
Devex Limited

Nabarlek Project

Target GC-11 2015 Work Program Review

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Executive Summary

Four RC holes completed in 2015 targetted the “GC-11” geochemical anomaly, reporting results including 2m @ 2354ppm U from 135m downhole in NAR7537 and 5m @ 1065ppm U from 169m downhole in NAR7535, both hosted in dolerite, in addition to a strong “unconformity uranium style” alteration halo on the sandstone/basement unconformity in hole . This document briefly reviews the original target criteria, and then the basis for the alteration model.

GC-11 was identified as the 5th ranked target in a review based on all the available multi-element assay data and SWIR spectral data available in the Nabarlek Project database. The review indicated GC-11 was a strong Li and V/Sc anomaly based on end of hole data from the generally shallow (generally less than 20m) RAB/AC drilling through the area. GC-11 was ranked as a 3 (in a scale with 1 high) and considered as a MEDIAL alteration signature. Given it was (broadly) along strike from N147 and GC-26 it was prioritised for drilling in 2015, initially with three holes, with a further hole drilled based on the preliminary scintillometer and pXRF results. Note GC-26 was the 4th ranked target.

Uranium and pathfinder mineralisation and anomalism define two mineralised horizons hosted in dolerite, probably running parallel to the basal dolerite contact.

NAR 7534 intersected a zone of strong silicification located at the top of a zone of illite-chlorite alteration at the base of the sandstone, and extending into the basement, with short wavelength chlorite spectra as well as sericite spectra changing from short wavelength (acidic) above the basal contact to a longer wavelength below the contact. The combined Mg content and spectral minerals indicate alteration is developed in the basal sandstone, and that a MEDIAL to PROXIMAL alteration cell is developed on the unconformity within hole NAR7534 but does not extend to the adjacent NAR7536.

Two targets for follow-up are indicated by the 2015 drill results, one a possible N147 equivalent, the second a possible completely new “unconformity style” body. The latter target has the greater upside, but the former target has more chance of intersecting at least another NAR7535/ 7537 type intersection. Possible hole positions are discussed in the text.

Contents

1	Introduction.....	4
2	the GC-11 Target.....	5
3	2015 drill Results.....	6
3.1	Overview	6
3.2	Uranium in the dolerite- NAR7535 (and 7537).....	7
3.3	Alteration on the sandstone/ basement contact	8
4	Discussion and recommendations	9
5	References.....	10

Attached Digital Data Sets

1 INTRODUCTION

LithosX Mineral Exploration Consultants have been requested by Devex Resources Limited to review the original target criteria and the results of the drilling completed in late 2015 over the GC-11 target (shown in Figure One).

The review is based on the original target generation report and the drill hole geochemical and spectral dataset.

Four RC holes completed in 2015 targetted the “GC-11” geochemical anomaly, generated in the 2014/2015 exploration program, which reported results including 2m @ 2354ppm U from 135m downhole in NAR7537 and 5m @ 1065ppm U from 169m downhole in NAR7535, both hosted in dolerite, in addition to a strong “unconformity uranium style” alteration halo on the sandstone/ basement unconformity in hole NAR7534. These results were presented in the Uranium Equities Limited (“UEQ”, the precursor company to Devex) ASX announcement dated 7/10/2015.

Brendan Bradley of Devex has requested the author review the basis of the target, and the results, especially the basis for the “alteration anomaly” in NAR7534.



Figure 1:- Nabarlek Project, location of 2015 drilling and prospects

Figure One. Project Location and tenements, showing the GC-11 Prospect Location. Taken from the UEQ ASX announcement, 7/10/2015

2 THE GC-11 TARGET

The GC-11 target was generated through a target generation program completed in 2014, utilising a detailed review of the drill hole multi-element and spectral database available at that time, in addition to spectral data measured from 2014 UEQ and other historical drilling, and Hylogger spectral data captured by the NTGS using their “Hylogger” spectral tool. The geochemistry and spectral data was filtered and reviewed by Scott Halley (Halley, 2014), and key geochemical and spectral criteria identified.

These datasets and criteria were then used by McIntyre (2014) to generate a suite of ranked exploration targets, as documented in McIntyre, 2014. In addition to ranking the targets, the geochemical and spectral criteria are grouped as either PROXIMAL, MEDIAL or DISTAL indicators of mineralisation.

Halley notes that the detectable halo around a Narbalek type deposit would include:

- MgO > 15% (representing strong chlorite alteration, and in particular, the chlorite mineral “sудоite”);
- Li > 100ppm;
- V/Sc > 10;
- A small core of phengite (2200 wavelength > 2210nm) sitting in a broad zone of muscovite (< 2200nm); and
- Mg-rich chlorite (2250nm wavelength < 2246nm).

The DISTAL alteration would include a muscovitic sericite and Na depletion, typical of stripping of basement by strong acid fluids. The sericite would have 2200nm wavelength around or less than 2200nm.

Geochemical pathfinders include Bi and Pb (very PROXIMAL to ORE), Mo (a PROXIMAL indicator) and Li and V as MEDIAL indicators.

GC-11 was identified as a strong Li and V/Sc anomaly based on end of hole data from the generally shallow (generally less than 20m) RAB/AC drilling through the area. GC-11 was ranked as a 3 (in a scale with 1 high) and considered as a MEDIAL alteration signature. Given it was (broadly) along strike from N147 and GC-26 it was prioritised for drilling in 2015, initially with three holes, with a further hole drilled based on the preliminary scintillometer and pXRF results.

Incidentally the highest ranked target in this exercise was GC-59 (along the Stevens Fault) with a ranking of 1.5. There were a further four targets ranked higher, including GC-26 at 2.5, which was drilled with no significant results (although the geochem indicated high Li and Mg were developed, but not high V div Sc values).

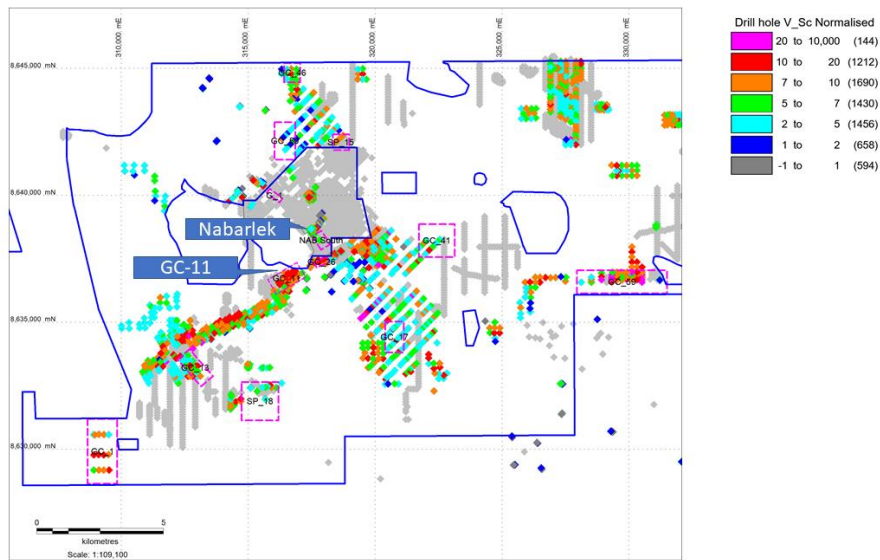


Figure Two. Nabarlek Project V/Sc patterns and the GC-11 Target

3 2015 DRILL RESULTS

3.1 Overview

Four drill holes were completed, as shown in Figures One and Three.

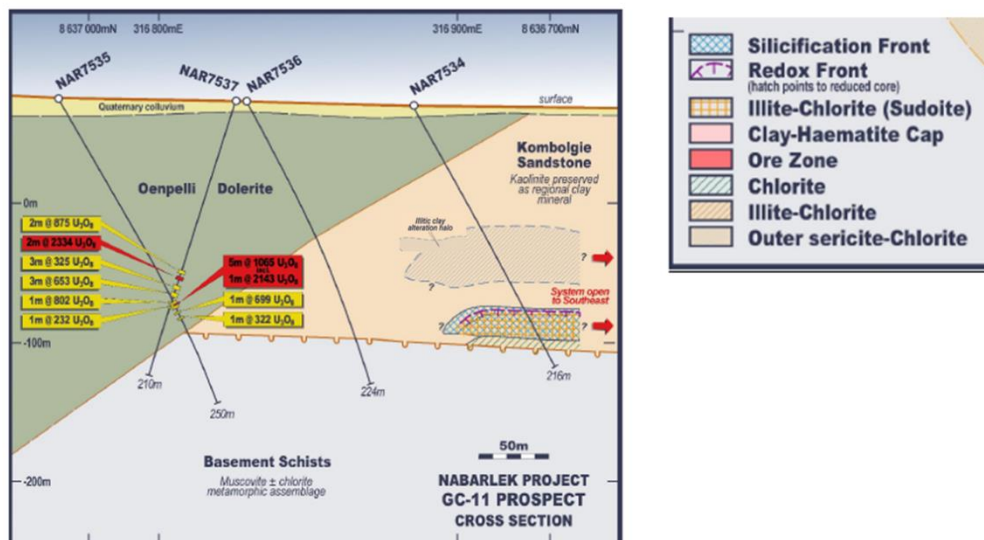


Figure Three. GC-11 2015 drilling (from ASX announcement 7/10/2015)

Data collected included:

- Onsite scintillometer readings;
- Onsite pXRF assays- on 4m composites or at 1m around mineralisation (based on the scint readings);
- Chemical assays (including 4 acid) on combinations of 2m, 4m and single metre composites. Note that Intervals assayed selected from anomalous pXRF, and many intervals are not assayed;
- UEQ assay suite included U, Pb, Ag, Al, As, Ca, Cu, K, Li, Mg, Mo, Na, Sb, Sc, Th, Ti, V, Zr by a 4 acid digest;
- Pb isotopes and Bi around U mineralisation;
- ASD spectral data- on 1m intervals. Looking at the fields in the spreadsheet this data has been processed by Scott Halley and he has selected a mineralogy, sericite composition and chlorite composition from the otherwise unfiltered TSG interpretation of the ASD spectral responses. Scott has not done an interpretation of this data however.

Various Figures are presented below, discussed by the anomaly/ mineralisation type.

3.2 Uranium in the dolerite- NAR7535 (and 7537)

Figures showing the downhole geochemistry for NAR7535 (see Figure Three for the cross section) are shown in Figures Four (U and pathfinders) and Five (major elements). Note some Figures are at A3 size at rear of document.

Figure Four shows strong U mineralisation hosted in dolerite close to the basal contact (in this case where a tiny wedge of Kombolgie is preserved above basement) and is associated with strong chlorite alteration and anomalous Pb, Bi and Li, and a V/Sc ratio just approaching 10.

An initial look at the cross section suggests the mineralisation (the high grades in NAR7535 and 7537) is steeply dipping, probably to the northwest. However, the base of sandstone as logged in NAT7537 (and supported by the pXRF chemistry) is at 165m, compared to 193m in the nearly adjacent NAR7535, suggesting there a fault offset between the two drill holes. Note there is a weak U anomaly in NAR7536 close to the base of the dolerite sill, which could suggest mineralisation is part of a lode sub-parallel to the dolerite contact.

There is a strong second zone of pathfinder anomalism (Pb, Ag, As, Bi, Mo, Li and V/Sc) at around 63 to 68m- this also has anomalous U to 120ppm. This looks like a PROXIMAL intersection, but on a separate lode structure to the main intersection. Note a possible correlative in NAR7537 at around 20m, with Bi, Mo and 79ppm U. If this is a correlative this would also suggest a dip sub-parallel to the dyke contacts, as opposed to the apparent lode orientation for the main intersection.

3.3 Alteration on the sandstone/ basement contact

Figures showing the downhole geochemistry for NAR7534 (see Figure Three for the cross section) are shown in Figures Six (U and pathfinders), Seven (major elements) and Eight (spectral data patterns).

Figures showing the same data for NAR7536, the immediately adjacent drill hole but with no alteration or pathfinders in the sandstone, are shown in Figures Nine, Ten and Eleven.

NAR 7534 intersected the base of the dolerite at around 50m, then drilled through sandstone to 204m and finished in basement at 216m. A zone of strong silicification was reported during the drilling (drill rates dropped to around 1-2 metres per hour from memory) and is noted in the logging.

The spectral data highlight two zones of illite- chlorite alteration within the sandstone:

1. An upper zone of longish wavelength sericite and intermediate wavelength chlorite. Note this is not observed in NAR7536; and
2. At the unconformity a second zone of illite- chlorite alteration, but here supported by high (around 2%) Mg chemistry (in the sandstone) and short wavelength chlorite spectra as well as sericite spectra changing from short wavelength (acidic) above the basal contact to a longer wavelength below the contact. Again, this is not observed in NAR7536; and
3. In between the two illite zones Kaolinite is recorded, probably background clay.

NAR7536 records illite- chlorite, but in or near the overlying dolerite or in the basement. Within the sandstone the spectral data is either null, or indicating kaolinite is present.

The combined Mg content and spectral minerals indicate alteration is developed in the basal sandstone, and that a MEDIAL to PROXIMAL alteration cell is developed on the unconformity within hole NAR7534, but does not extend to the adjacent NAR7536.

4 DISCUSSION AND RECOMMENDATIONS

Two targets for follow-up are indicated by the 2015 drill results, one a possible N147 equivalent, the second a possible completely new “unconformity style” body. The latter target has the greater upside, but the former target has more chance of intersecting at least another NAR7535/ 7537 type intersection. These are drawn in Figure Twelve.

The results from NAR7535 and 7537 have clearly defined one, and possibly two, stacked U mineralised systems within the dolerite. Based on the original target (and the drill line was drilled on the north east end of the GC-11 Target), the GC-11 alteration extends for at least 500m to the south west. Note there is a historic drill hole at about this position (NAA6744) with anomalous U in dolerite (192ppm U at 10m, EOH).

I would expect to intersect one or more “N147” style lodes along this structure. The coincidence of the apparent late fault offsetting the dolerite between holes NAR7535 and 7537 is probably just that, and I would recommend drilling angled to the south east, similar to NAR7535. If the data/ structures do not hang together then drilling at a high angle to this, targeting the late structure, may then be warranted. If one hole is proposed, it should probably be drilled under NAA6744. If there is a significant intersection you then have a 500m strike bounded by U hits in drilling for future targeting.

The results from NAR7534 contain the alteration characteristics from a text book “unconformity uranium” deposit. The issues with this are:

1. Depth of cover (but any new system in the Nabarlek area will be covered);
2. The alteration is effectively open to north east, south east and south west;
3. The nearest deep hole is NARD6014 (430m to the east south east), unconformity around 168m, with a sericite chlorite altered basement, but no proximal indicators. Note there is no spectral data below 130m; and then NARD6015 (660m to the south east), but with no recorded logging, assays or spectral data in the current database; and
4. There are no indicators to a possible strike direction to the source of the alteration in NAR7534.

While I propose a late fault between NAR7535 and 7537, spatially related to the dolerite hosted mineralisation and at a broadly low angle to the drill line, if this was related to the unconformity mineralisation I would expect alteration in NAR7536.

In the absence of any clear controlling feature in the geophysical data ideally a pattern of three holes is proposed, one 100m SE along the line from NAR7534, and two holes one each 125m to the NE and SW perpendicular to the drill line. If only one hole is proposed, drill the 100m step-back on NAR7534. Allow budget for some reasonable amount of drilling into the basement, not just aiming for the unconformity (say +50m of basement, and if there is evidence of alteration in the on-site data (pXRF, scintillometer, the deeper the better?).

Proposed Follow-up

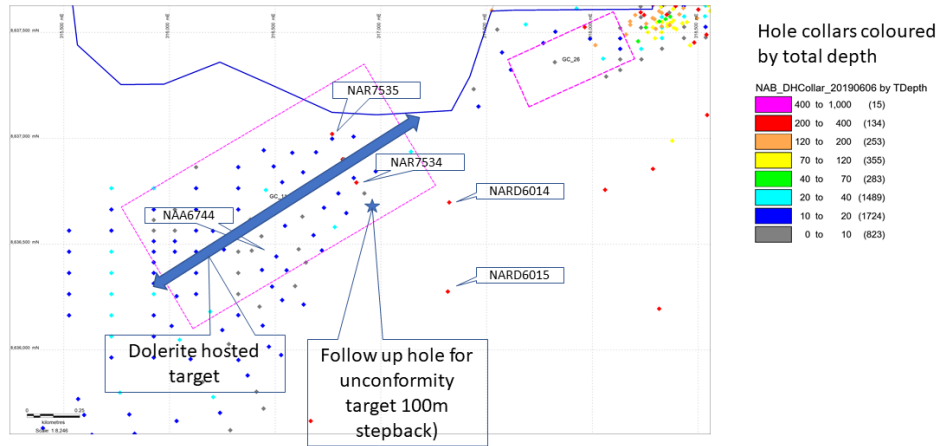


Figure Twelve. Follow-up options, Target GC-11

5 REFERENCES

McIntyre, J., 2014a. Memorandum titled "Spectral Data- Results" dated 10/11/2014. Unpublished memorandum to Uranium Equities Limited.

Halley, S., 2014. Powerpoint presentation file titled "Narbalek Geochem_ASD". Unpublished document for Uranium Equities Limited.

Results: NAR7535 (mineralisation in the dolerite- u and pathfinders)

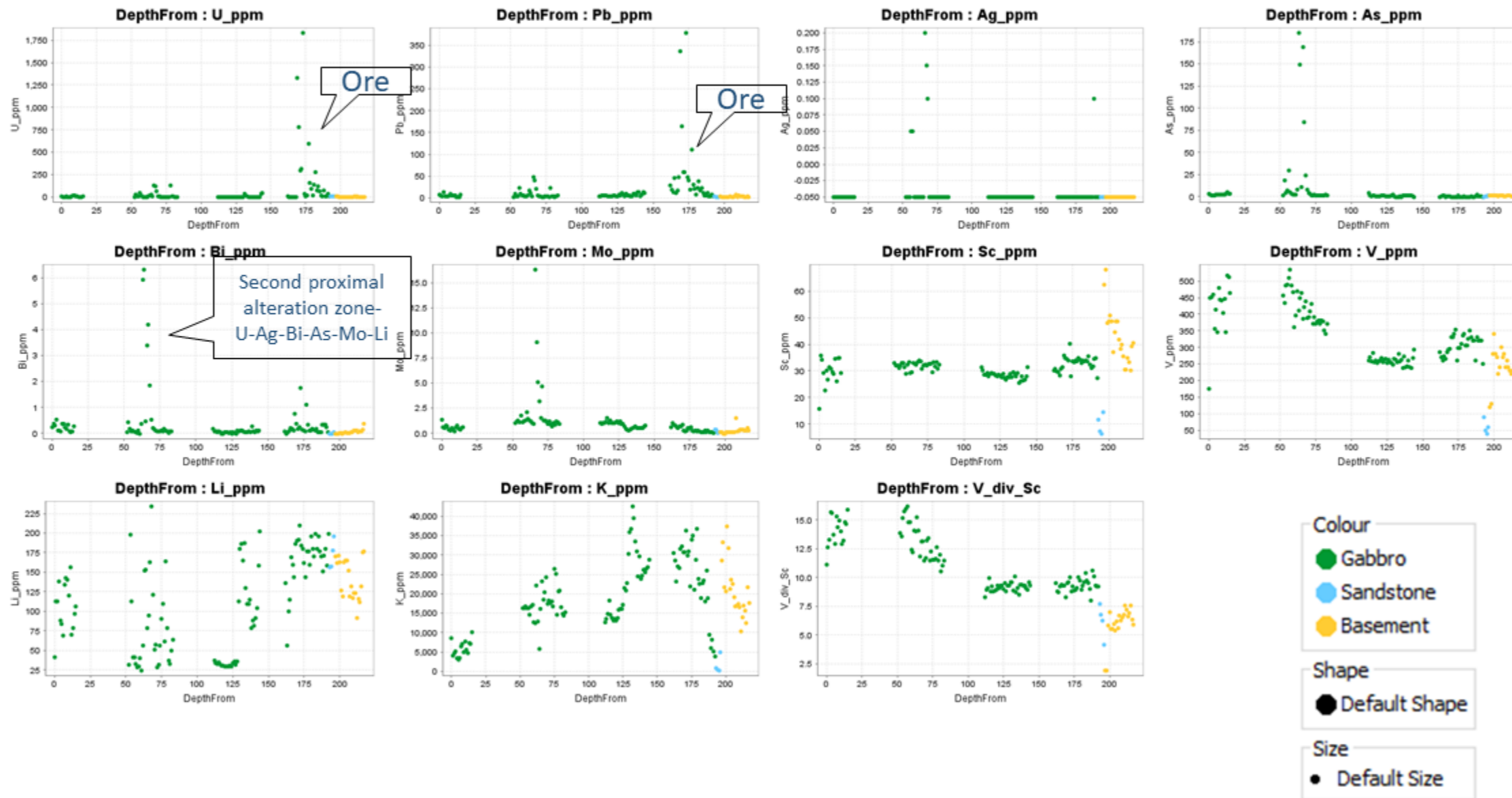


Figure Four. . NAT7535 with U and pathfinder elements plotted down hole. Colours indicate gross lithology

Results: NAR7535 (mineralisation in the dolerite- Lith and alteration)

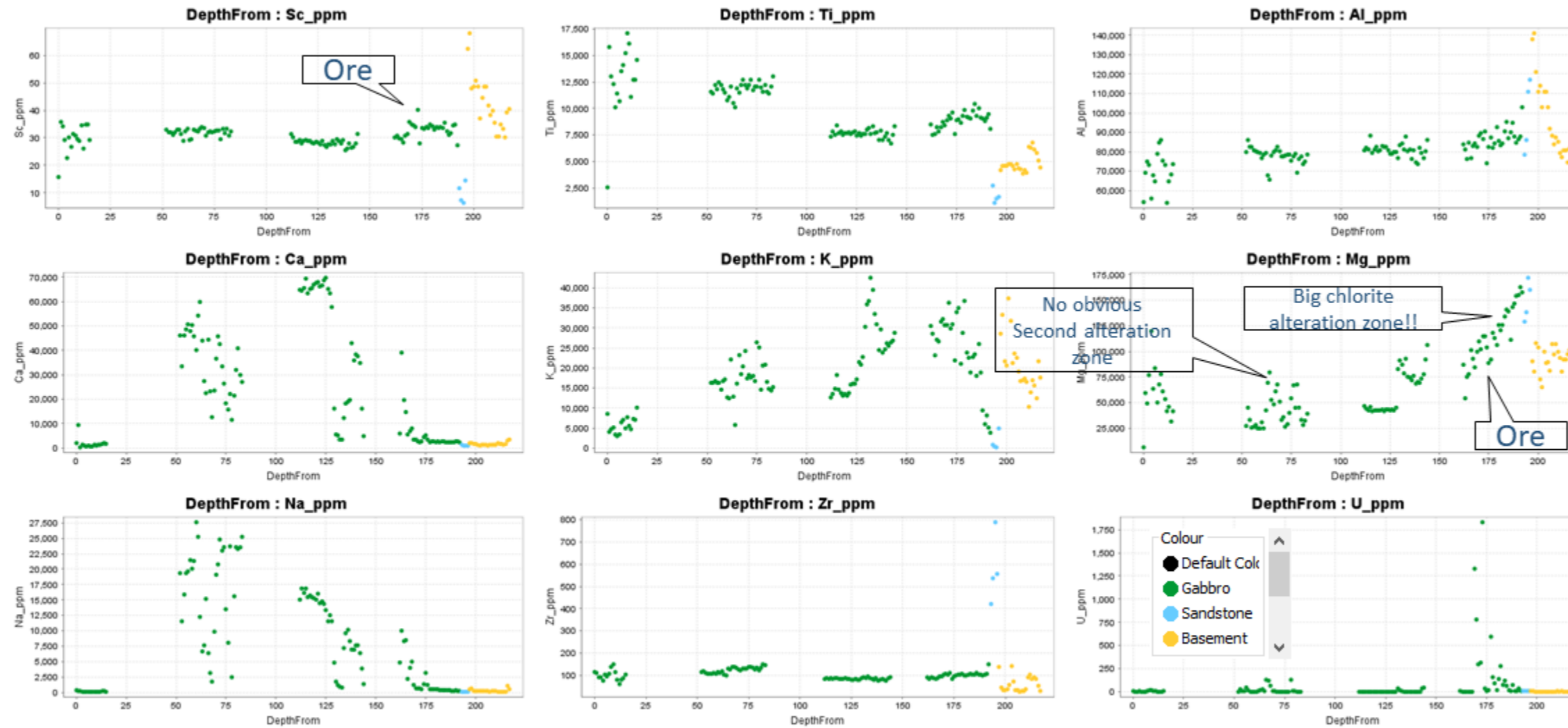


Figure Five. NAT7535 with major and litho- elements plotted down hole. Colours indicate gross lithology

Results: NAR7534 (alteration on the unconformity- pathfinders)

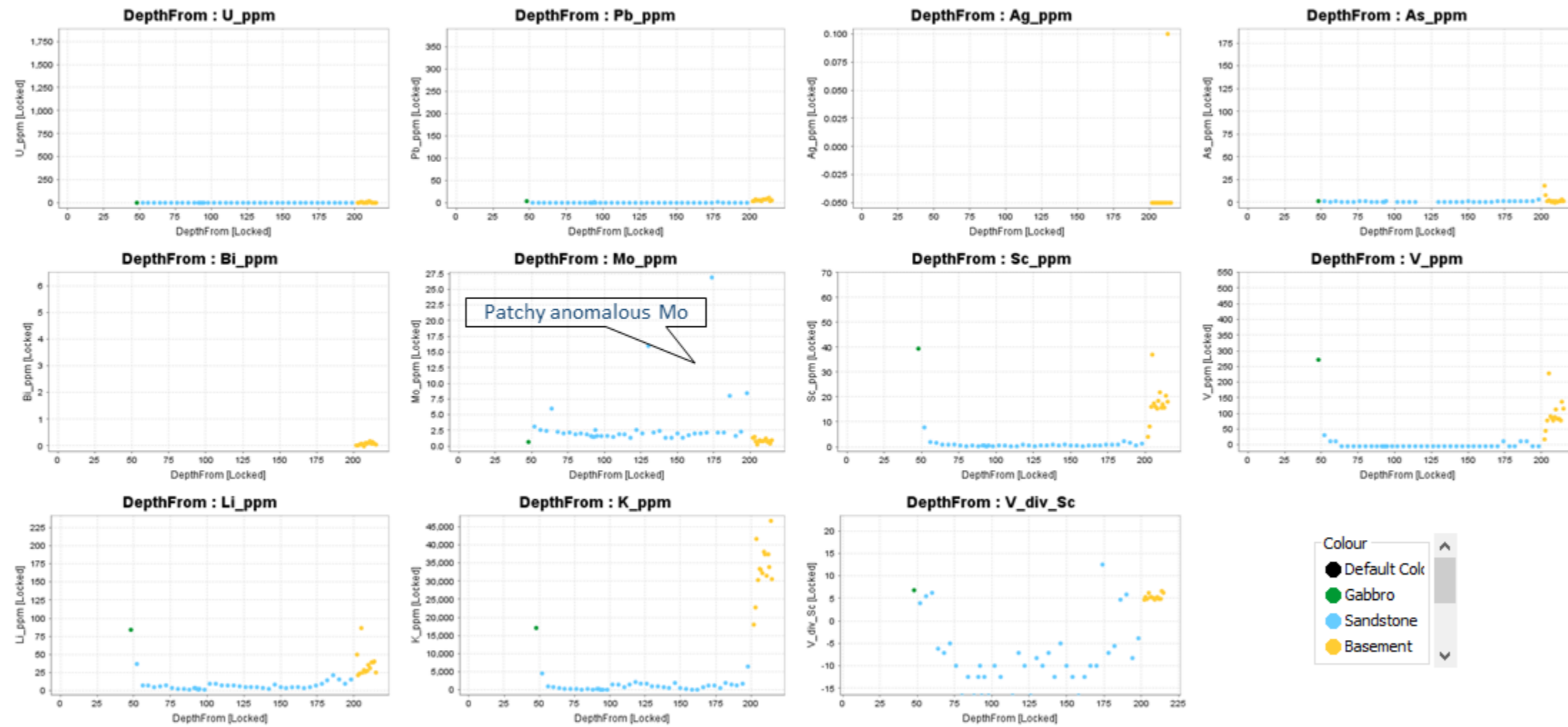


Figure Six. NAT7534 with U and pathfinder elements plotted down hole. Colours indicate gross lithology

Results: NAR7534 (alteration on the unconformity- lithology)

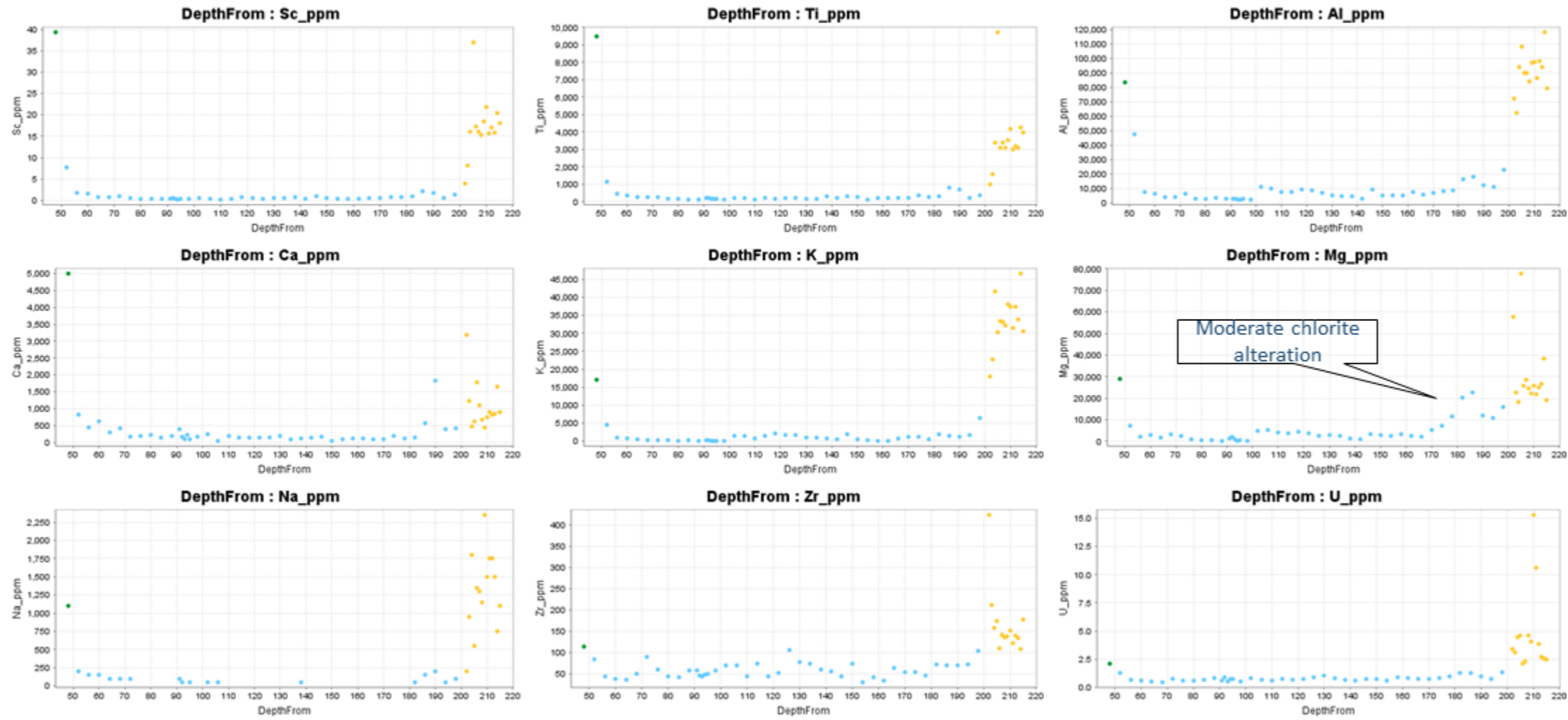


Figure Seven. NAT7534 with major and litho- elements plotted down hole. Colours indicate gross lithology

Results: NAR7534 (alteration on the unconformity- spectral data)

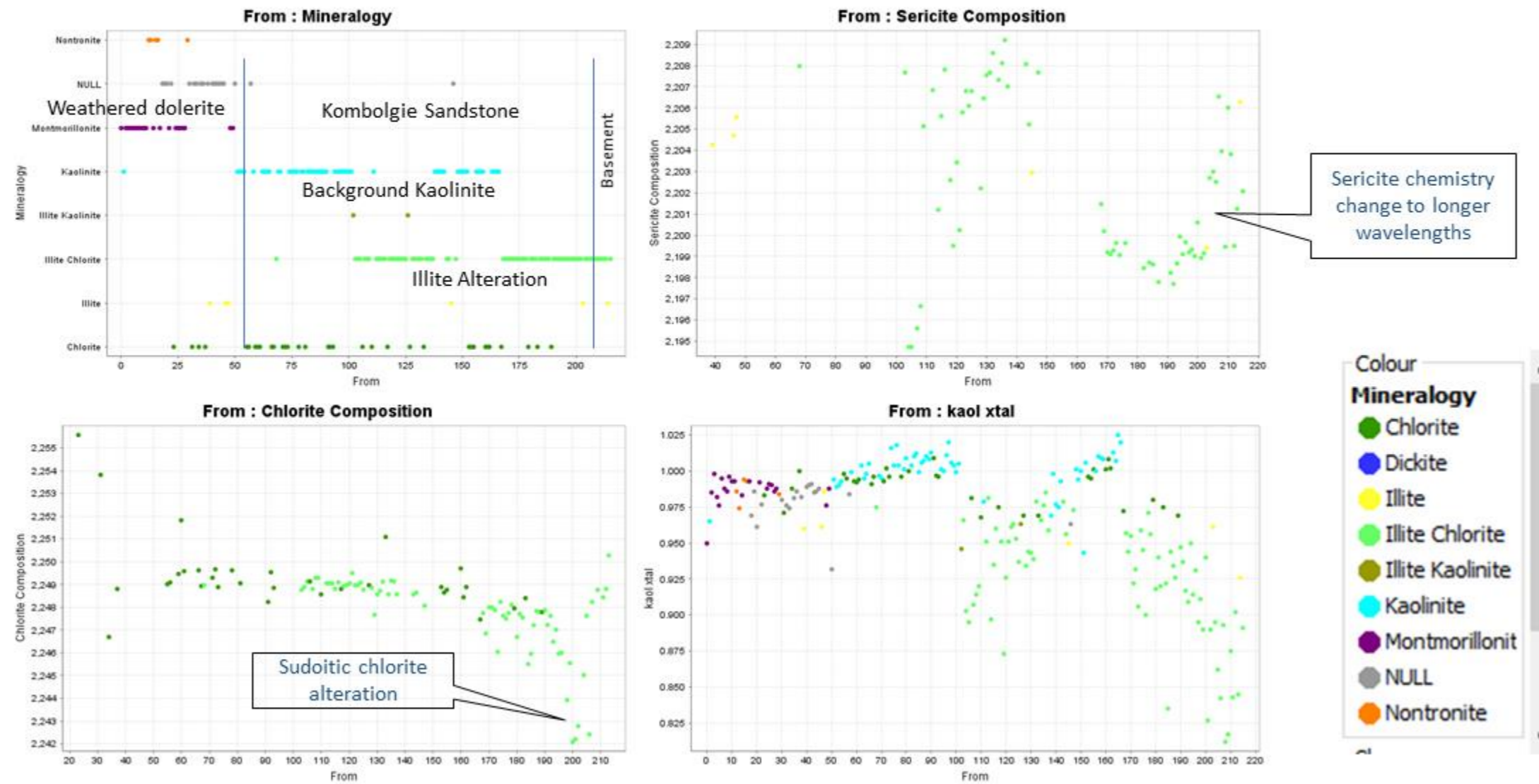
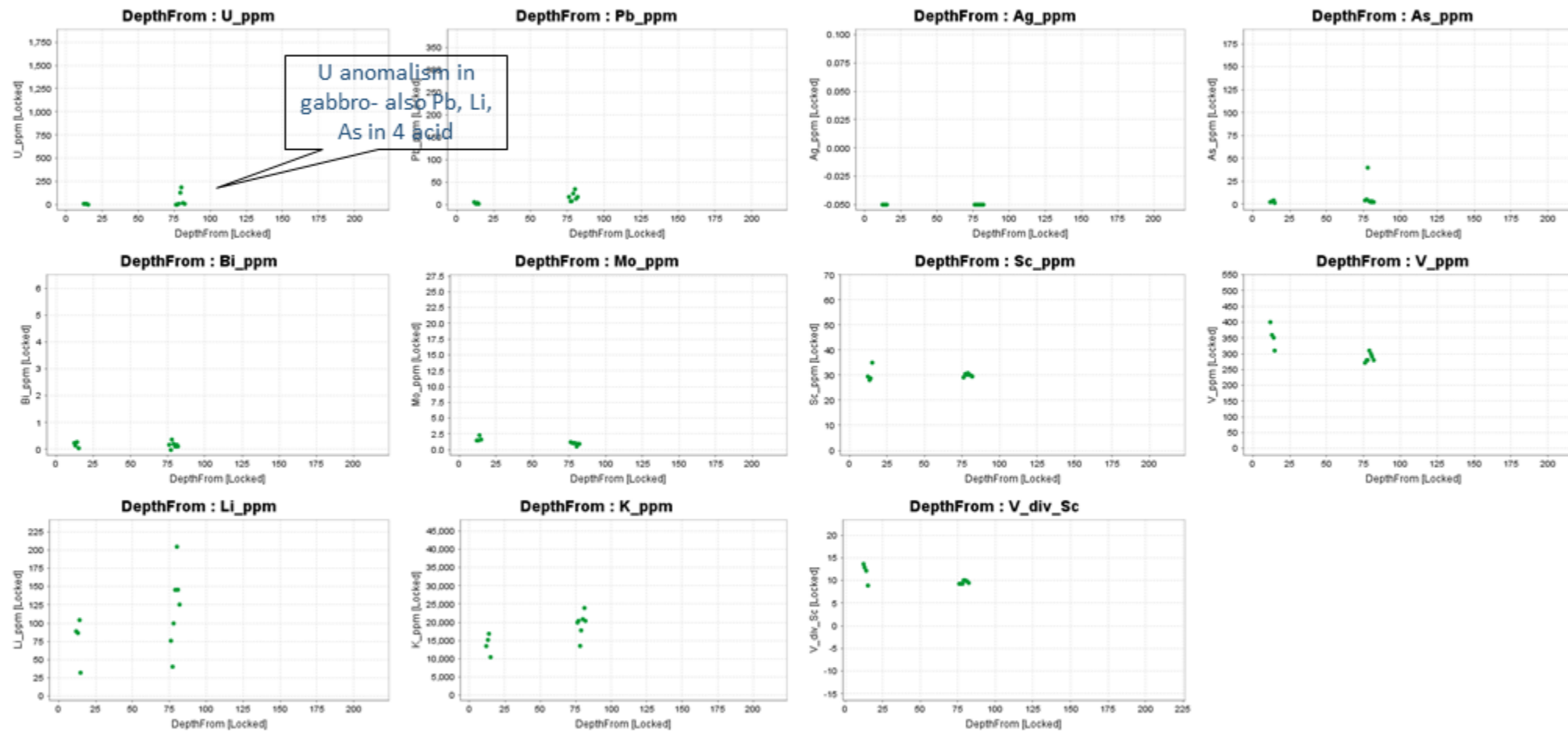


Figure Eight. NAT7534 with spectral data plotted down hole.

Results: NAR7536 (sandstone, no alteration- pathfinders)



NB: these are the only 4 acid assays

Figure Nine. NAT7536 with U and pathfinder elements plotted down hole. Colours indicate gross lithology

Results: NAR7536 (sandstone, no alteration- pathfinders)

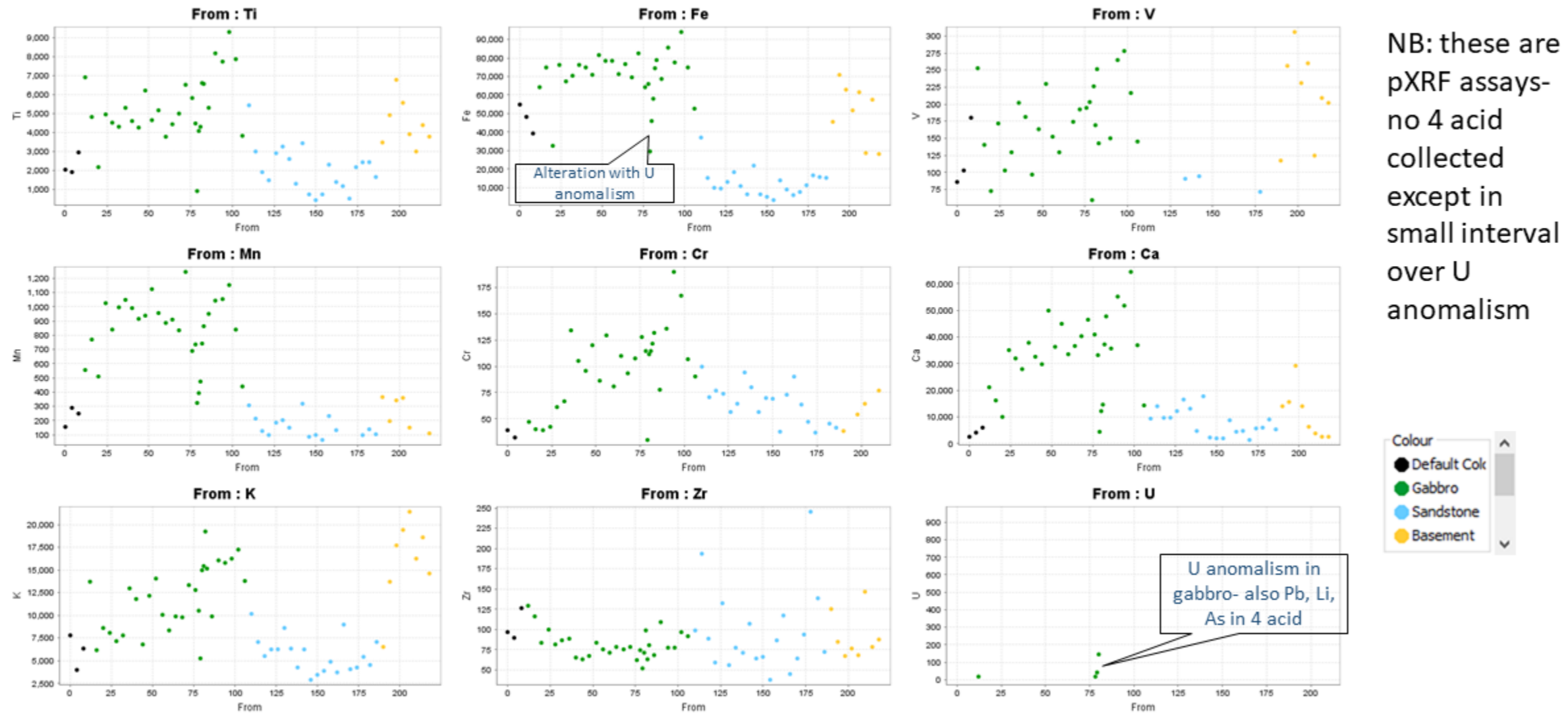


Figure Ten. NAT7536 with major and litho- elements plotted down hole. Colours indicate gross lithology

Results: NAR7536 (sandstone, no alteration- spectral)

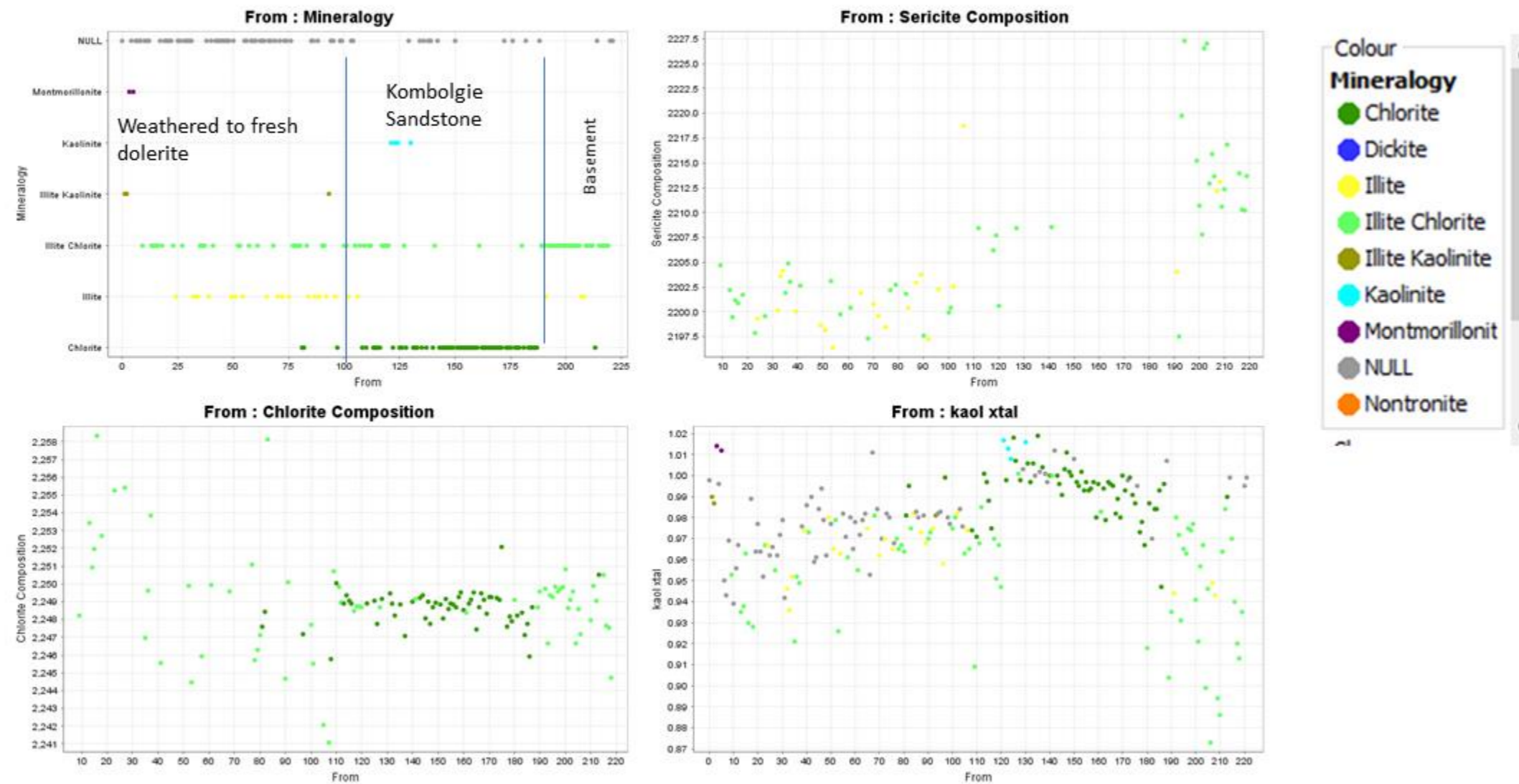


Figure Eleven. NAT7536 with spectral data plotted down hole.