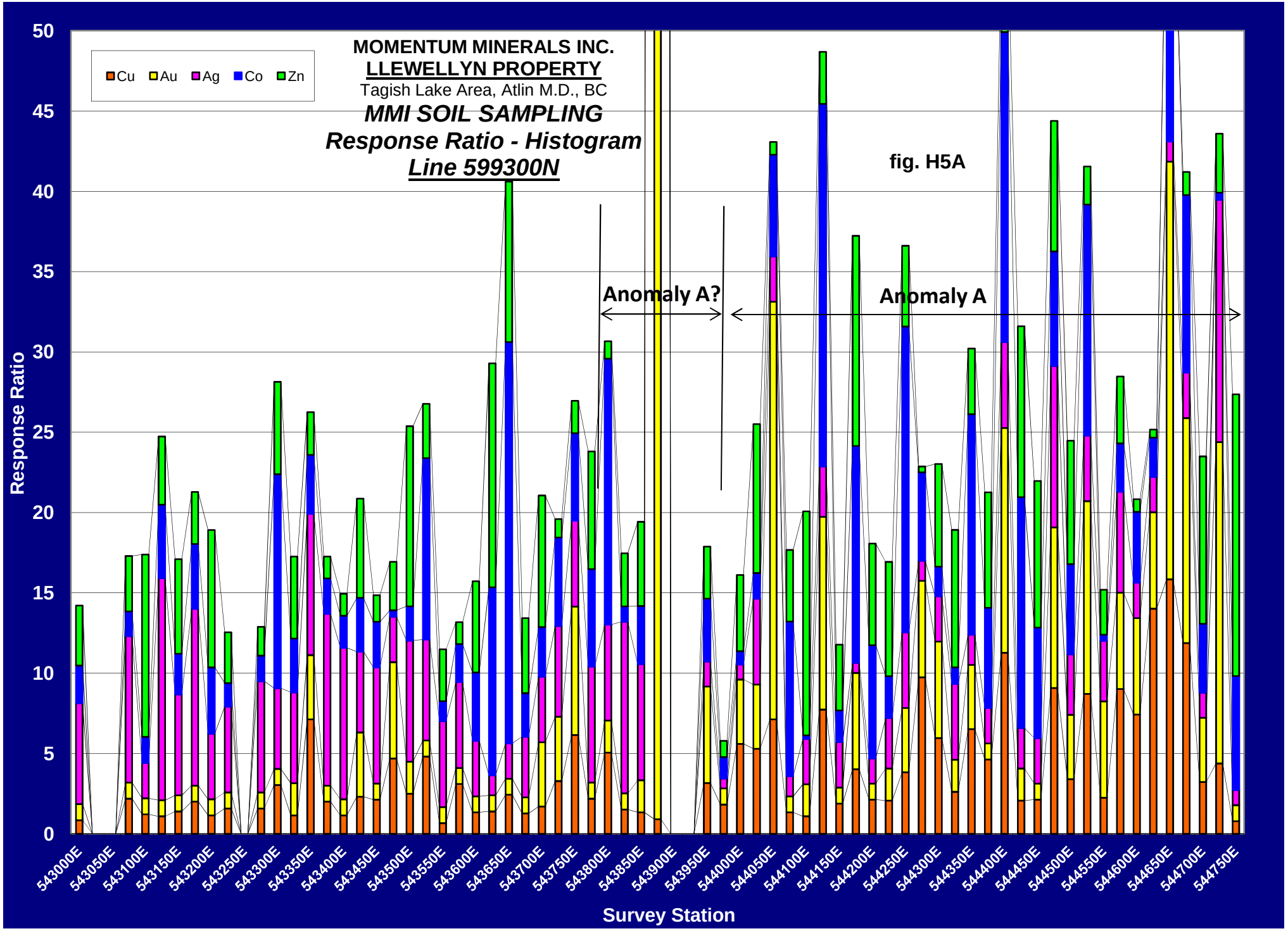

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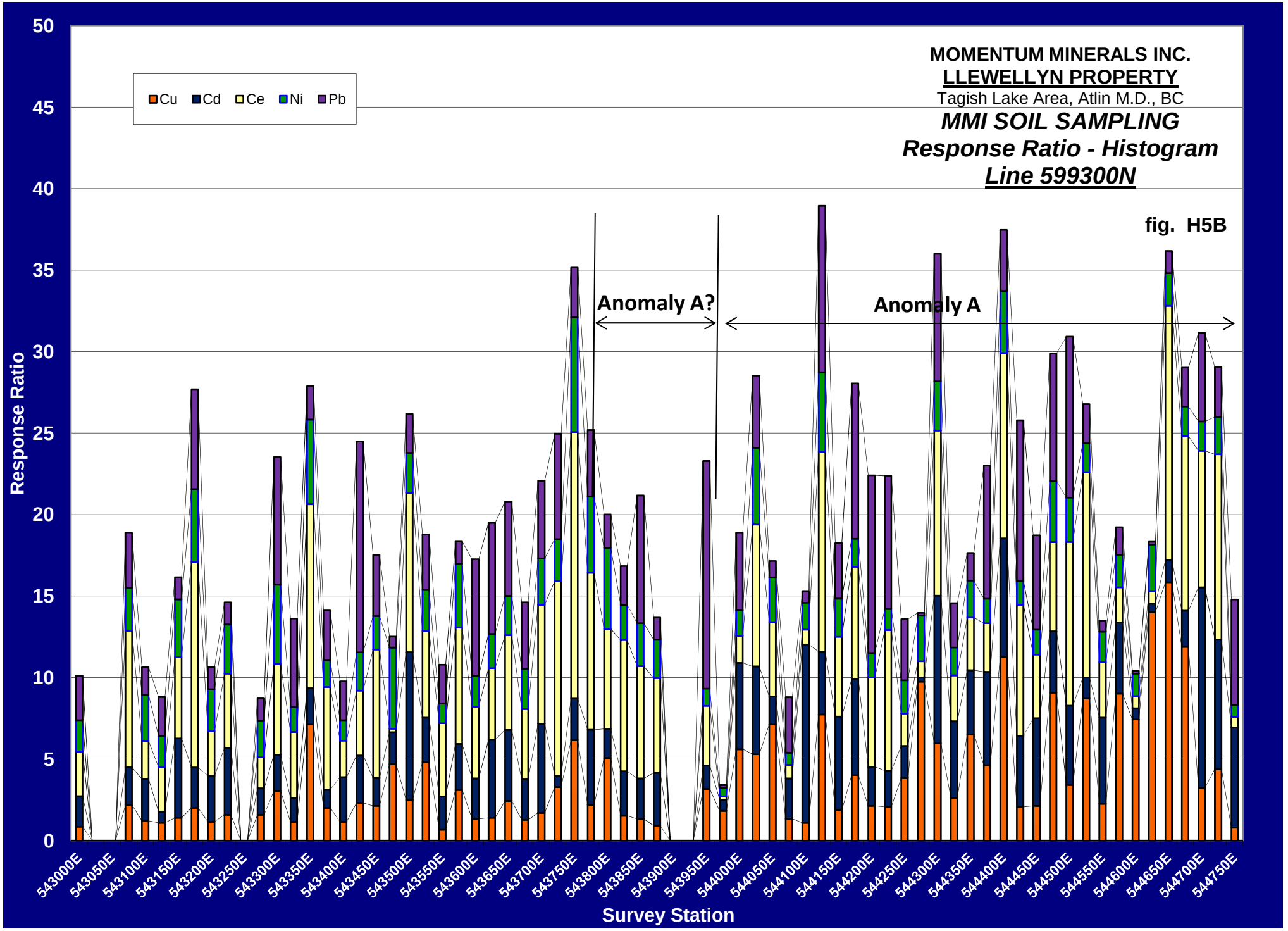

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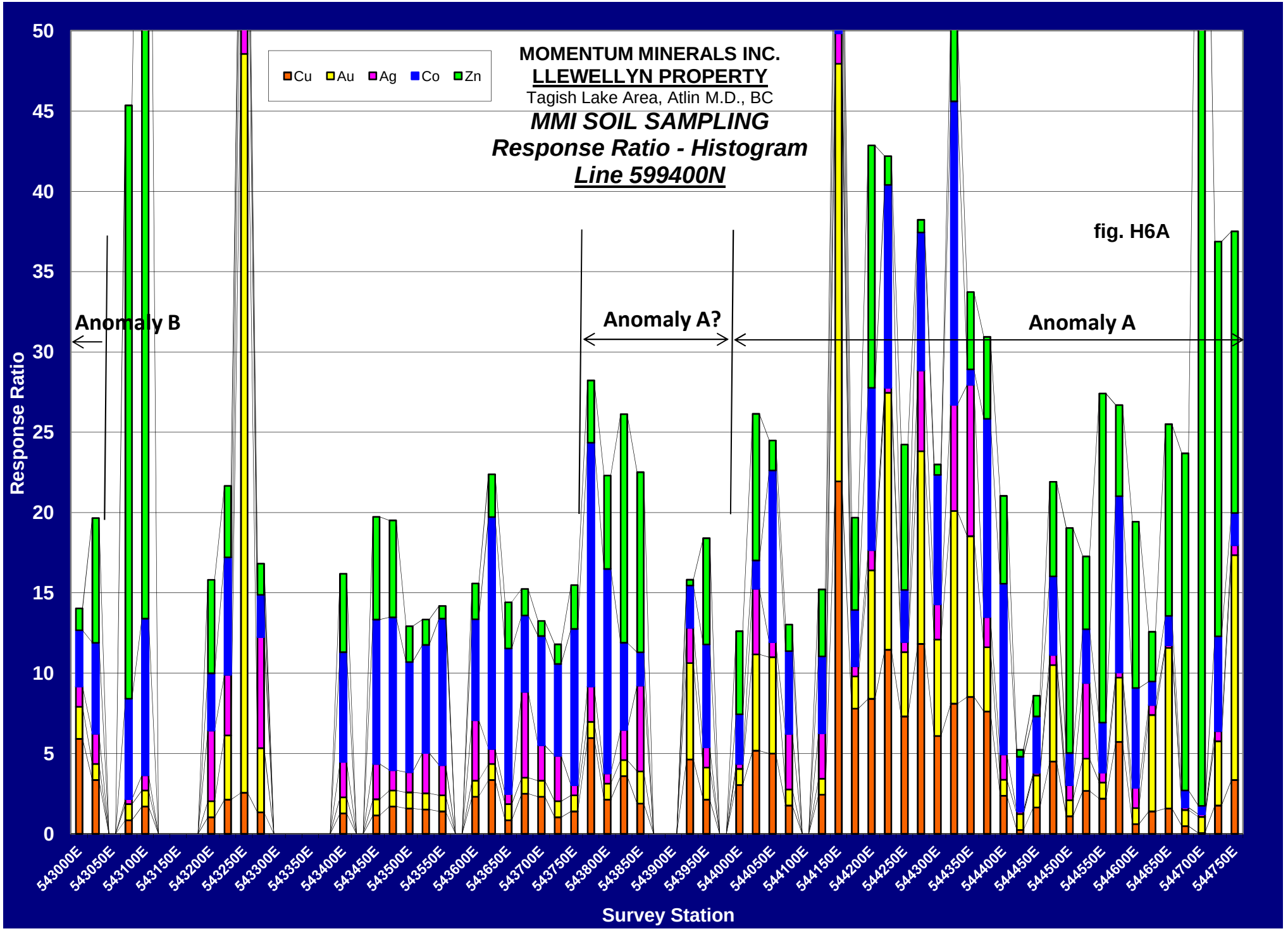

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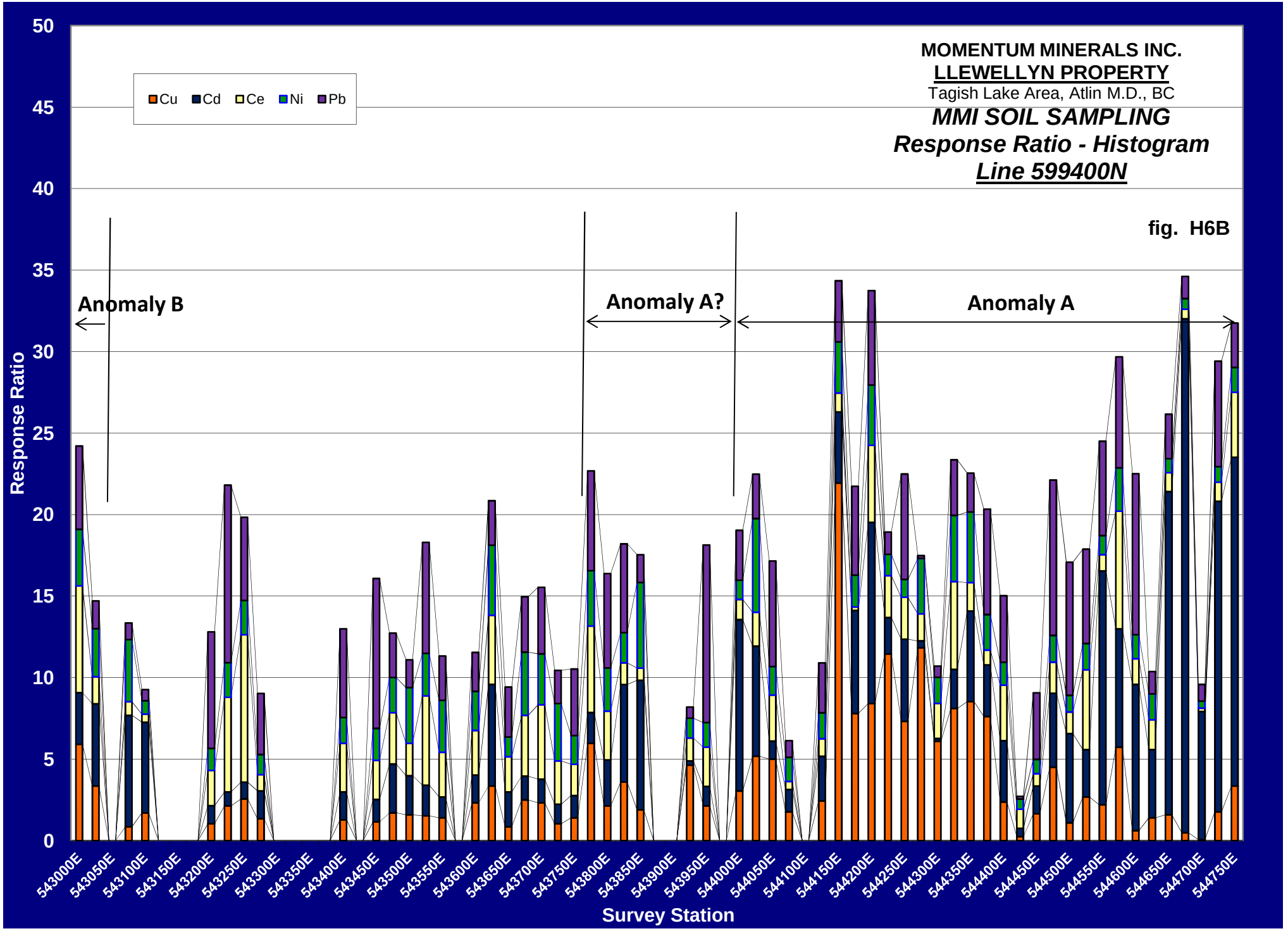

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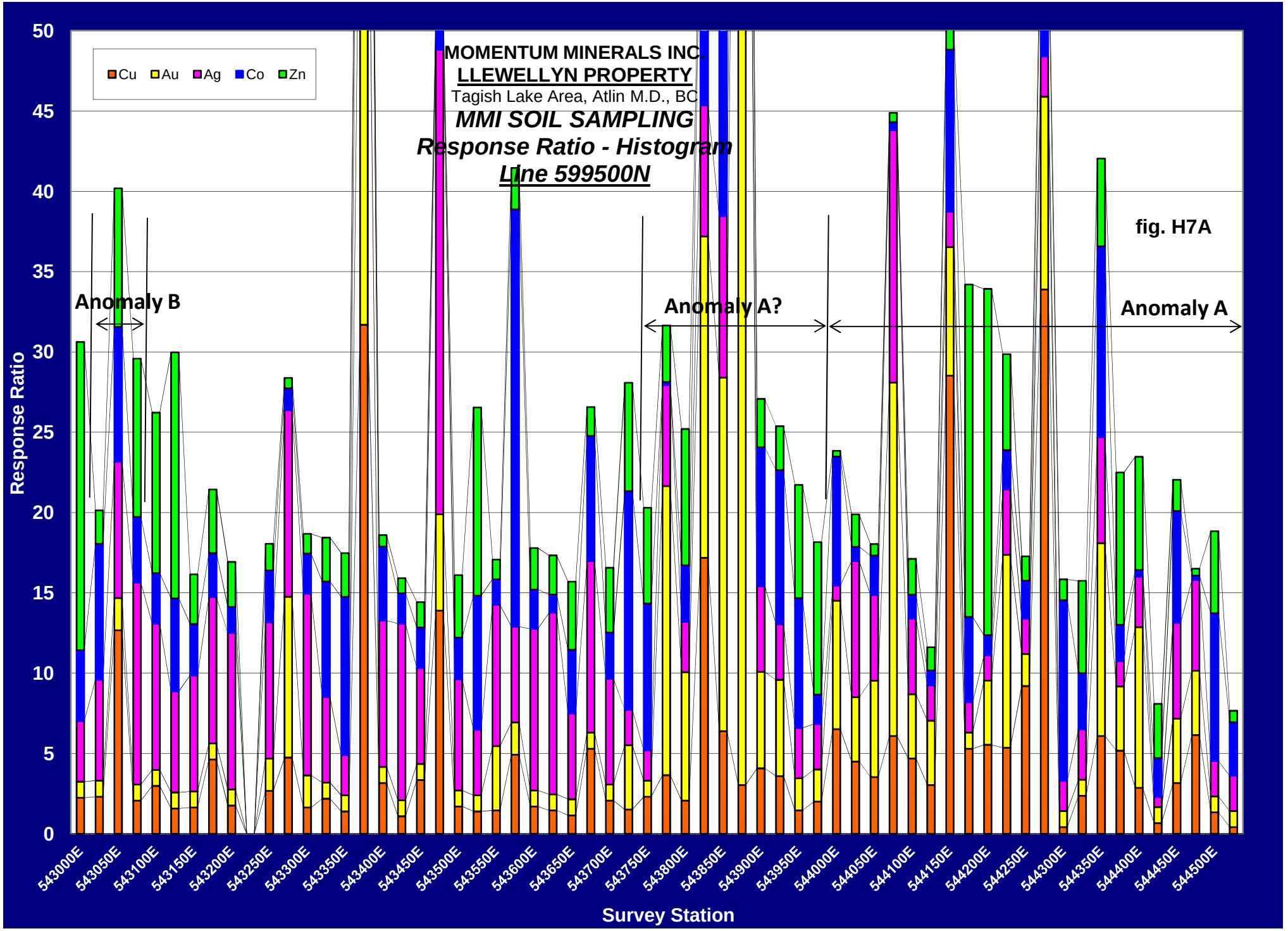

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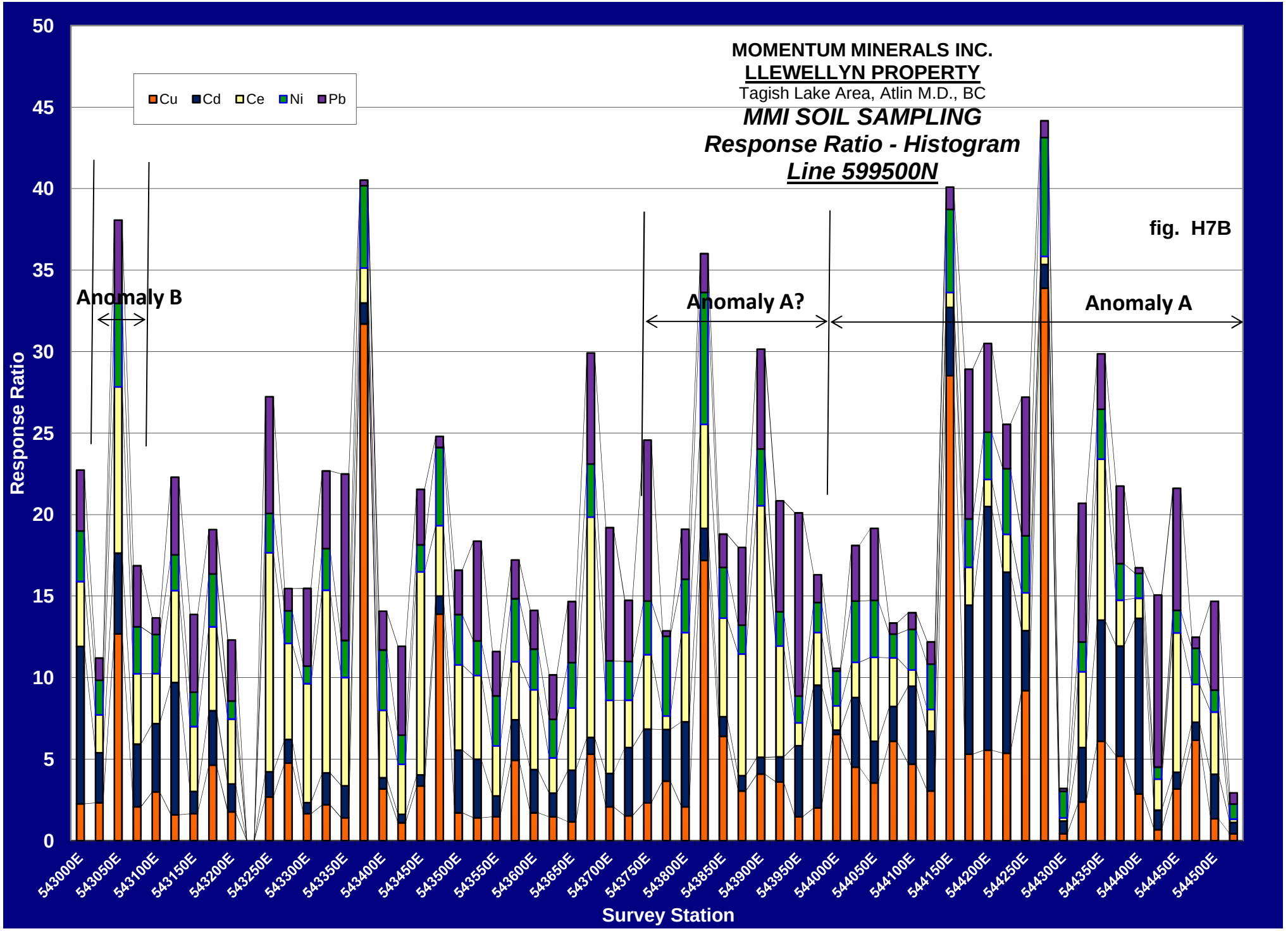

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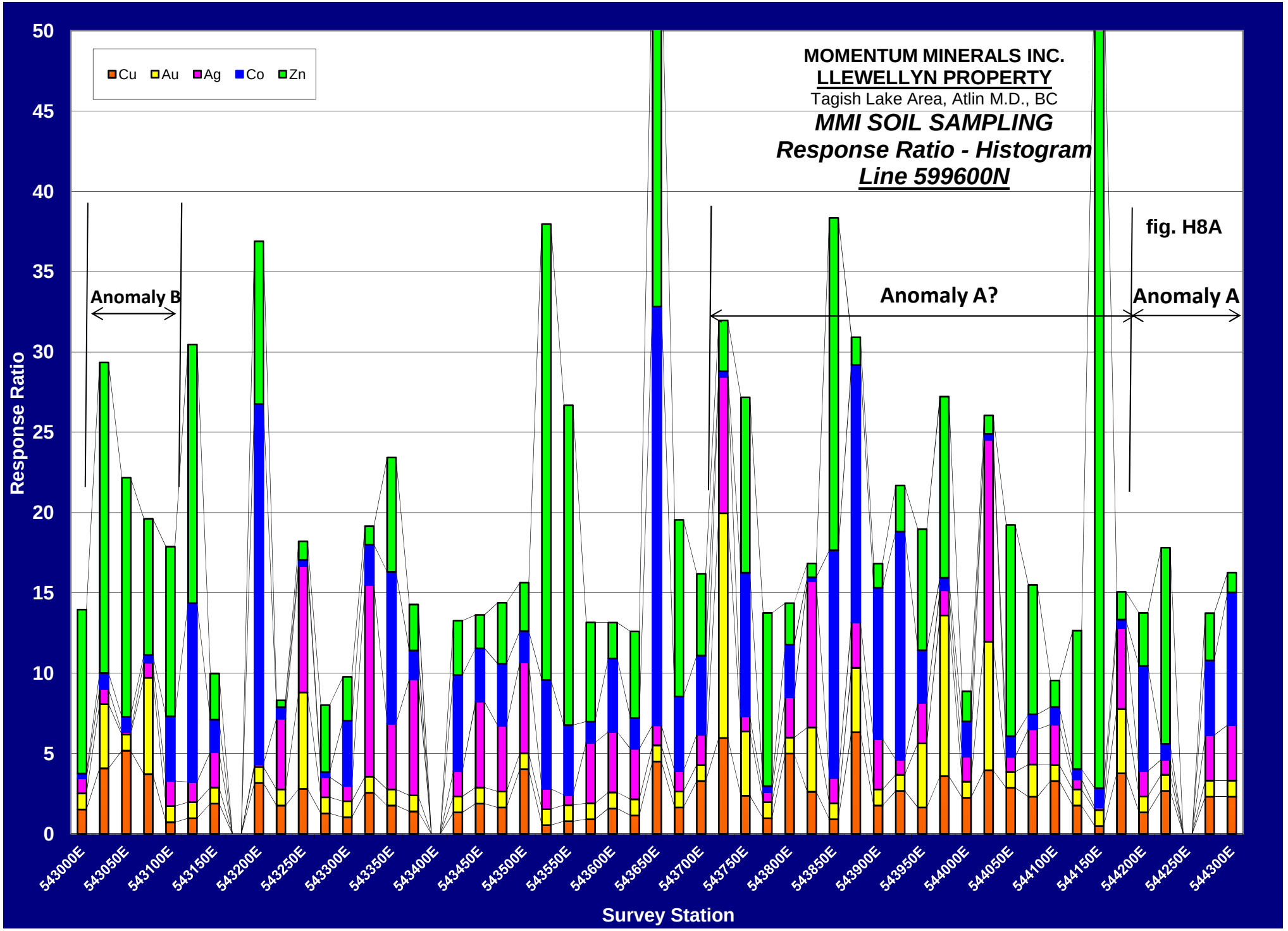

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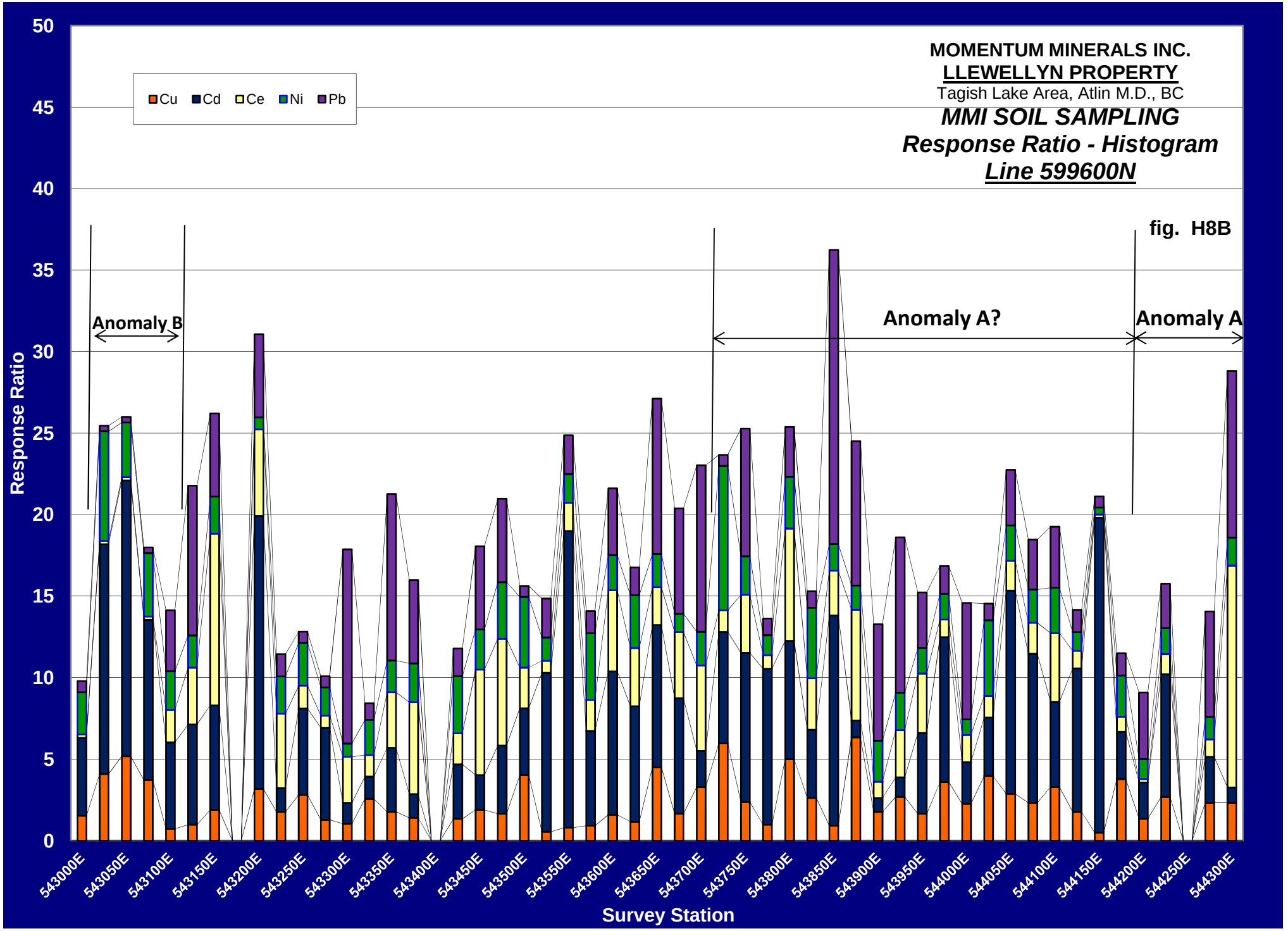

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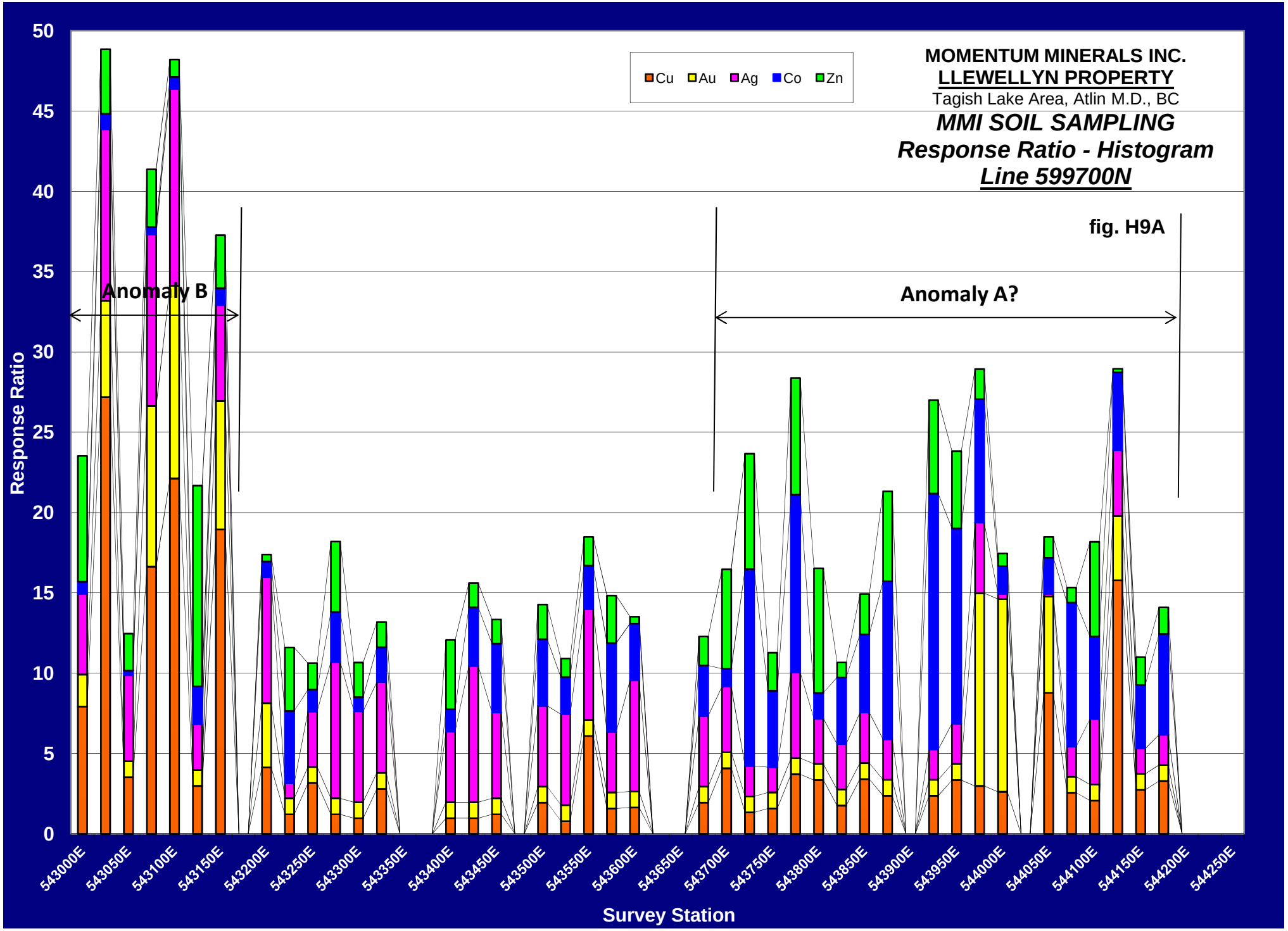

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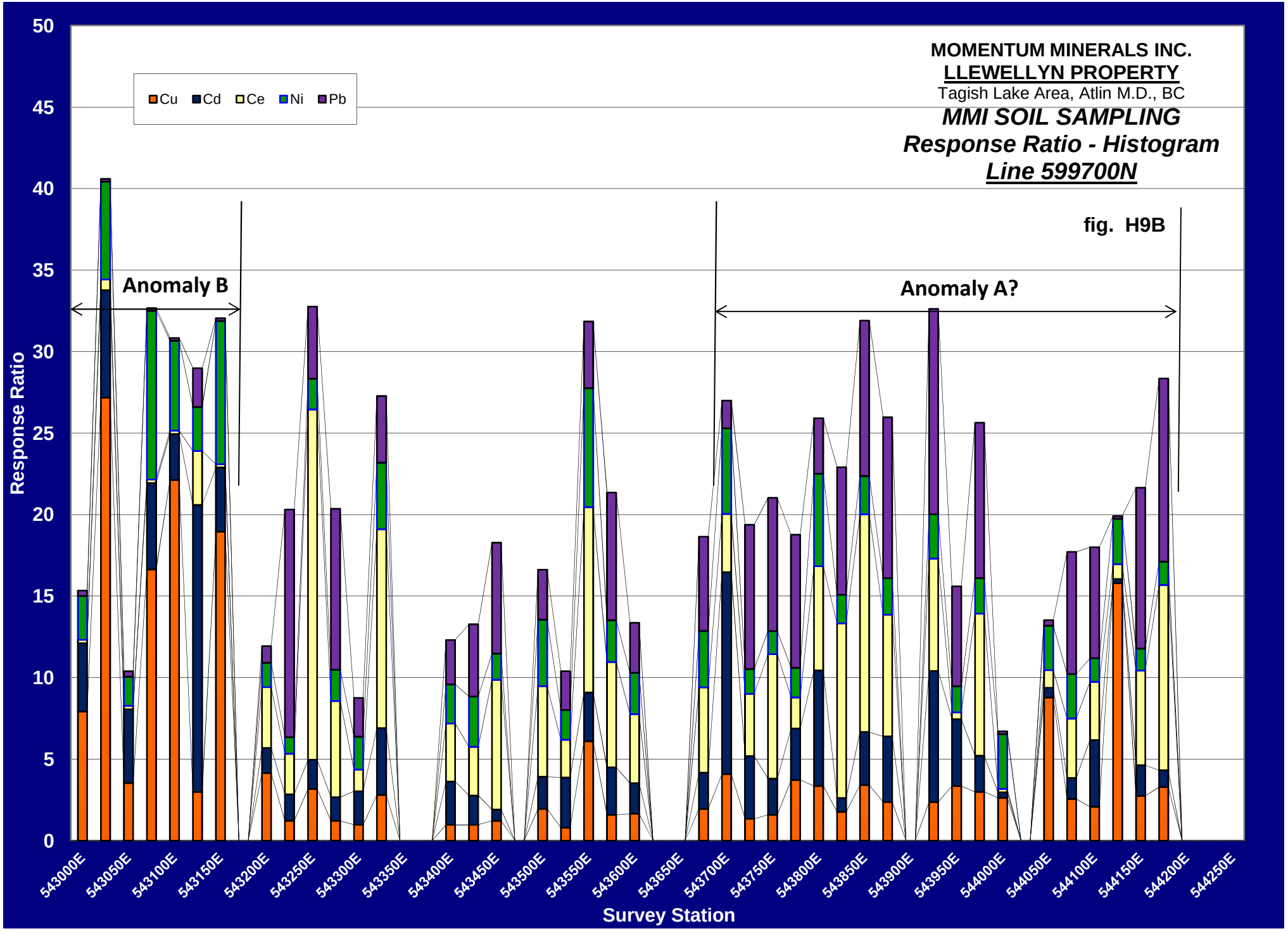

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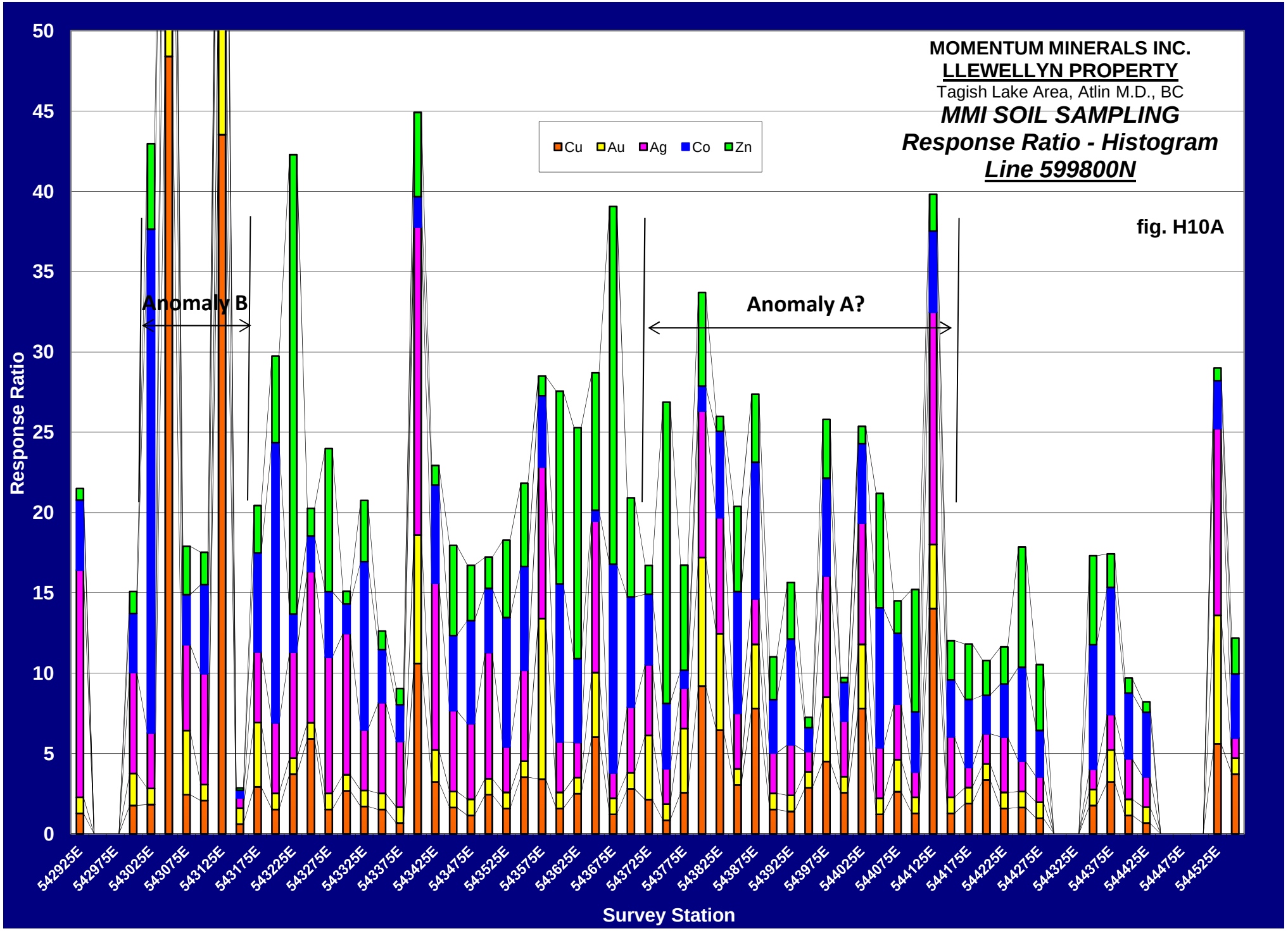

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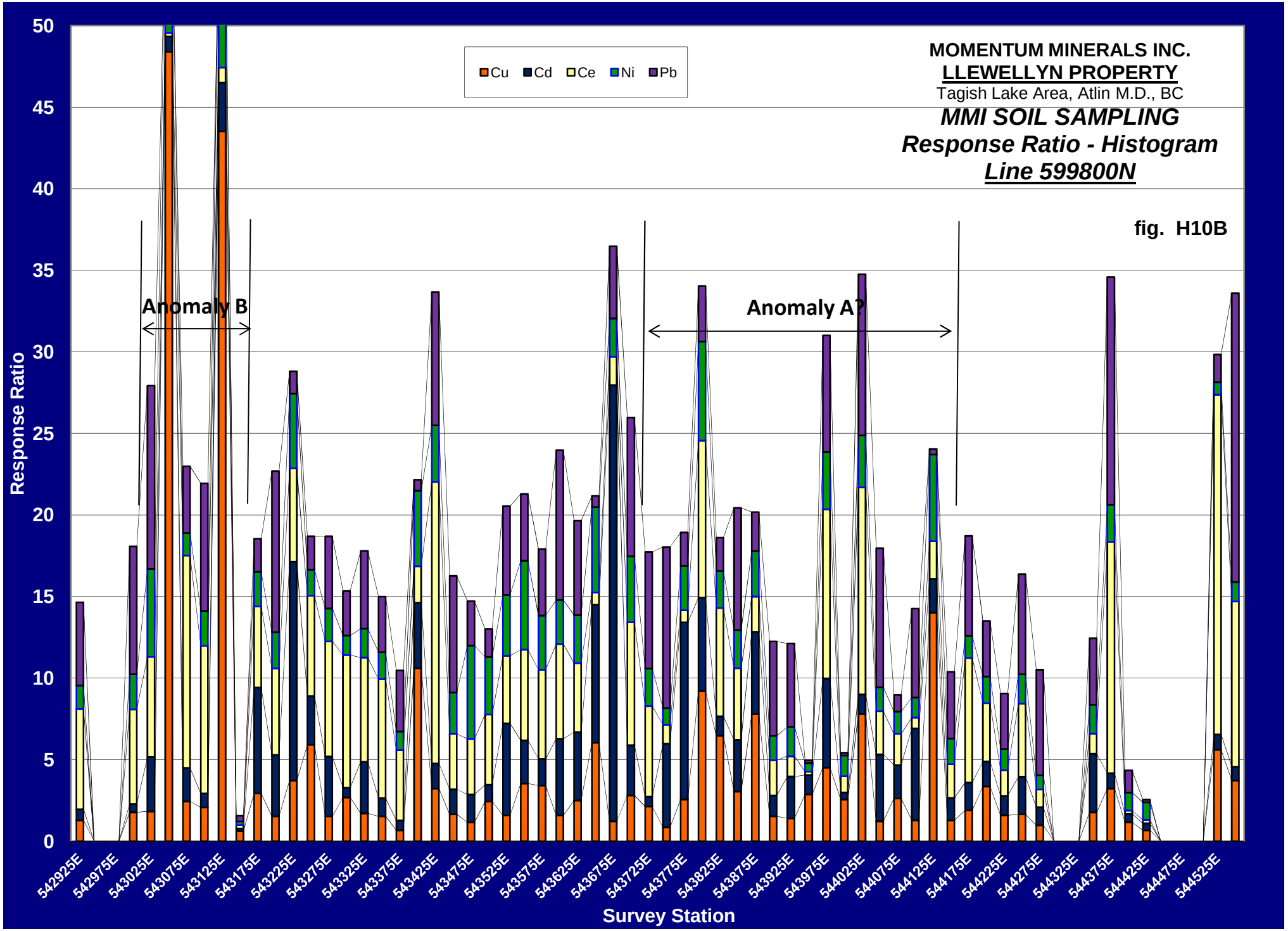

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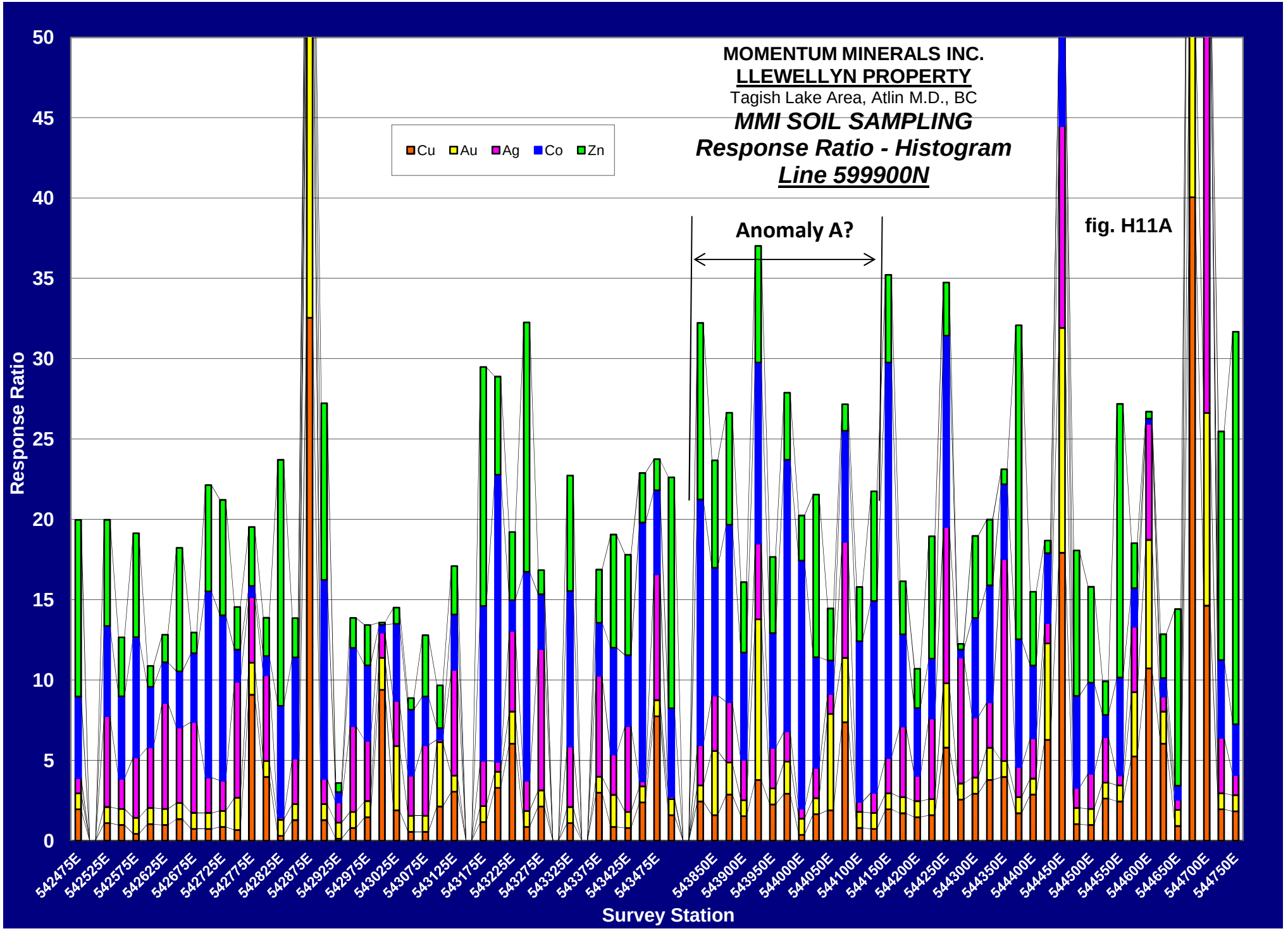

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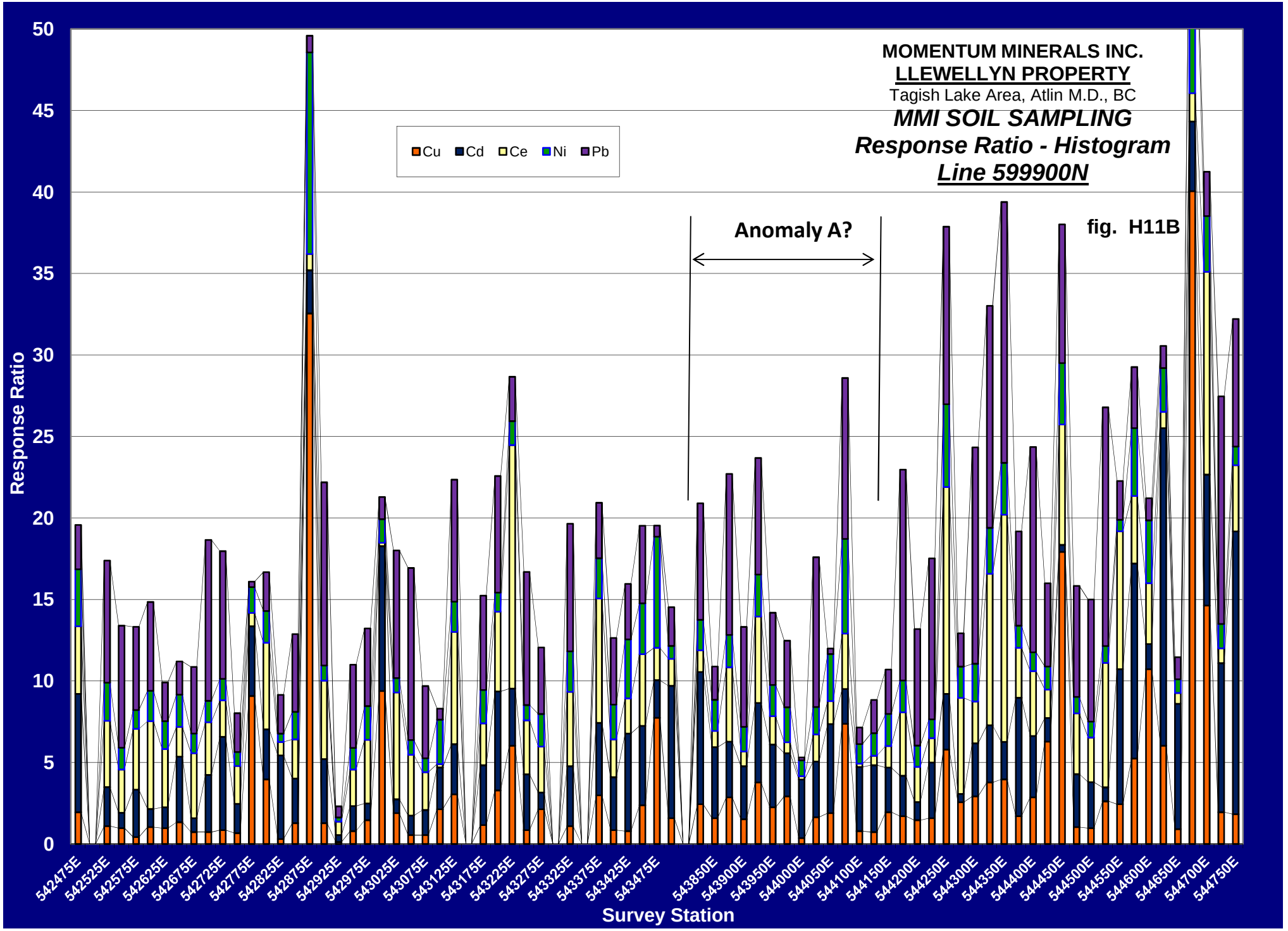

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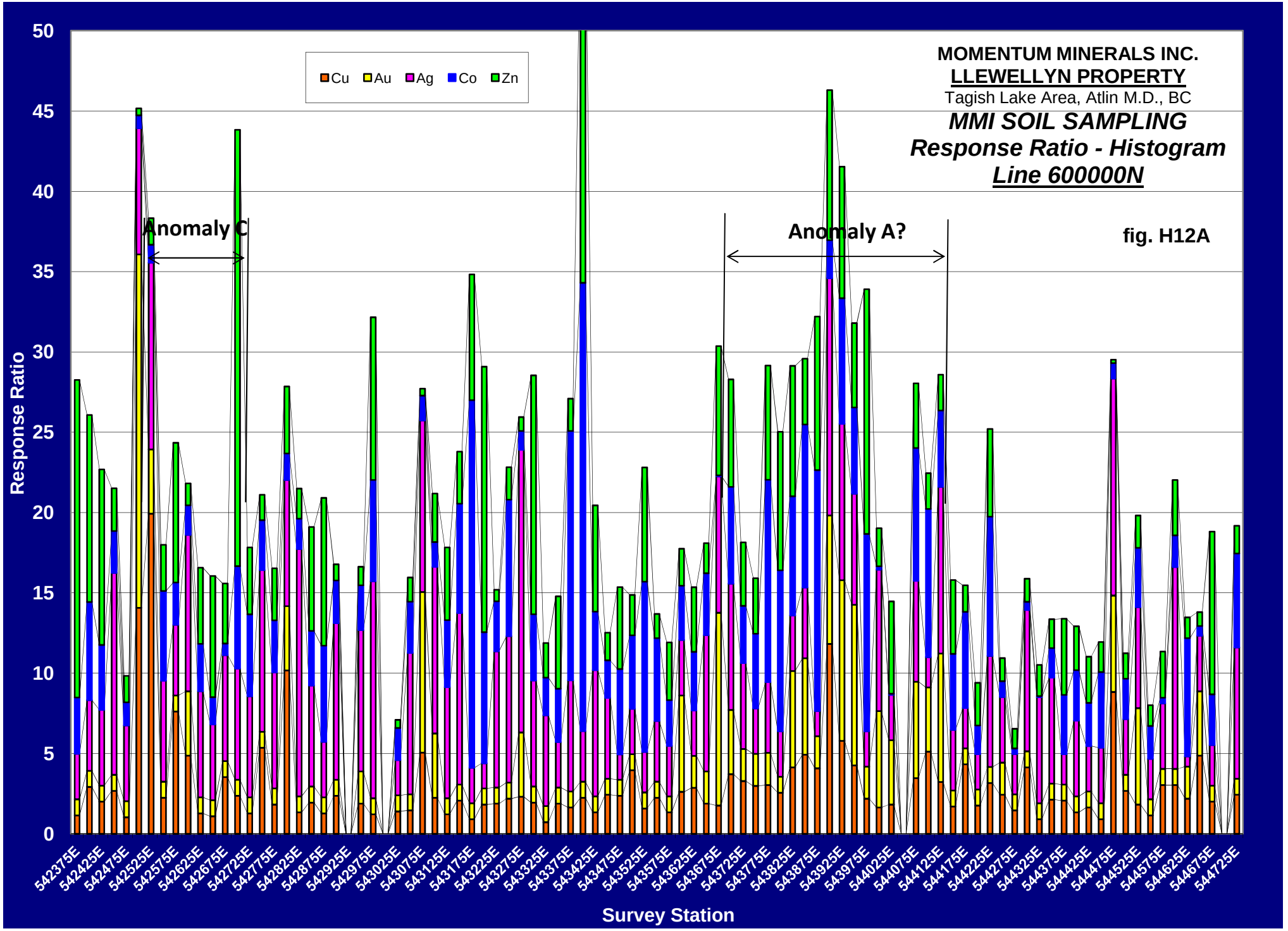

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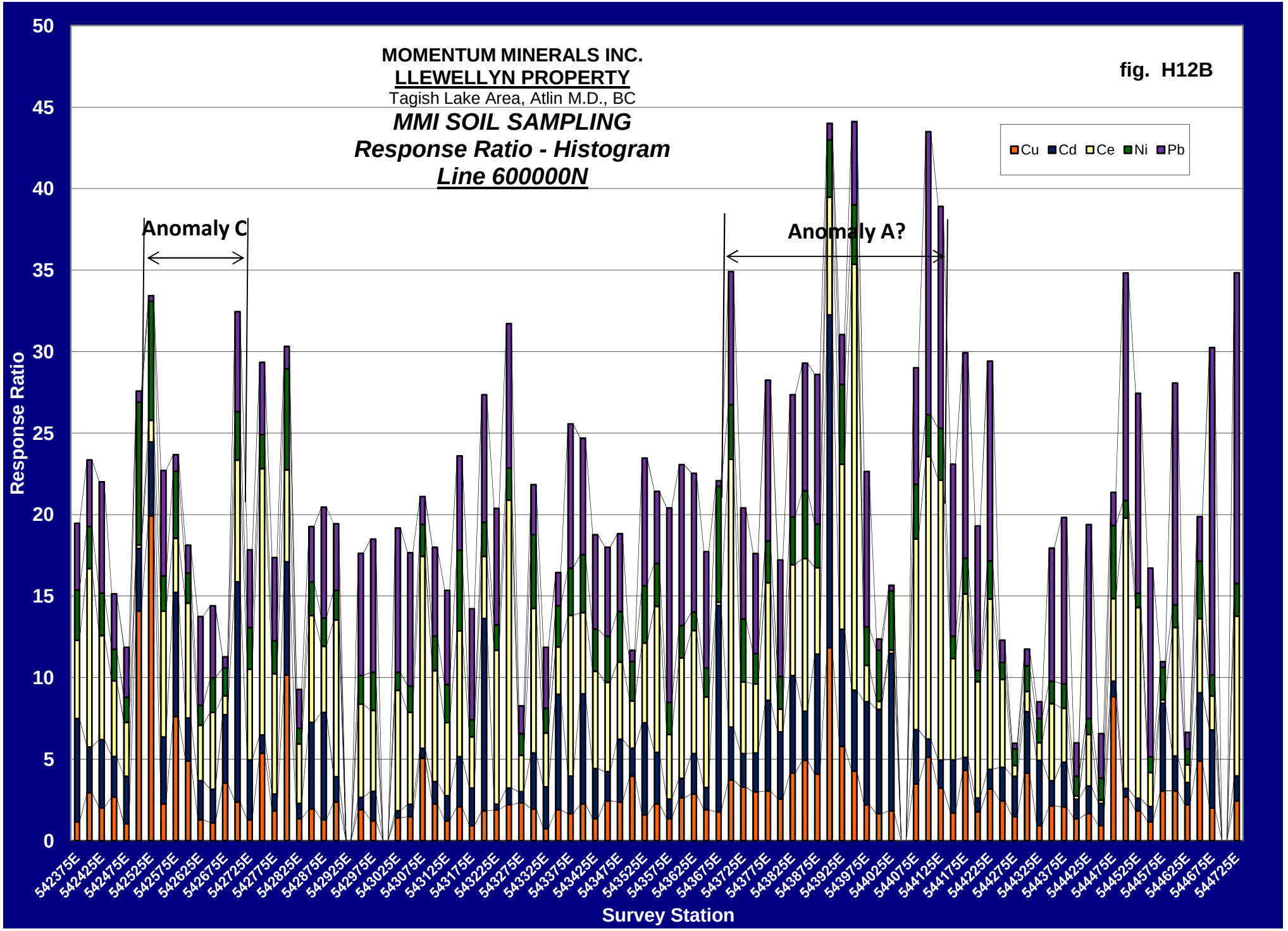
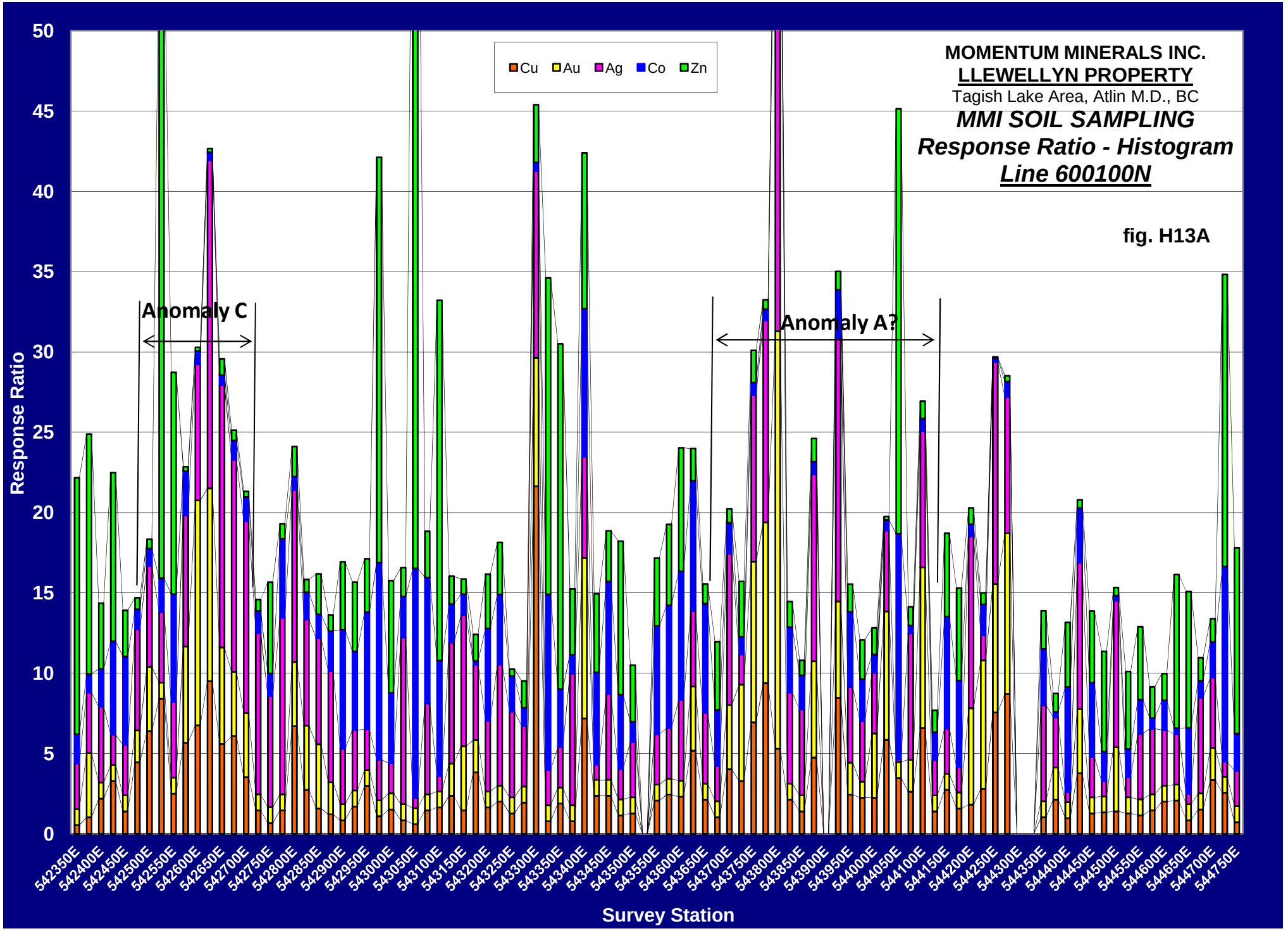
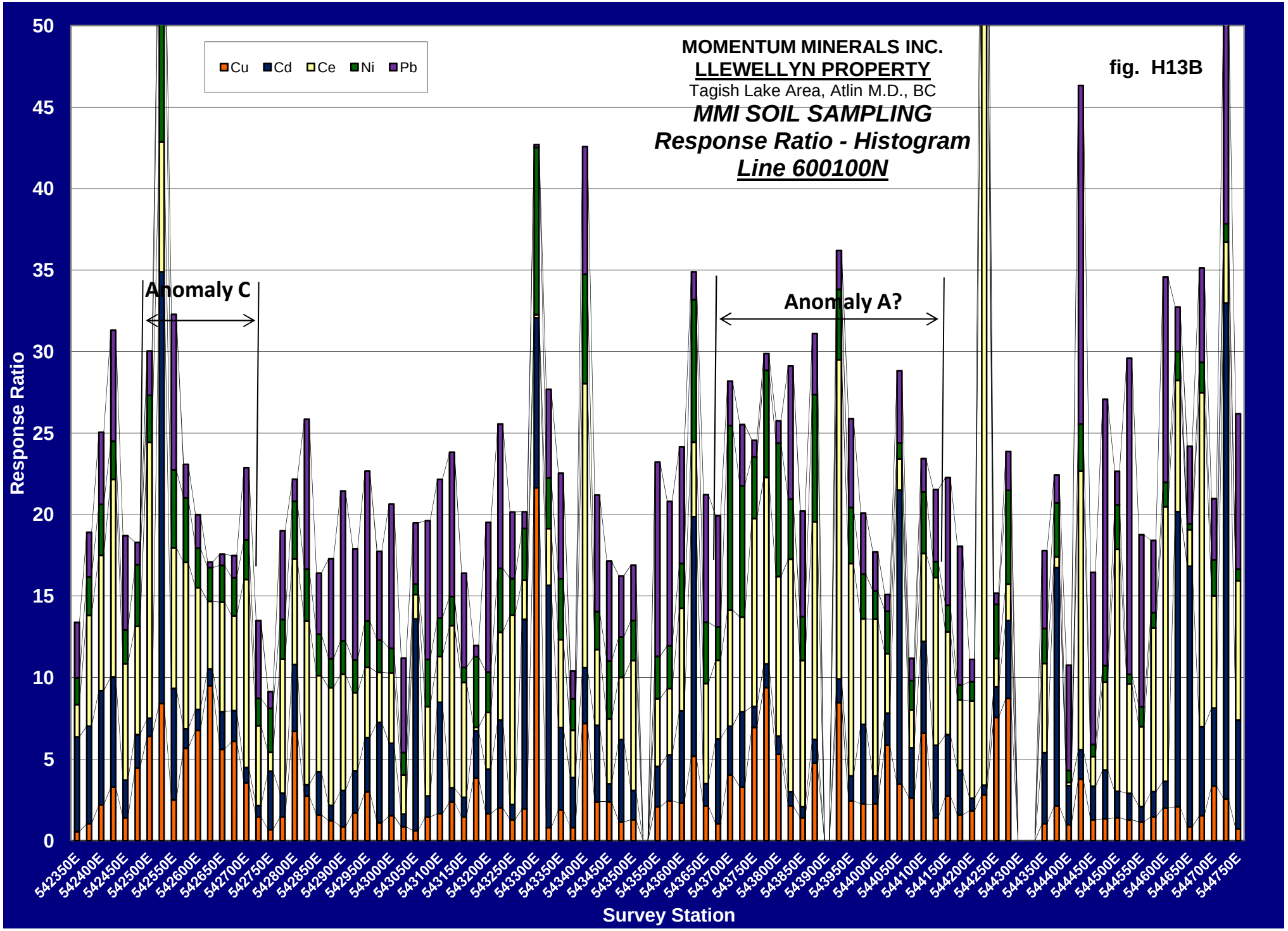


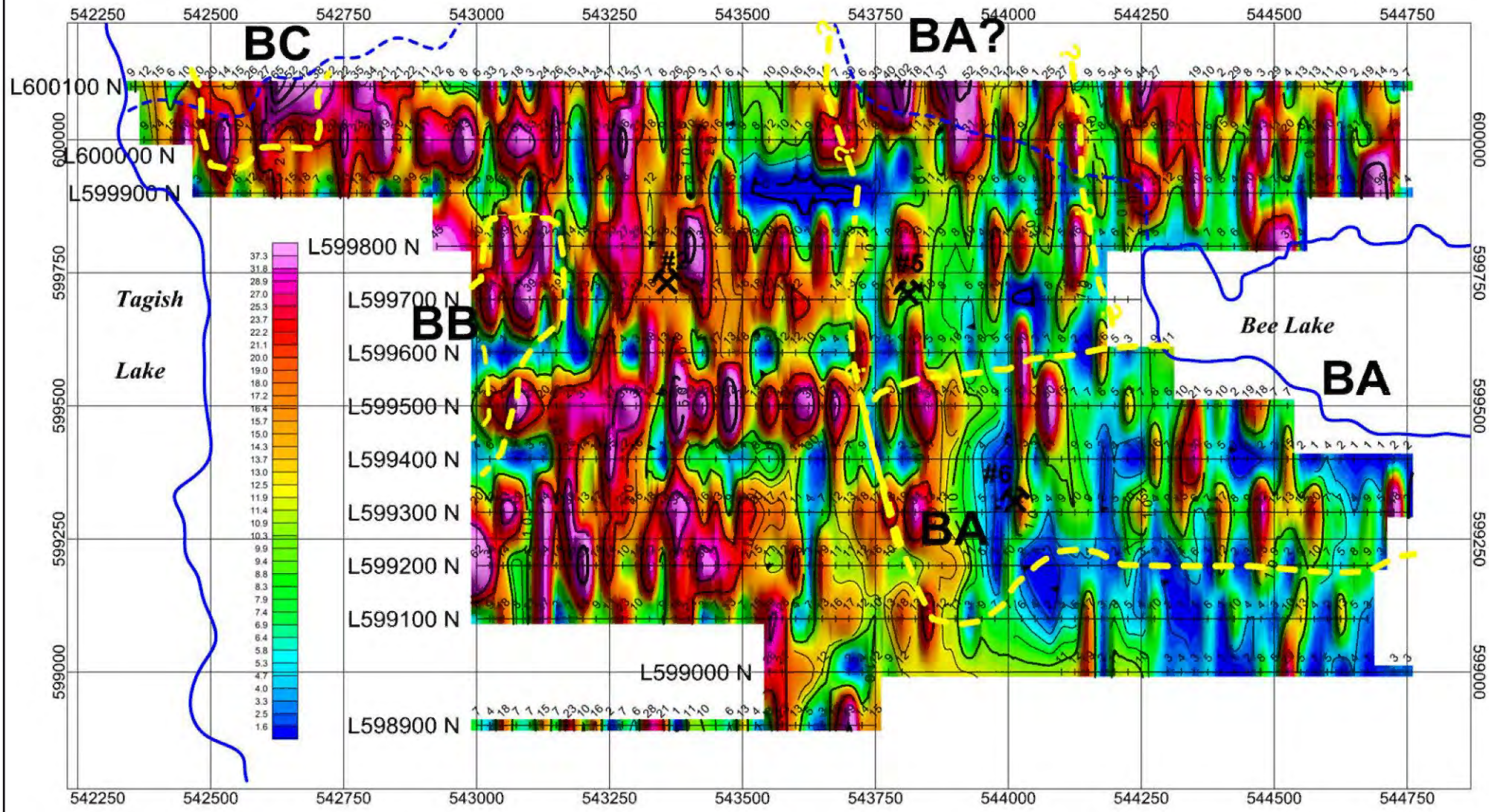
Data Reduced by : **GEOTRONICS CONSULTING INC**



Data Reduced by : **GEOTRONICS CONSULTING INC**



Data Reduced by : **GEOTRONICS CONSULTING INC**



#2 approximate location of 1981 grab sample containing gold with sample number

sample #2 - 0.90 g/t gold
sample #5 - 2.81 g/t gold
sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6) eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

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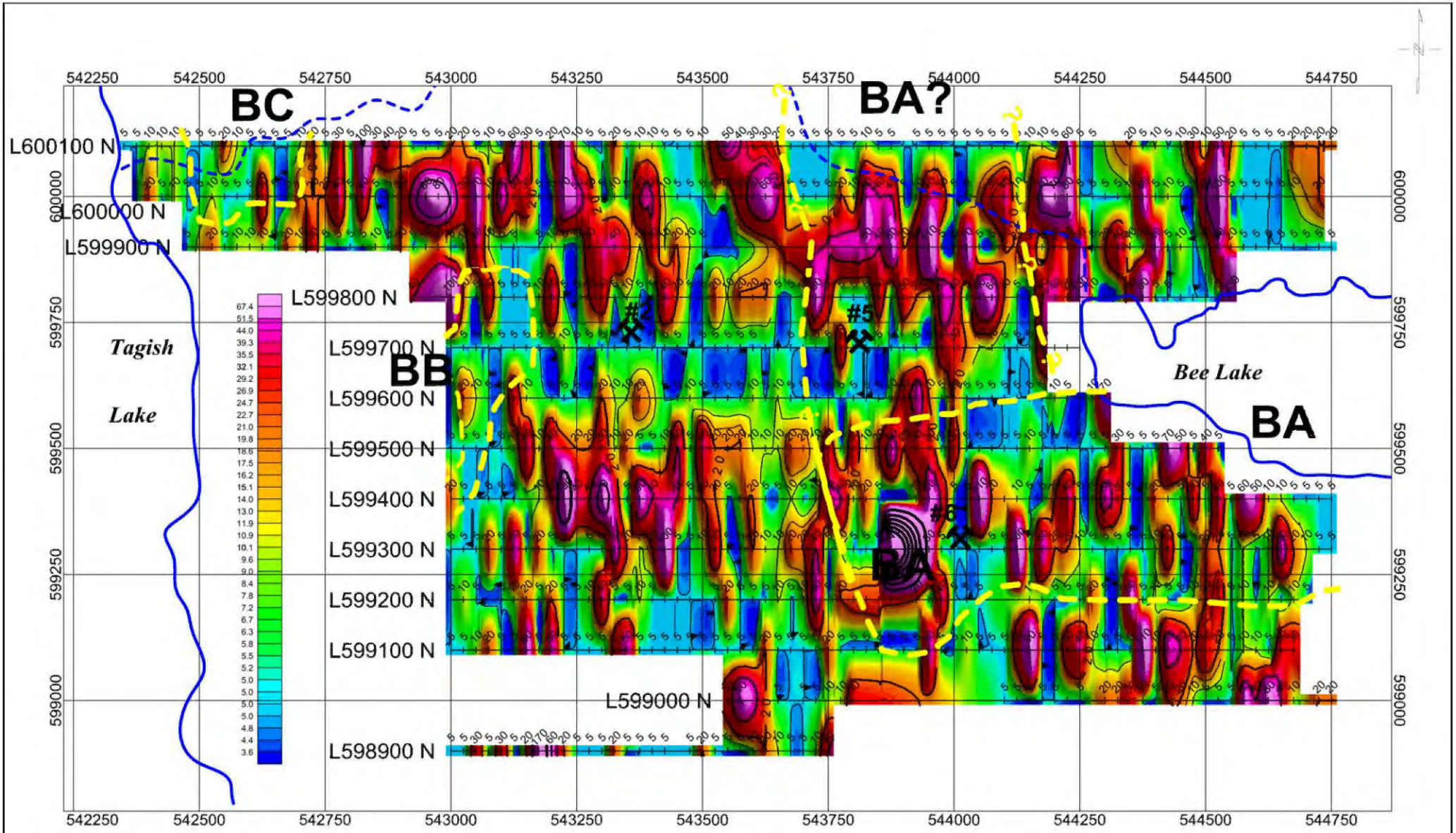
Surrey B.C.

MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
SILVER (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-1



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
ARSENIC (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-2

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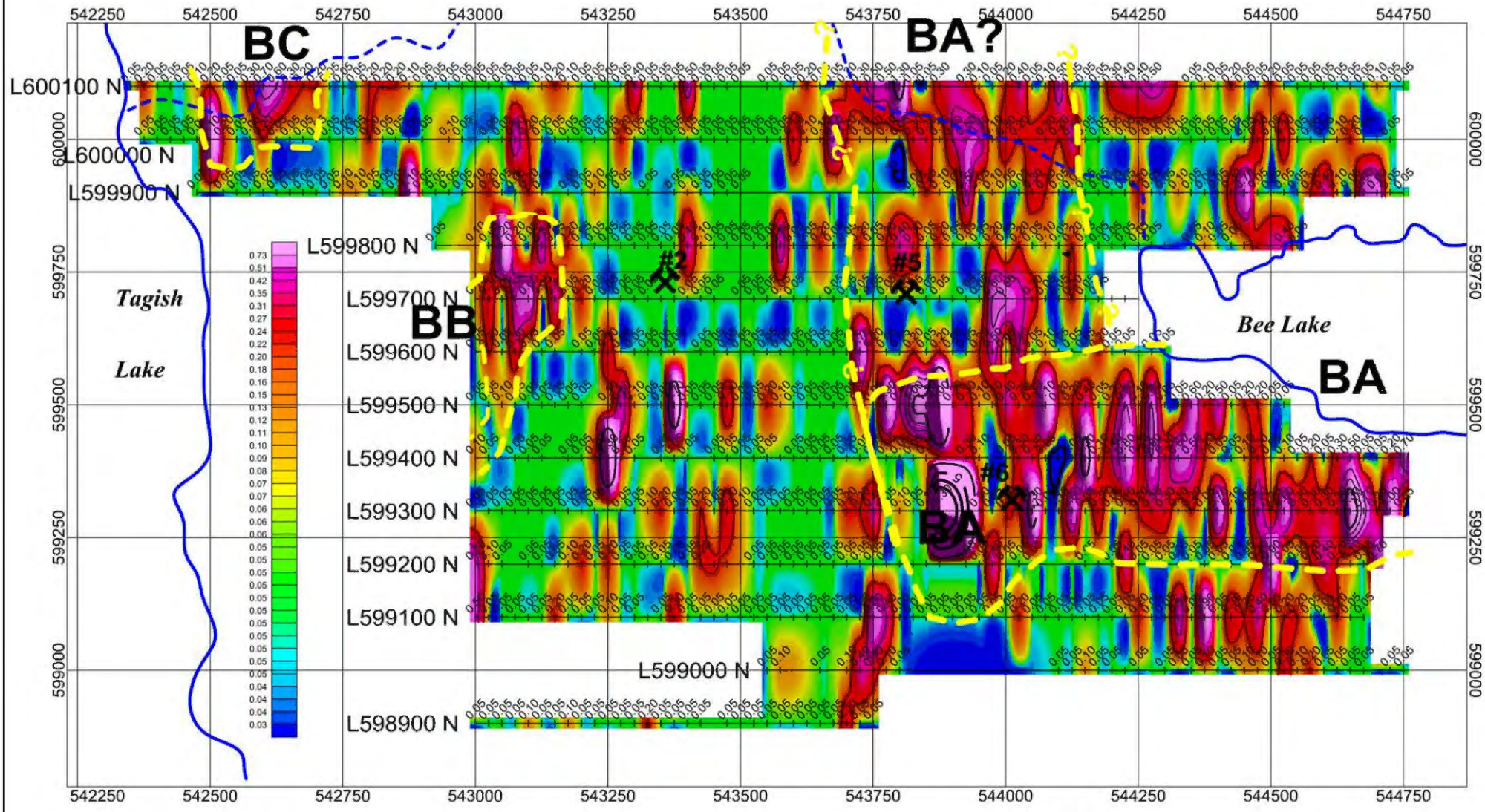

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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

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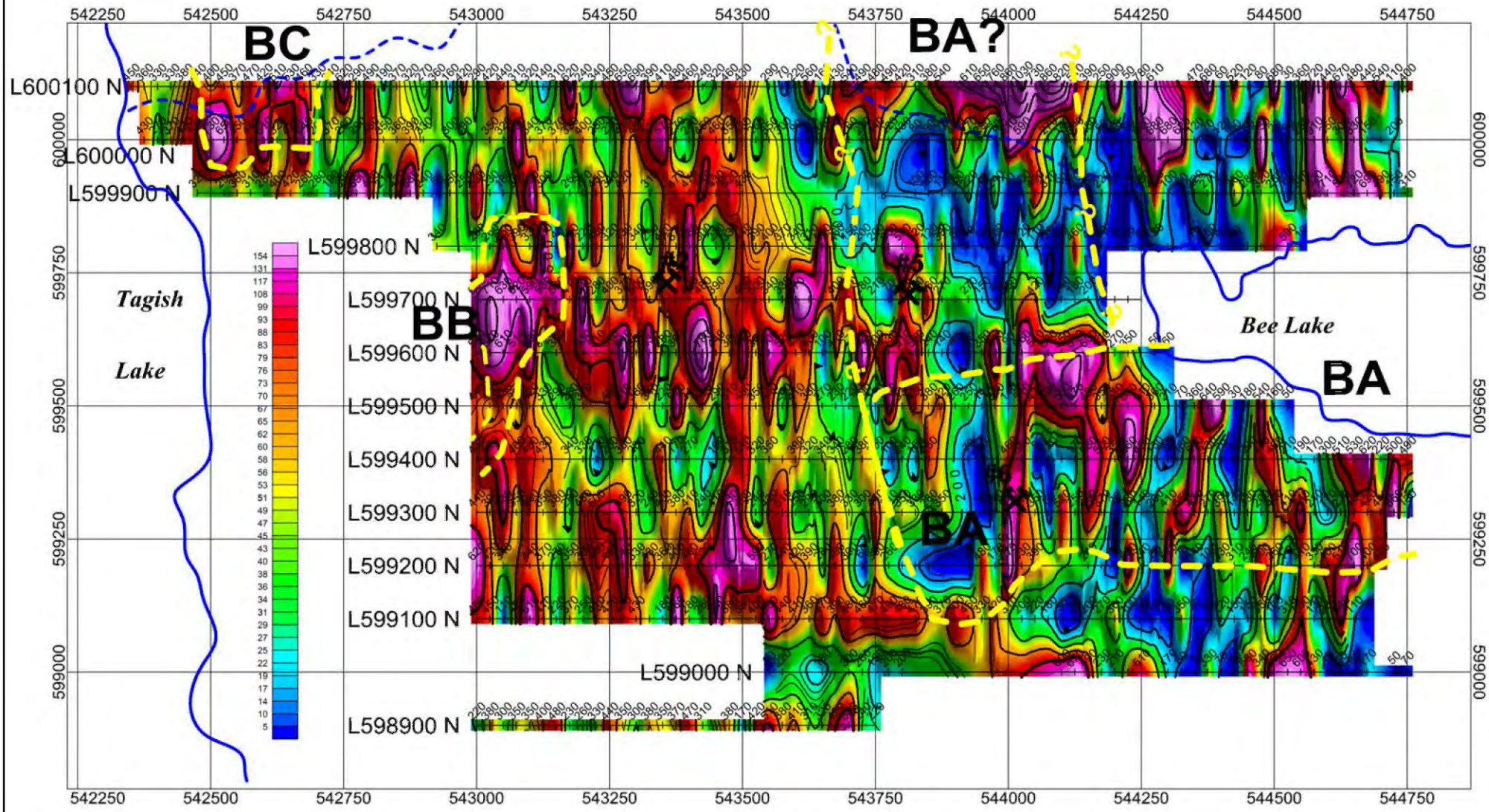
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
GOLD (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-3



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

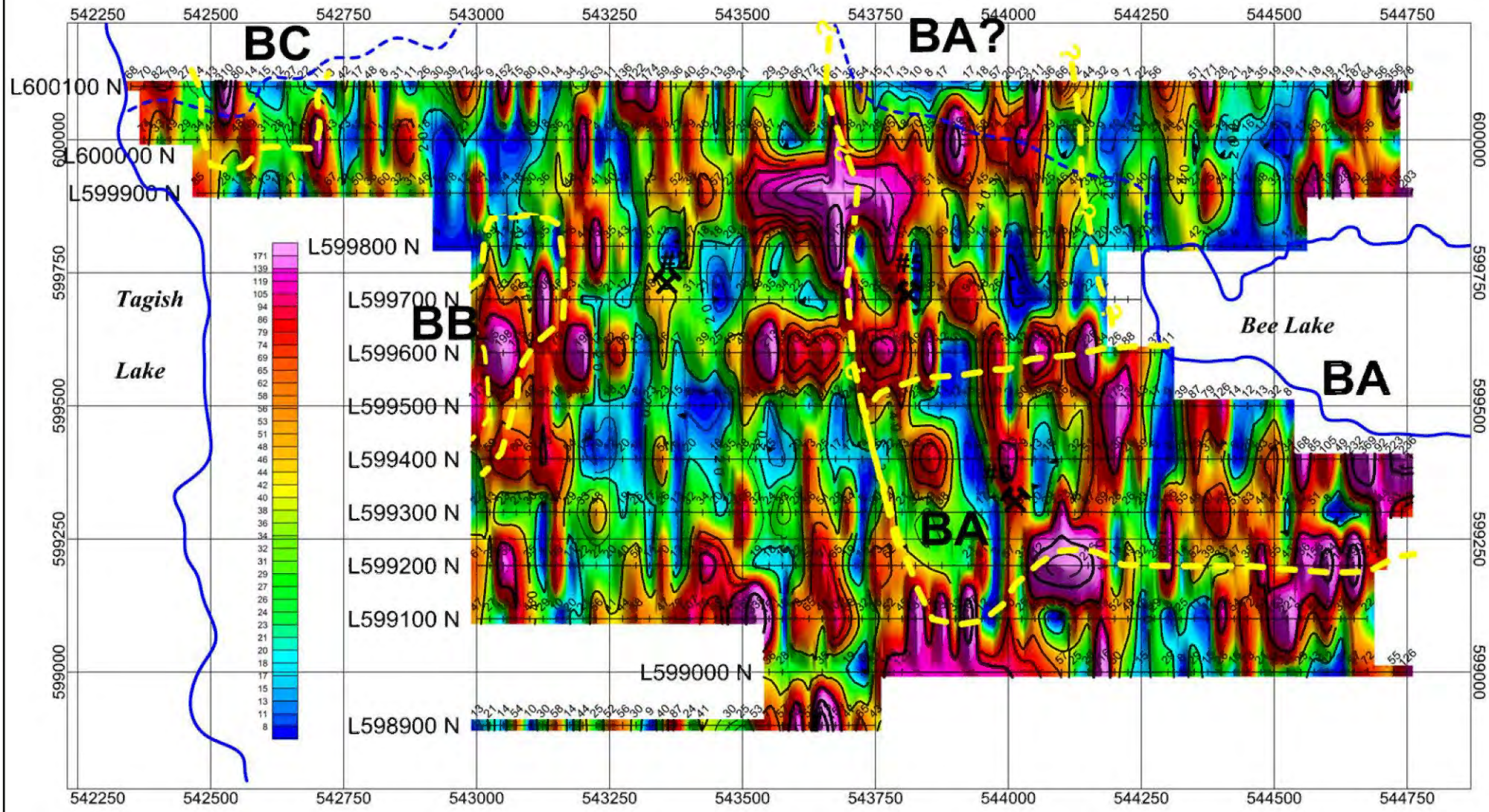
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
CALCIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-4

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

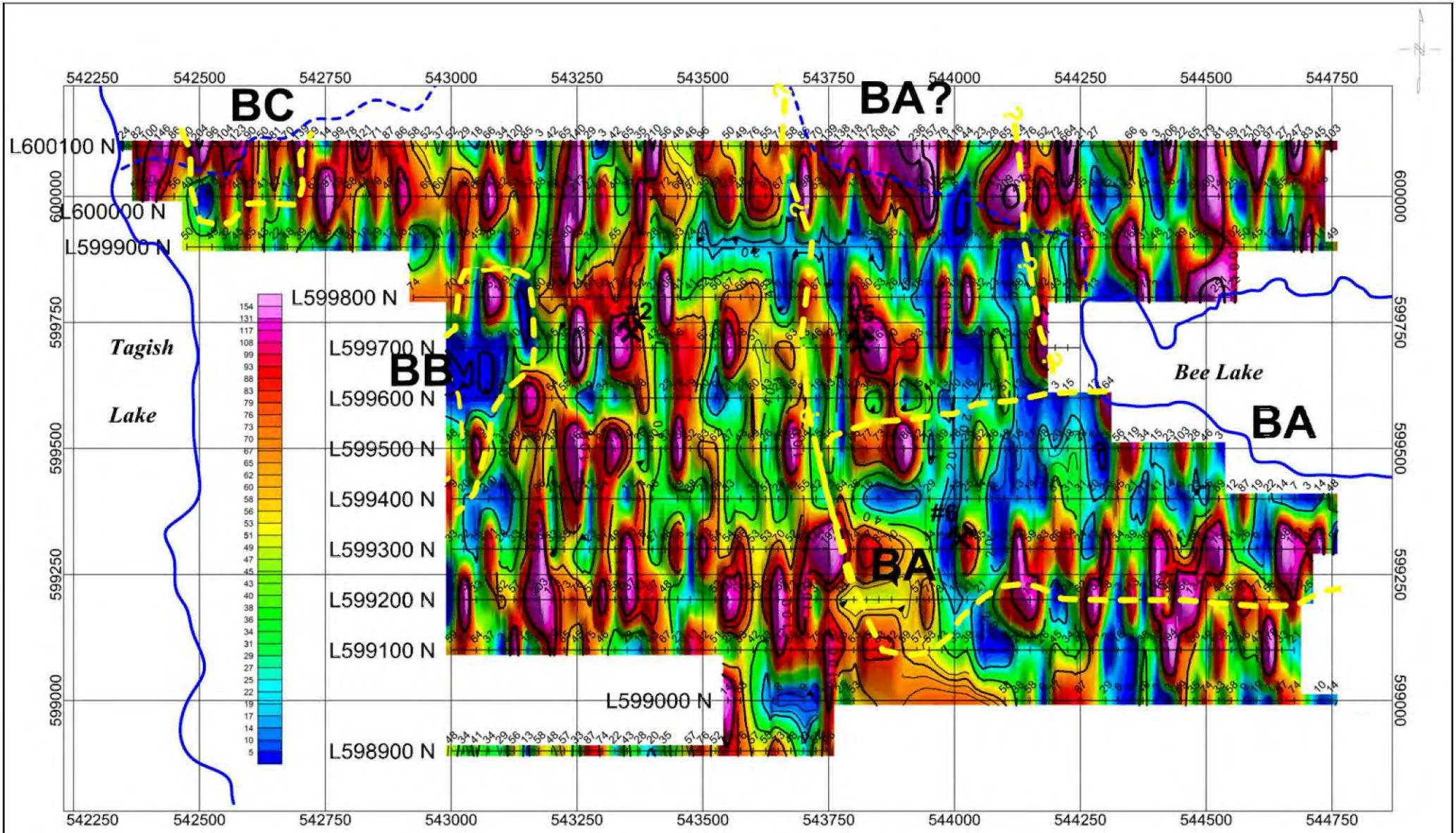
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
CADMIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-5

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

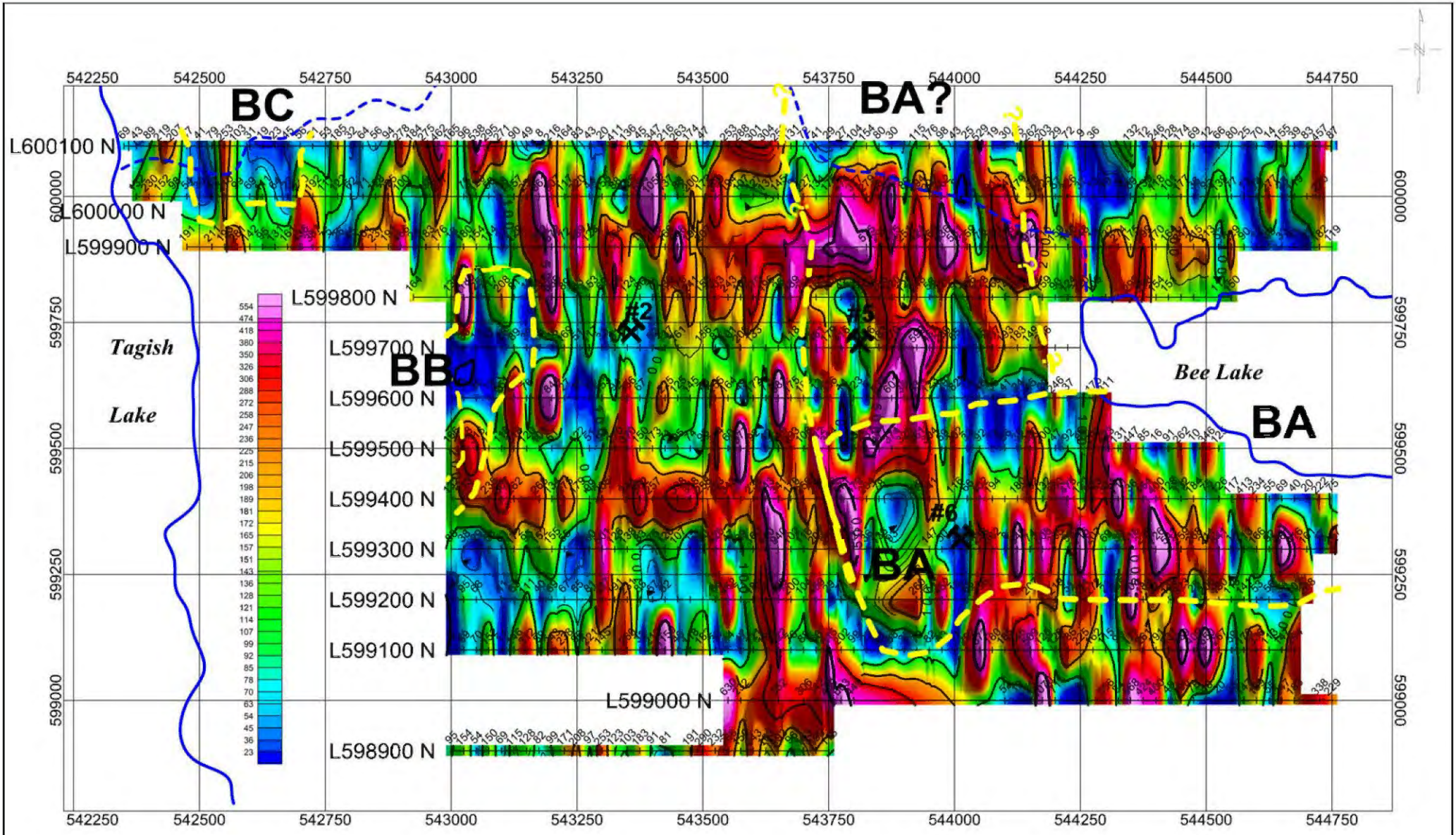
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
CERIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-6

Geotronics Consulting Inc
Surrey B.C.



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Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

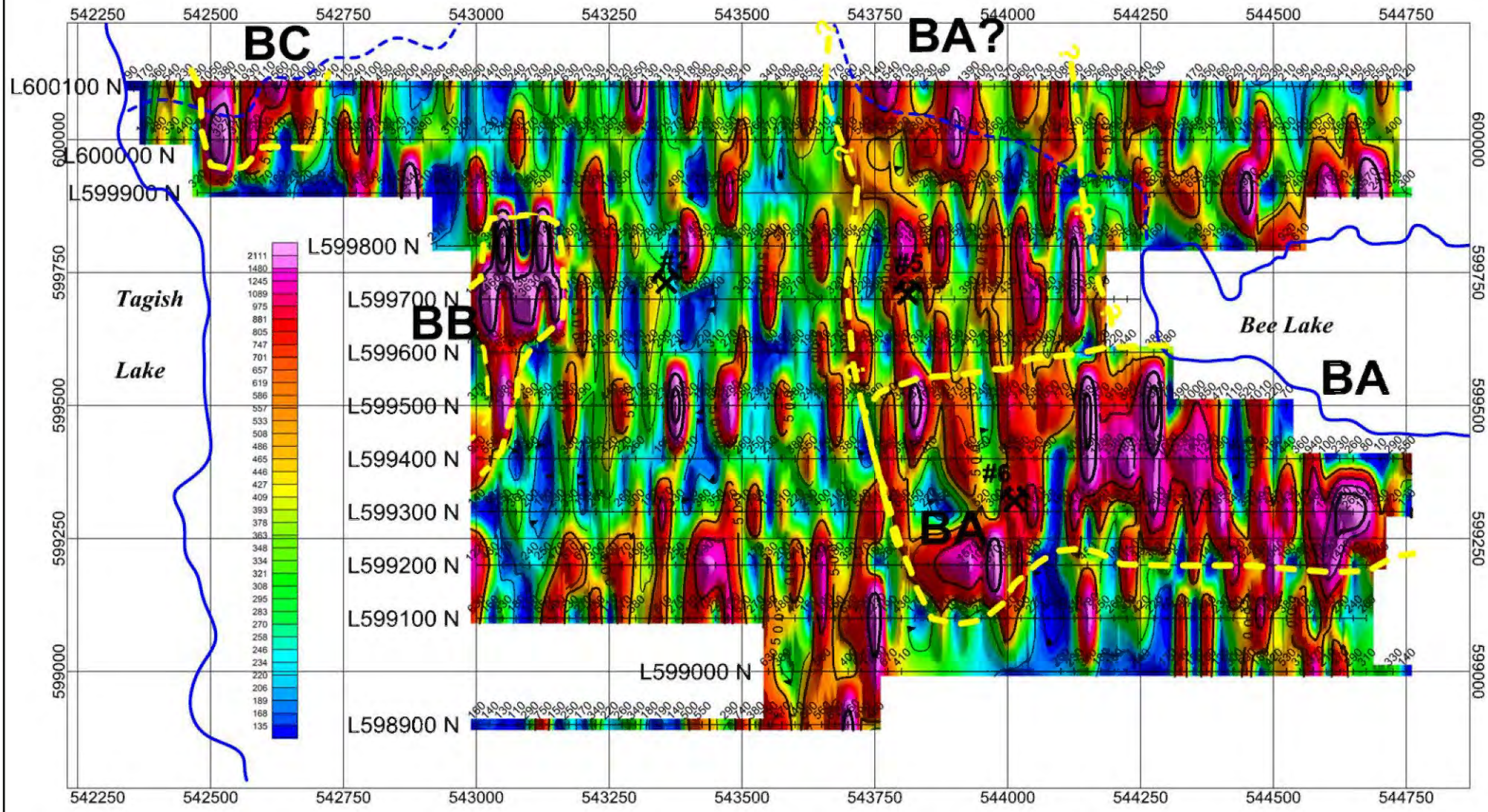
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
COBALT (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-7

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

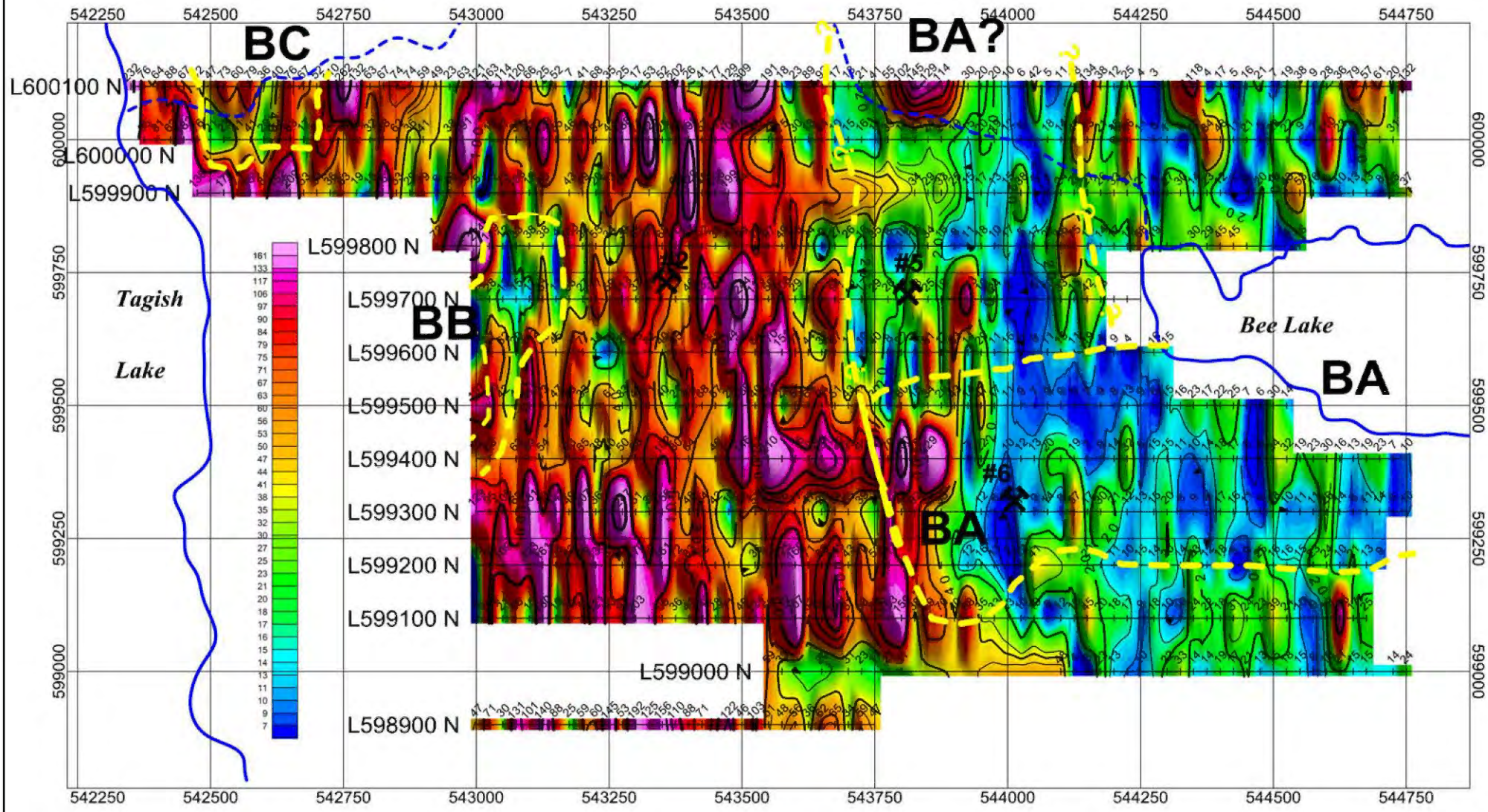
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
COPPER (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-8

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

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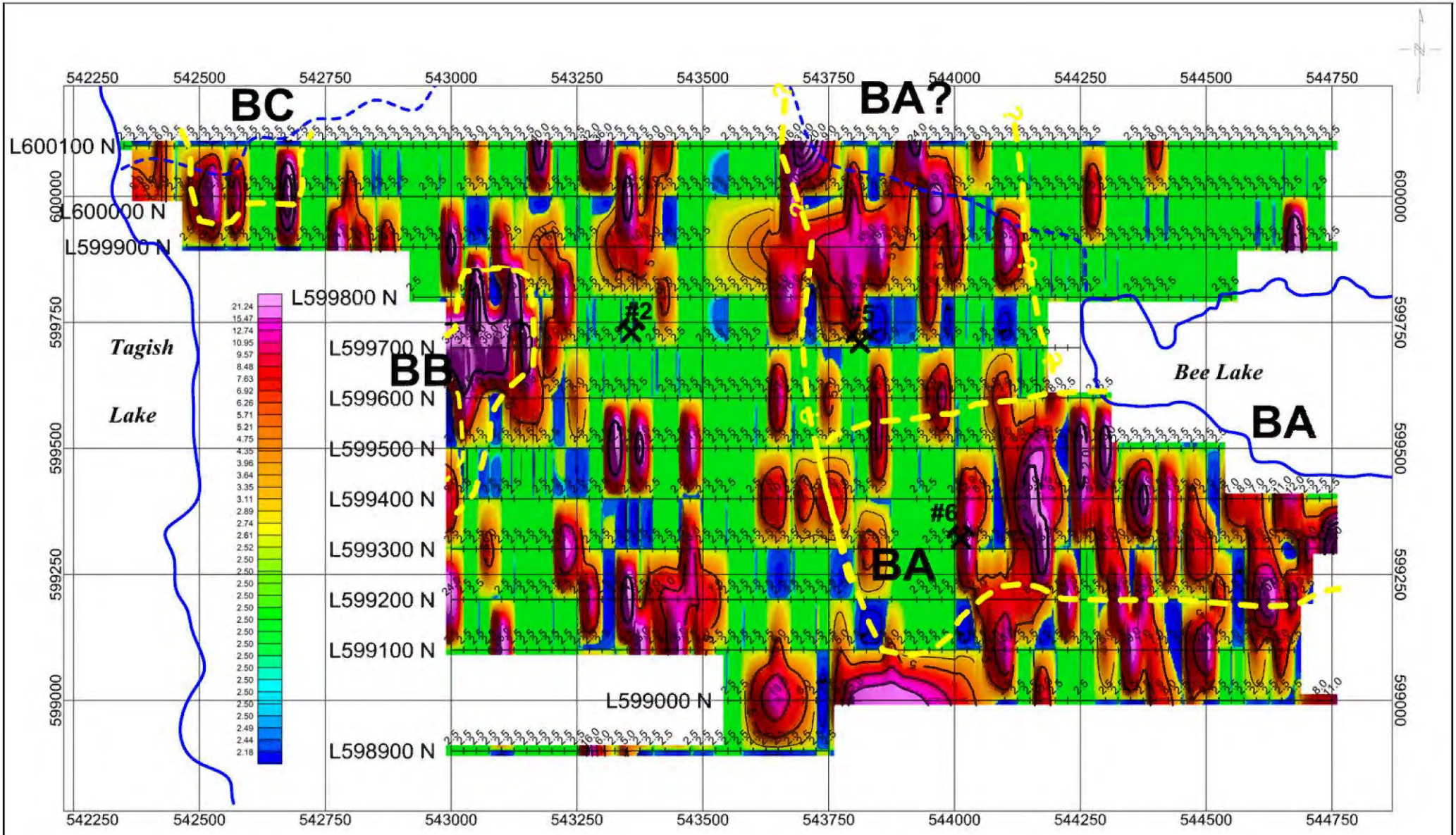
Surrey B.C.

MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
POTASSIUM (ppm)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-9



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

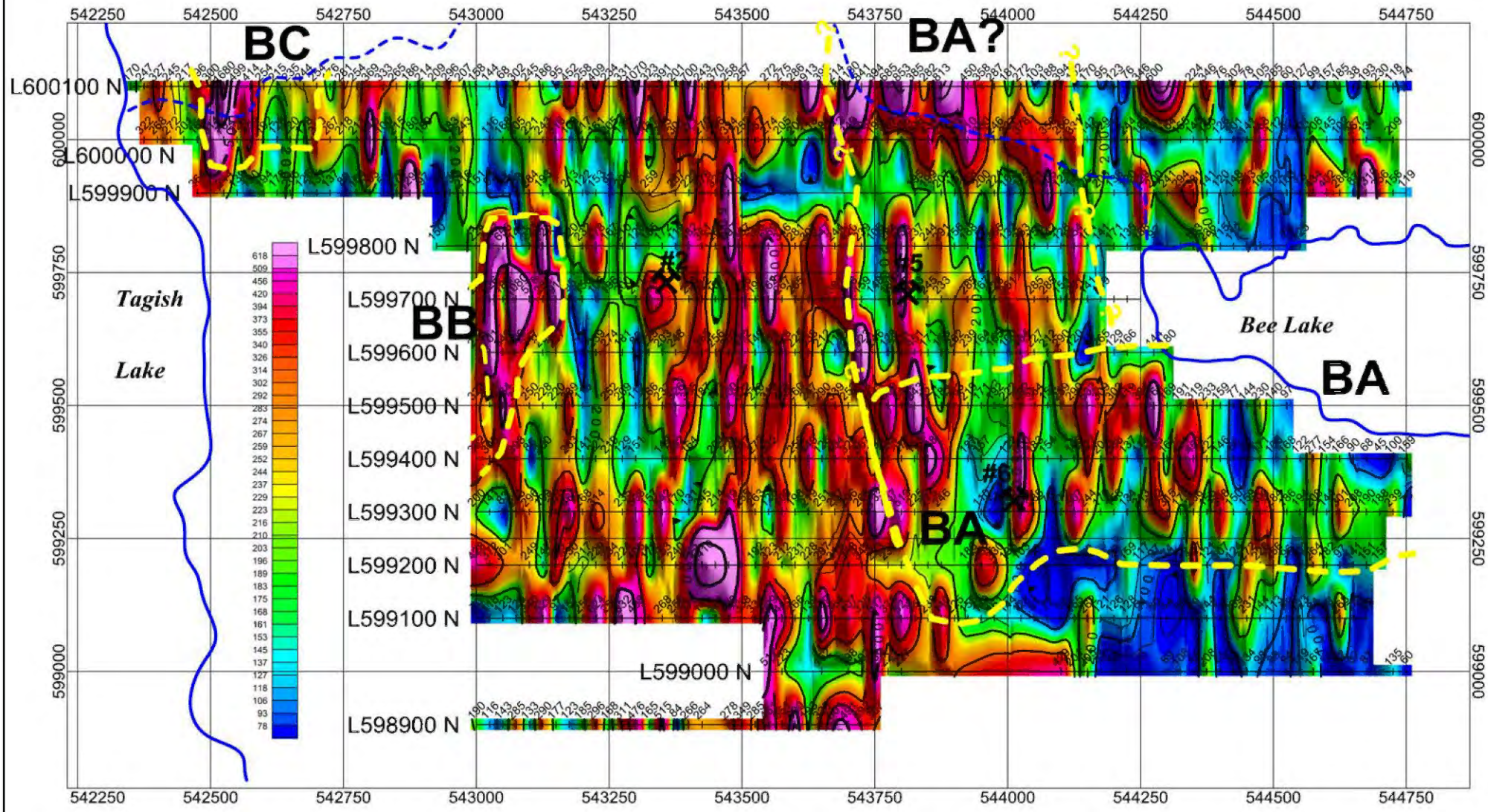
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
LITHIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-10

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

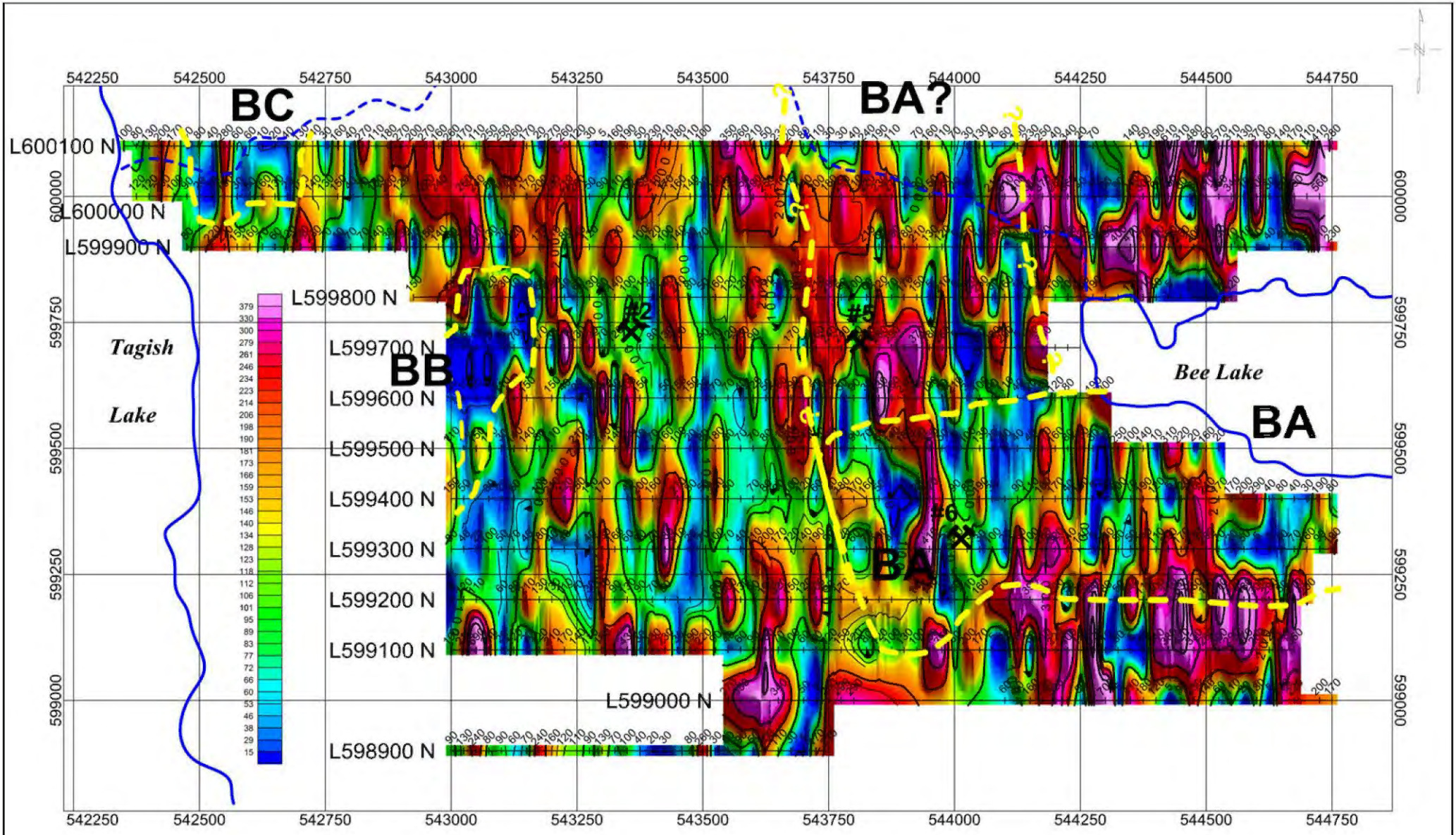
Geotronics Consulting Inc
Surrey B.C.

MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
NICKEL (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-11



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

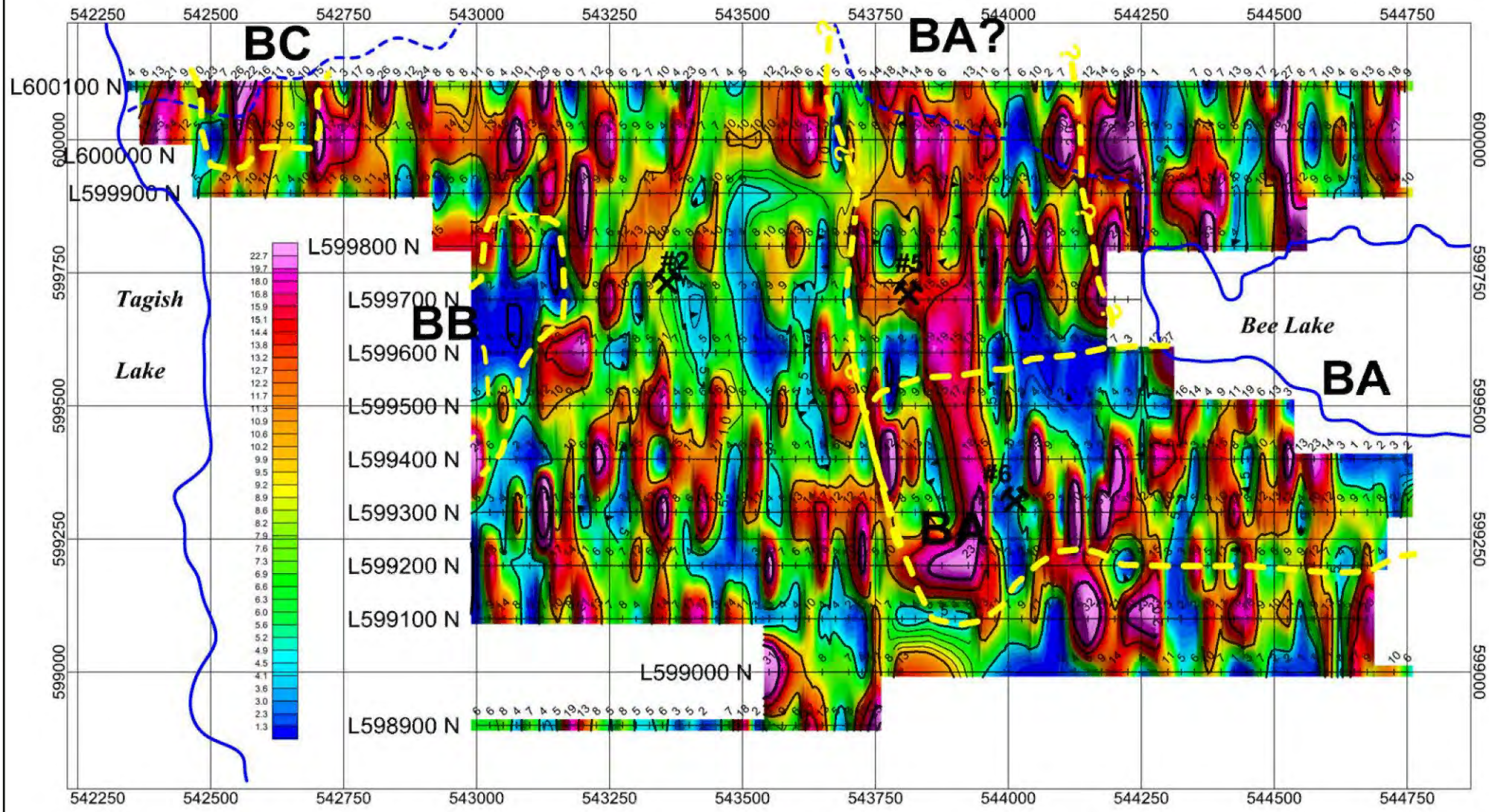
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
LEAD (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-12

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

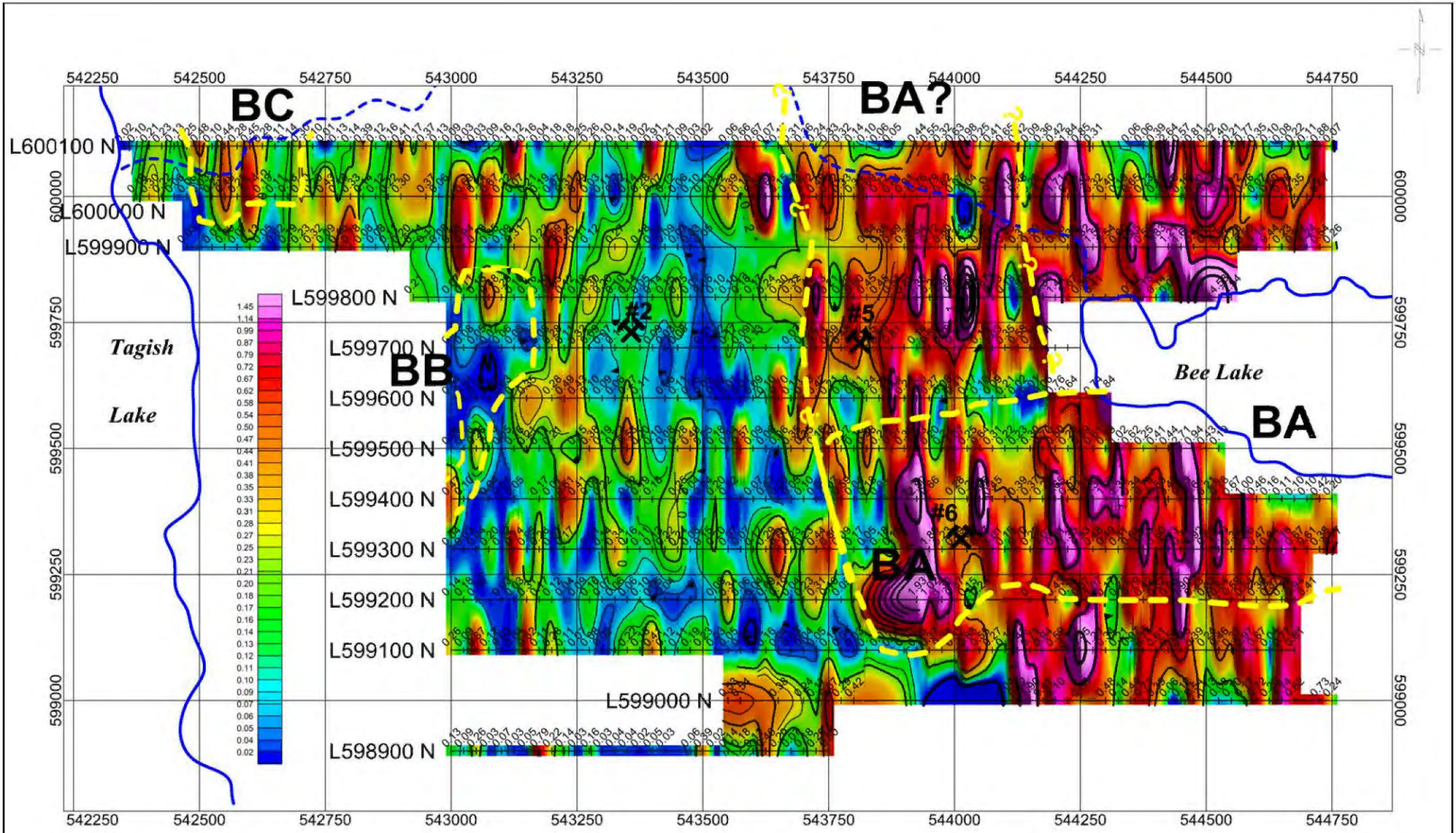
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
THORIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-13

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

Geotronics Consulting Inc
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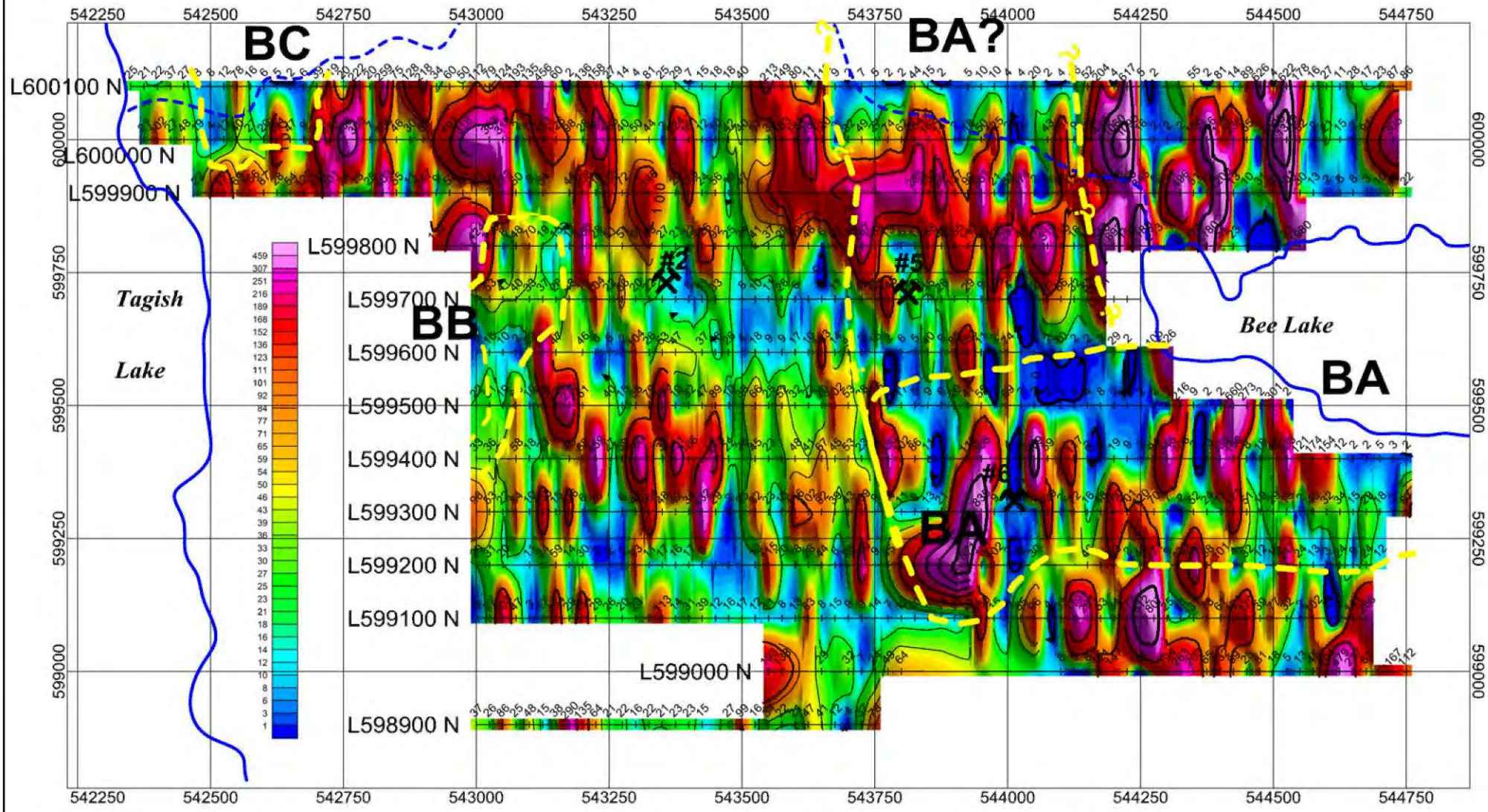
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
THORIUM-POTASSIUM RATIO (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-16



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sample #6 - 5.21 g/t gold

Bee Creek
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Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

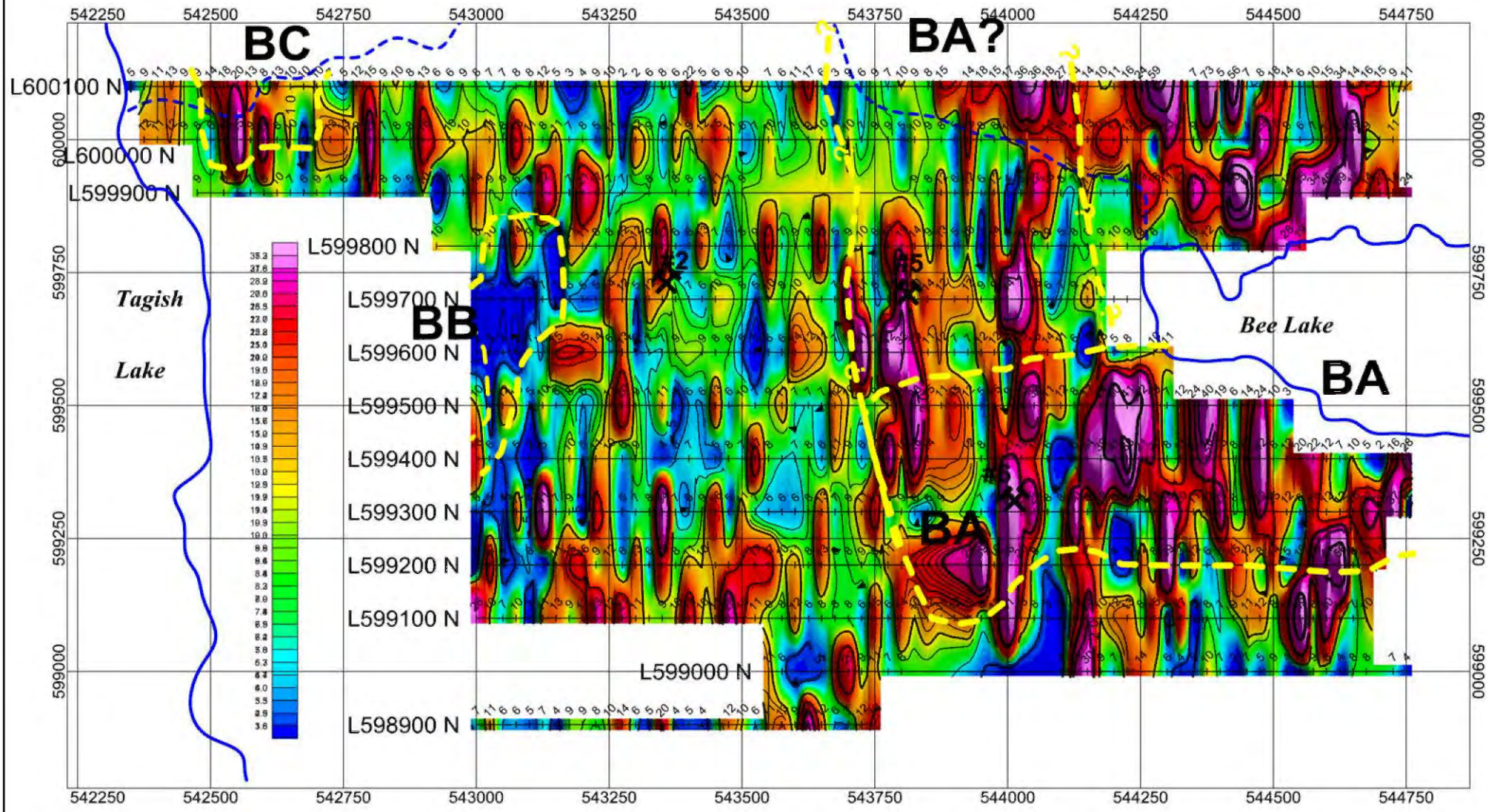
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
TITANIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-14

Geotronics Consulting Inc
Surrey B.C.



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sample #6 - 5.21 g/t gold

Bee Creek
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Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6)
eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

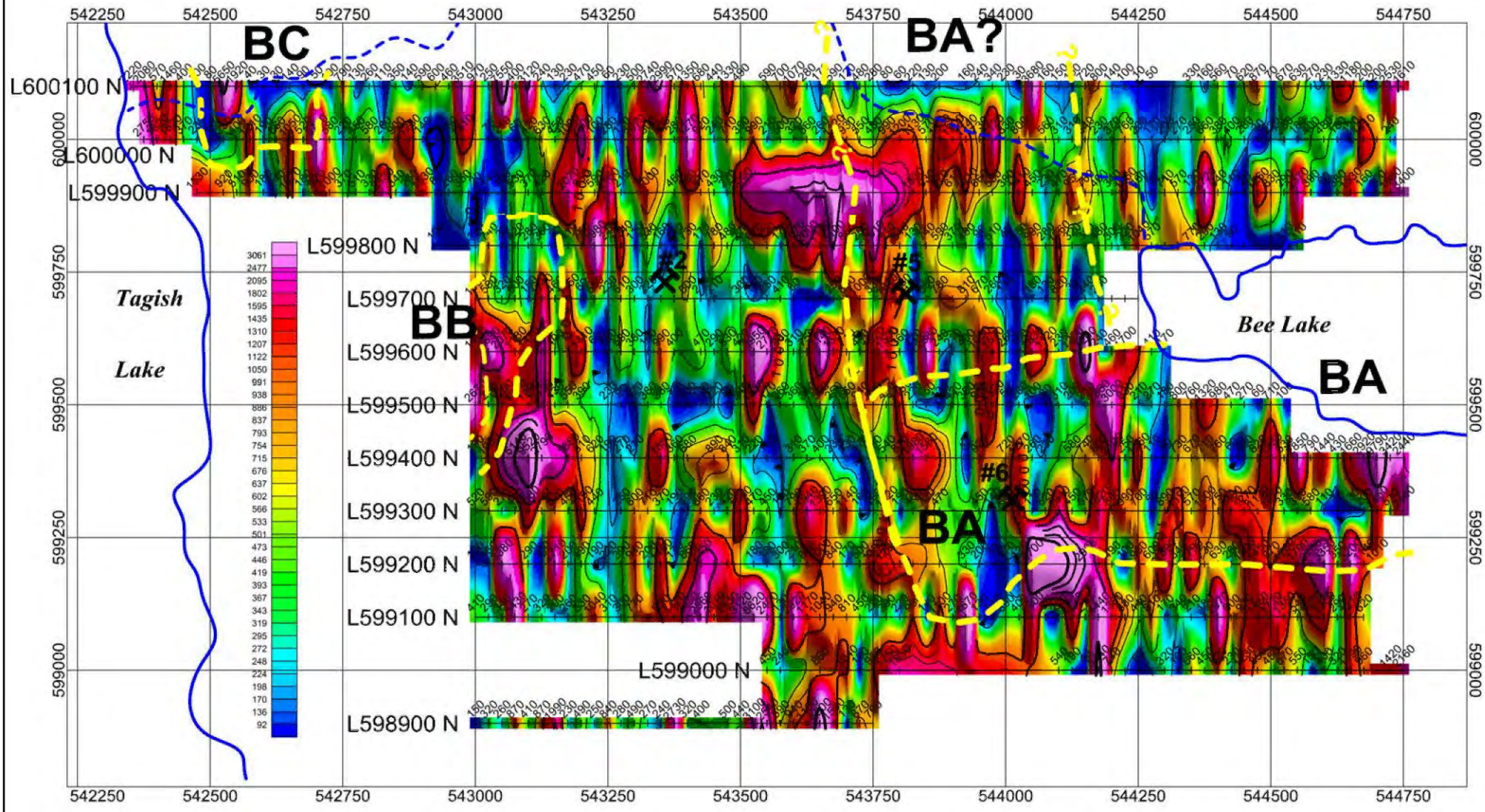
MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
URANIUM (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-17

Geotronics Consulting Inc
Surrey B.C.



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Bee Creek
*Note: creek and lake boundaries are approximate

Dates Samples Picked Up:
September 2011

Soils Tested By:
SGS Laboratories, Toronto, Ontario

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 8. Grid northings and line numbers are missing 1st number (6) eg. line 599500N is UTM northing 6599500

250 0 250
(meters)

MOMENTUM MINERALS INC.

LLEWELLYN PROPERTY
BEE LAKE GRID
TAGISH LAKE AREA, ATLIN MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
ZINC (ppb)

DRAWN BY:	JOB NO:	NTS:	DATE:	FIG NO:
CAM	11-04	104M/08,09,10	MAR '12	GC-15

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Surrey B.C.