NARROWS BREAK DRILLING

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GEOSCIENCE ASSESSMENT

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Executive Summary

Drilling and trenching on the Narrows Break zone has significantly increased the overall inferred resource in this region.

- South Zone, from surface to –260': 38,450 tons at 0.29 oz/t over 7.9'. Newfields had calculated 24,300 tons at 0.17 oz/t for the same zone. The geological potential of the area is 102,925 tons at 0.24 oz/t.
- South Zone, from –260' to –800': 56,500 tons at 0.26 oz/t over 5.0'.
- South Zone, from –900' to –1050': 19,000 tons at 0.44 oz/t over 5.1'. The geological potential from –900' to –1300' is 256,000 tons at 0.29 oz/t over 5.0'.
- North Zone, from surface to 80' below surface : 6,308 tons at 0.21 oz/t over 6.7'.
- North Zone, from –300' to – 800': 98,400 tons at 0.26 oz/t over 6.8'.
- Below the thrust the geological potential of the Narrows Break is 3,400,000 tons at 0.30 oz/t over 5.0'.

An **engineering feasibility** study is needed on these zones before further drilling is recommended.

Additional drilling programs are **strongly recommended** to uprade and expand the existing, inferred resource.

Narrows Break Report

Introduction:

The first phase of an exploration program on the "Narrows Break", consisting of trenching and drilling, has been completed.

A brief geological overview of the "Narrows Break" has been completed for Kinross by John Reddick with excerpts attached. His background work resulted in a report on this zone, recommending that 11 deep holes (sub 1000' vertical, Fig. 1, 1A and 2) be drilled. The targets are resource blocks which were delineated by underground development at the Lakeshore Mine in the 1930's (281,000 tons @ 0.20) and by deep, surface, drill holes completed by Newfields Minerals in 1987/88 (100,000 tons @ 0.25 see Fig. 2).

The Macassa exploration department recommended that these holes be drilled in addition to a series of shallower holes. The shallower holes would target a resource block that was calculated at 275,000 tons at 0.18 (See Fig. 3), by Newfields drilling (1987/88). These 9 shallower holes would follow up on some of the better drill results (Fig. 4). The main targets would be around a near-surface, potentially open pitable zone, centred on two holes that graded 0.33/11.0' C.L. (core length) and 0.30/11.3 C.L. A deeper zone, based on a drill hole intersection at –700' which assayed 0.39/8.2' C.L. (See Fig. 4), would also be examined.

It was decided that a phased exploration program would be the best approach to examine these targets. Phase #1 would entail the drilling of 3 shallow holes in the proximity of the 0.33/11.0' C.L. intersection (98-14,15,16), one deeper hole 100' west of the 0.39/8.2' C.L. intersection (98-19) and 5 shallow exploration holes east and west of the known resource, at 500' centres (98-23, 24, 25, 26, 27 - See Fig. 5). Prior to the drilling, compilation of all previous data would be required. Subsequently, the various survey grids would be reconciled with all data converted to the Macassa grid system. Following this grid transformation all of the drill holes to the north of the '04/Main Break would be entered into a database in Datamine. When all of the information had been compiled a 5000' drilling program and $5000.00 trenching program would proceed.

Results:

It was decided that additional footage would be utilized in 5 shallow drill holes (DH-98-12, 18, 28, 32, 33) and one deep hole (DH-98-27). The target for DH-98-27 was east of NT-42, which had an intersection of 0.49/17.9' C.L. at –700' (See Fig. 6). One exploration hole, DH-98-24, was cancelled due to the lack of any promising results from an extensive trench across the surface expression of the drill holes intended target. The extra footage from this hole was used in DH-98-33 and the extension of DH-98-19.

The holes in the resource block proper have had the following noted. The mineralization in the shallower holes is generally more dispersed and wider in the greywacke. The ore is typically a silicified, albitized, bleached unit with fine disseminated pyrite. Of note is the fact that very little pyrite (<1%) can still lead to high-grade assays. Another common feature is that there is very little quartz veining in this portion of the Narrows Break Zone. However, a very small percentage of quartz (such as rare 1/16"-1/8" quartz stringers) greatly increases the grade attained. A structural relationship is evident, with one particularily strong shear zone containing a red mineral, likely anhydrite, which is recognized in most holes. Massive veins of quartz-albite-ankerite are present, however assays of these features do not always come back as high-grade.

The two deeper holes, though both at a common elevation, encountered quite different mineralization. Hole 19 was drilled originally at an azimuth of 333° and at a dip of -66°. The hole did not intersect the zone at the targeted depth due to extensive deviation, as indicated by the Sperry-Sun Multishot tests (358° azimuth and -70° dip at 900 ft.). The hole was extended to 1250 ft. and intersected silicified bleached zones with 2-8% of fine disseminated pyrite and multiple visible gold nests. The mineralization in this hole, typical of the rest of the shallow holes, is not lithologically restricted. Hole 98-27, on the other hand, intersected a silicified, bleached zone with 5% pyrite that is strictly limited to felsic syenite.

The following is a list of findings realized through compilation of previous work:

1.) The '05 Break zone is interpreted to be the same as the 'Narrows Break'.
2.) No surface sampling was completed previously.
3.) Survey problems were encountered when comparing hole locations supplied on plan map and actual positions observed in the field.
4.) Hole M88-7 and M88-2 are plotted incorrectly on the long section. The importance of this is that these holes actually plot in the area of the fault gap. It should be noted that both holes have anomalous assays (0.15/9.0' with V.G. and 0.20/1.3' respectively). Based on these anomalous assays, the fault gap orientation is plunging to the West.
5.) There is no assay information for a drift from Lakeshore Mine on the Narrows Break at the 5450 level. This drift was targetting a hole which ran 1.59/2.5'.
6.) No quartz was observed at the position of the historically named 'Narrows Break' during trenching or mapping by Kinross or by Newfields during their drilling program. The zone that is being focussed on is more correctly called the 'Powderhouse Zone'.
7.) The logs for Macassa holes LS88-13, 14 or assays for LS88-15 could not be found. In the case of LS88-15, the core could not be resampled because it was dumped. All of these are deep holes examining the West basin of Kirkland Lake.
8.) Based on the southern offset of the Thrust Fault it is believed that the Narrows Zone does not extend onto the Basin Property as previously thought, but actually stays on Kinross property.

Results :

Drilling:

Four exploration drill holes were collared east and west of the resource block. The two to the west encountered very weak mineralization, while the two eastern holes (98-26, 31B) intersected mineralized zones that had assay values of 0.15/1.2' C.L.and 0.30/2.5' C.L. respectively (Appendix #6). Both deep holes (98-27, 19) intersected excellent mineralization. 98-27 intersected 0.29/23.2' C.L., while hole 19 intersected multiple nests of visible gold.

Nine holes were drilled into the shallow target (above –300', as defined by Newfields Exploration drilling). Two holes were drilled outside of the now defined plunge and outside the resource blocks of Newfields (17 & 28) while 5 of the 7 remaining holes graded better than the resource grade of 0.18 oz/t that Newfields calculated. Of note is the fact that four holes have intersections greater than 0.30 oz/t over mineable widths. Newfields had only two such intersections above –500'. Of particular importance is the width attained in 98-16 (and to a lesser extent 98-14) which intersected 0.32/44.3' C.L. (24.0' H.M.W.) including 0.49/18.3' C.L. The mineralization here fits well with hole 87-29 (0.33/8.0'). It should be noted that the grade increases along the mineralized zones with increasing depth. Refer to Fig. 7 and Fig 8 for a list of drill holes and assay results. Appendix #1 shows the locations of the drill holes. The following is a brief synopsis of each hole. More detail can be found in the corresponding logs.

DDH-98-23

This hole was collared at 35-East section, 400' west of the closest previous drill hole, M88-6. It should be noted that the logs for M88-6 did not have an obvious 'Narrows Break' noted (Appendix #6).

DDH-98-23 was drilled to target the Narrows Break at its projected location approximately 20' south of a porphyry marker horizon and at –150' vertical. A very strong break structure on the hanging-wall contact of this porphyry, with a red, marker, mineral (anhydrite?) was intersected. In the holes drilled within the resource block, 1300' to the East, a structure which controls the mineralization looks identical and is on strike.

In DDH-98-23, associated with this 'break' structure, was 1.7' of silicified, bleached tuff and 4% finely disseminated pyrite at 230.0'-231.7'. A very strong fault precedes this 'break' and is characterized by a 5" silicified zone.

Assays of note : 0.04 oz/t over 2.2' at 39.1'-41.3' in a bleached, pyritic zone; 0.023 oz/t over 2.6' in a bleached zone at 48.8'-51.4'; 0.03 oz/t over 1.0', adjacent to a shear with a 1/8" quartz vein, at 108.4'-109.4'; 0.05 oz/t over 0.8' in a hematized zone at 148.0'-148.8'. These zones are on strike with similar zones in DDH-M88-6.

DDH-98-16

DDH-98-16 was planned to intersect the zone 50' below NT-29 which had an intersection of 0.33 oz/t over 11.0' C.L. Like other holes in the vicinity (87-29, 98-14 and 88-60) DDH-98-16 intersected a wide zone of mineralization. It is thought that this is a local 'blow-out' of the south zone which is consistent up and down the plunge, through all of the rock types.

Assays of note : 0.32 oz/t over 44.3' C.L. (275.7'-320.0'), including 0.49 oz/t over 18.3' C.L. (301.7'-320.0'), at a vertical depth of -200'. 0.16 oz/t 5.7' C.L. (218. 5'-224.2', including 0.44 oz/t over 1.3' C.L., 0.36 oz/t over 1.2' C.L. (254.2'-255.4') and 0.49 oz/t over 1.7' (329.3'-331.0').

All of the mineralized zones that DDH-98-16 encountered are also present in DDH-98-33. In every case though, the grade is lower in DDH-98-33. It is clear that the grade is increasing with depth. A strong break at 290.0' is identical to that found in hole DDH-98-23 and DDH-98-14. The break is characterized by a 2" sericite-chlorite-ankerite zone and what is believed to be anhydrite.

DDH-98-27

DDH-98-27 was drilled to intersect the north zone, 80' east of DDH-88-42 (0.49 oz/t over 17.5' C.L. – 6.5' H.M.W.). This zone was described in the original logs as 'a bleached Basic Syenite with 1% sulphides'. The north zone intersection graded 0.29 oz/t over 23.2' C.L. This zone is entirely confined to a silicified, bleached, felsic syenite along a mylonite which appears to control it. The entire Syenite, from contact to contact is sulphidized, with 5-8% pyrite and assays well throughout.

A number of 2-8'other Felsic Syenite rock units were also noted, however, none were described in the log for 88-42. Of interest is the Porphyry described in 87-24, which hosts the north zone. It is possible that the rock type for this interval is incorrectly identified and may actually be Felsic Syenite.

DDH-98-14

DDH-98-14 was planned to intersect the heart of the widest part of the south zone, as close to surface as possible. Like DDH-98-28 topography played a part in the elevation of the intersection and the original planned intersection could not be precisely attained.

Assays of note : 0.20 oz/t over 20.8' C.L. (16.5' H.M.W.)on the south zone, which includes 0.40 oz/t over 7.8' C.L. (6.2' H.M.W.). The north zone had an intersection of 0.26 oz/t over 2.5' C.L. Two mineralized intervals between the two zones assayed 0.08 oz/t over 1.6' C.L. and 0.05 oz/t over 1.8' C.L.

It should be noted that the dip on the south zone appears to be changing. Here it appears that it is actually dipping to the north. This was unexpected and indicates that our trenching program from 49E to 51E was not extended far enough to the south. On the other hand, the poor result of DDH-88-55 and 56 suggests that 49.5E to 51E is out of the plunge of the zone. A strong break at 240.7'-242.0' is identical in appearance to that found in DDH-98-16 and 23.

DDH-98-18

This hole was drilled to intersect the south zone, midway between 88-60 (0.14/9.0' H.M.W.). It returned a grade of 0.13/5.0 H.M.W. in Tuff and in an Intermediate Dyke. An intersection between the north and south zones graded 0.70/1.9' with nests of V.G., while the north zone graded 0.124/6.7' C.L.

DDH-98-17

This hole was drilled to intersect the south zone 100' down dip of DDH-98-31 (0.12 oz/t over 6.0' H.M.W.), which occurs at approximately –300'.

Assays of note : 0.21 oz/t over 1.0' C.L. on the south zone and 0.04 oz/t over 3.5' C.L. Two mineralized intervals occur between these two zones. 0.10 oz/t over 1.0' C.L. and 0.14 oz/t over 1.0' C.L.

Like DDH-98-28, this hole helps to define the eastern boundary of the resource block and the plunge of it.

DDH-98-28

DDH-98-28 was designed to intersect the south zone at 80' below DDH-88-59 (0.30 oz/t over 11.3' C.L.) and the north zone at a higher elevation. Because of the topographical relief in the area the precise, planned intersection location could not be attained.

This hole serves as an important boundary to the resource block with an intersection of 0.46 oz/t over 1.5' C.L., 100' east of DDH-98-18. This mineralized interval occurs in Basic Syenite. This indicates that **the economic plunge coincides with the Wacke/Basic Syenite contact**. The north zone returned insignificant assays.

DDH-98-26

DDH-98-26 was drilled at 62+50E and approximately 800' east of the resource block and above a fence of Newfields holes, at –300' to –500'. It should be noted that none of these Newfields holes encountered any promising assays.

The purpose of this hole was to test the near surface expression of the zone and determine if it was mineable from surface. There were two pre-existing shallow holes drilled in the 1930's by Teck-Hughes. Hole T2219 had an intersection of 0.08 oz/t over 1.4' 200' to the west of the DDH-98-26 collar. Hole T2220 had intervals of 0.07 oz/t over 1.6' and 0.11 oz/t over 2.0' within 80' of the surface. Both the collars and the drill hole logs of these Teck-Hughes holes could not be found.

Due to results from trenching to the west (trench 'K') of the planned collar location, the collar was moved approximately 100' south.

Assays of note : 0.15 oz/t 1.2' C.L. at 359.0'-360.2' in a hematized zone with a ¾" silicified horizon carrying 4% finely disseminated pyrite.

DDH-98-12

DDH-98-12 was drilled at the same location as DDH-98-15 and was designed to intersect the south zone at –150' and the north zone at –200'. Like DDH-98-15, DDH-98-12 was changed to intersect the zone at a shallower depth. The south zone was intersected at –70' and graded 0.36 oz/t over 5.0' H.M.W. (including 0.55 oz/t over 2.8' C.L.). It is a quartz stringer zone in silicified, sulphide-rich, bleached Basic Syenite, at the contact with the Greywacke and along a fault. The north zone graded 0.10 oz/t over 6.2' C.L. at the north contact of the Basic Syenite and Greywacke.

DDH-98-15

DDH-98-15 was drilled at 49E and was designed to intersect the south zone at –180', 50' east of DDH-87-33 (0.11 oz/t over 9.0' H.M.W.). The actual intersection of 0.19 oz/t over 5.0' H.M.W. (5.8' C.L.) is at –140'. This is because the initial plans were changed so that the zone would be intersected closer to the surface. The zone is characterized by a 4" quartz vein in a 4% pyrite zone on a fault.

Assays of note : 0.17 oz/t over 1.2' C.L. at 175.0'-176.2' on a quartz-albite fault, 0.10 oz/t over 12.1' C.L. at 160.0'-172.1' on a strong fault with associated quartz stringers and sulphides. Two hanging-wall zones assayed 0.17 oz/t over 0.9' C.L. on a ¾" quartz vein and 0.05 oz/t over 2.8' ¼" quartz vein with accompanying sulphides. All of the above zones are in Basic Syenite, with the exception of the 0.05 oz/t over 2.8' C.L.

DDH-98-19

This hole was drilled to intersect the south vein at –800' down-plunge from the 0.39 oz/t over 8.2' C.L. value of DDH-87-35. It was drilled south to north on an azimuth of 333. The Sperry-Sun values indicated that the hole had experienced extreme deviation, with a 25° deviation in azimuth over 900'. It steepend to -70° from -66° which was not expected either. As a result, the hole initially stopped at 1017' but did not intersect the zone. At this time it was determined that another 233' would be added to try and find the zone.

At 1209'-1241.7' the zone was intersected. Multiple nests of fine, visible, gold were observed, however assays were somewhat disappointing. Some assays of note : 0.17 oz/t

over 6.2' C.L. and 0.14 oz/t over 5.5' C.L. (including 0.311 oz/t over 1.5' C.L.). Two very strong fault zones, with a high ankerite component, and hematized breccia fragments of country rock, occur at 809.6'-819.6' and 873.0'-879.0'. These are not the 'Thrust Fault' presented on the long section, but are likely offsetting features nonetheless.

DDH-98-31

This hole was drilled at section 75E (See Appendix #6), just south of the reported 'Narrows Break', on the western arm of the Kirkland Lake Narrows. This was the only location possible for drilling the eastern extrapolation of the zone which should be found at about 200' south of this point. The only other location that was possible was north of the tracks. This location was dropped when it was determined that a rail crossing would have to be built and the northern property boundary delineated with the Basin Property.

The first attempt at this hole cut through 60' of tailings overburden and was at a depth of 165' (@-45°) when the hole was lost. It was determined that this occurred through re-drilling some lost core which caused a wedging-off of the original hole and eventually jammed the rods. The second attempt was in roughly the same location (4'west) and was drilled at -50°. This hole was lost due to the casing glancing off of the bedrock at depth, which caused the casing to snap off. The third attempt, at -50° on an azimuth of 153°, succeeded. The entire hole was in porphyry, with the exception of a diabase unit. This diabase wasn't expected since the only diabase that is intersected along the entire Main Break and Narrows Break is located 200' to the west.

Assays of note : 0.30 oz/t over 2.5' C.L. at 464.4'-467.0'. Several quartz veins, up to 4" wide, were found. It should also be noted that a strong Break is found at 966.6'-968.6'.

DDH-98-25

DDH-98-25 was an exploration hole, designed to intersect the Narrows Break hanging wall structure to the same porphyry marker horizon as in 98-23. The hole was collared 150' south of the porphyry and 20' east of a potentially major, north-south striking, fault (See Appendix #6).

A 2" quartz vein and associated pyrite, which generally aligns well with the zone, was found at 81.0' with a value of 0.01 oz/t over 0.6' C.L. at 167.5' - 168.1'. This vein occurs just within the hanging wall contact of the porphyry.

Previously, the closest hole drilled was 88-02. This hole intersected a zone that assayed 0.11 oz/t over 1". It is possible that this is the 'zone', 1200' to the west. No significant assays were returned in 98-25, but a 2" quartz vein at 81' may be the zone. A strong break is located at 238.3'.

DDH-98-33

DDH-98-33 was drilled to test the up-dip extension of holes 87-29 and 87-33 on the west side of the south zone resource, in the location of proposed hole DDH-98-13. It should be noted that the south zone is along the contact between Basic Syenite and Greywacke.

Assays of note : 0.42 oz/t over 5.1' H.M.W. (6.1' C.L.) including 0.74 oz/t over 3.4' C.L. or 1.38 oz/t over 1.4' (the highest assay attained in the program). Other anomalous assays were 0.09 oz/t over 1.0' C.L. and 0.05 oz/t over 1.2'C.L.. Both of these were on the north zone.

DDH-98-32

DDH-98-32 was also drilled to test the up-dip extension of holes 87-29 and 87-33 on the west side of the south zone resource, in the location of proposed hole DDH-98-13.

Assays of note : 0.17 oz/t over 5.0' H.M.W. (including 0.38 oz/t over 2.4' C.L.). 0.22 oz/t over 1.7' C.L. (north zone), 0.33 oz/t over 1.2' C.L. and 0.05 oz/t over 1.1' C.L. on the south zone.

Trenching :

The trenching program was initiated before drilling commenced in order to get an understanding of the Narrows Break mineralization. The peripheral trenching (exploratory in nature, along strike to the east and west of the resource) did not outline any significant mineralization. See Appendix #2 for the trench locations and assays. An 8' to 25' wide syenite porphyry body which strikes for 1600' to the west of the zone was thought to be a rough guide to the Break. The zone was found, both in mapping alteration and in previous Macassa drilling, to be within 30' of the south contact of this porphyry. During our

reconnaissance prospecting we increased the strike length by an additional 400' by finding a previously unmapped porphyry outcrop at section 27E. At this point it abuts a massive conglomerate unit and disappears. It is likely that a major north-south trending cross-fault occurs at this location (See trench 'A').

Drillhole 98-23, at 35 section encounterd a strong break on the south contact of the porphyry with a zone characterized by abundant pyrite and extensive silicification. This zone did not run when assayed, but the Break looks identical to that found in the resource block 1300' to the east (including the red mineral – anhydrite (??) which is characteristic in all holes there). In trench 'B', we found the same porphyry and Break location. Due to the lack of any encouraging assays in this trench, DH-98-24, which was to be drilled here, was cancelled. The trenches 'J', 'L' and 'M' were chosen to intersect the quartz veining of the Ontario Department of Mines geological map of 1945 (Teck Township). This is supposed to be the actual location of the 'Narrows Break'. No veining or other evidence of the Break was found. Newfields drill holes in the area corroborate this observation

The trenches on the zone proper were completed in strips so that the 10,000 square metre maximum set by the Mining Act (environmental provisions) would not be exceeded. The plunge of the south zone indicated outcropping at trenches 'D', 'E' and 'F'. The zone is present and was sampled in these trenches. Despite heavy sulphide percentages (up to 10%, usually 5% in highly silicified, albitized and bleached quartzite/greywacke), the best grade attained was only 0.073/1.2'. Even the presence of 1/8" – ¼" quartz stringers did not help the grade. It should be noted that, unlike the rest of the outrcrop area covering the entire zone (a ridge in fact), this zone is in a 10' depression. At trench 'E' a 2' zone with quartz on its edge could not be sampled due to the presence of water. Some limited areas in trench 'F' are water-covered. This south zone strikes at 52° and dips 68°-80° south. The north zone was intersected in trenches C, D and E. The following lists off the pertinent assays in order; 0.12/3.6' (C), 0.13/11.6' (D), and 0.31/6.0' (E). Mineralization consists of a strong quartz stringer zone with an accompanying fault on the hangingwall, plus 5-15% fine disseminated pyrite. It strikes from 53° (at C and D) to 44° (at E) and is sub parallel to the greywacke bedding.

A quartz vein observed in trenches D and E assayed 0.039/2.6' and 0.038/2.1' respectively. This is the same quartz vein that was observed in Newfields hole NT-60, but

was interpreted to be the south zone. This quartz vein is actually south of the south zone, but may join the south zone to the west. See appendix #2.

Trenches 'G' and 'H' were designed to follow up on a 0.36/3.6' intersection in hole 88-71 at –160' below surface. They failed to uncover anything encouraging. Trench 'C' realized an assay of 0.12/3.6' which correlates with the north zone.

Trench 'K' is 100' east of the resource block but south of the old Teck-Hughes drilling, which had intersected the Narrows zone (0.11/2.0' and 0.07/1.6' in T2220 and 0.08/1.4' in T2219). It traced an ancient trench. We completed it because of the presence of a large 90' syenite porphyry body which contains a strong fault zone and a separate 5' wide bleached zone. Chip samples gave us 0.12/2.0' on the fault and 0.04/1.6' plus 0.06/2.0' in the bleached zone (where up to 4" milk white quartz fragments are located).

Because of these results, hole #98-26 was moved further south to intersect both these zones and the Narrows Break.

Conclusions and Recommendations :

An inferred resource has been calculated covering an area of 400 x 300 feet in the south zone of the shallow area. It includes 10 drill holes with an inferred resource of 49,200 tons at 0.27oz/ton (Fig. 9), or with 12 holes, 62,933 at 0.23 oz/ton (Fig. 10). This compares favourably with the 24,300 tons for the same area in the Newfields calculations at 0.17 oz/ton. If the geological potential is added in, the tonnage increases to 102,925 at 0.24 oz/t (Fig. 11). The dip of this zone is ~80° south here. Appendix #3 shows the location of these shallow blocks on the South Zone long section. It should be noted that there is a shallow block on the north zone, from surface down approximately 80' at its deepest point. See Appendix #4 for the location.

The deeper holes have increased the North Zone resource as well. Hole 98-27 has helped define an inferred resource block on the north vein of 63,700 tons at 0.31 oz/ton (Blocks A and B). Appendix #4 shows the location of these inferred blocks on the North Zone long section. The Newfields figures for the same zone, using similar constraints, was 32,000 tons at 0.31 oz/ton.

Hole 98-19 intersected many nests of visible gold. Appendix #5 shows the deep, inferred resource blocks on the south zone. Figures 12 and 13 show the inferred resource calculations for the sub –300 level on both the North and South Zones. Fig. 14 shows the complete list of inferred resource and geological potential blocks on both the North Zone and the South Zone.

At this time engineering studies are needed to determine whether any or all of these zones can be mined economically.

On the shallower zone, a program of drilling on 50'centres is recommended in order to upgrade this inferred resource to an indicated resource. This will entail the drilling of 26 holes. If initial results do not merit the drilling of the more distant holes, the program could be cut back to 18 holes. One exploration hole would be necessary to follow up on the 0.30/2.5' C.L. intersection in hole 31B.

A drilling program is also strongly recommended on the deep targets identified by holes 98-19 and 98-27. The resource in that area can be increased rapidly with 9 holes.

The targets outlined by John Reddick have the greatest chance of significantly increasing the Narrows Break resources. These targets are substantially higher in grade than those at higher elevation (based on the fact that grade is increasing with depth). This should be undertaken immediately to allow for a lengthy development schedule.

Executive Summary

Kinross Gold Corporation (Kinross) holds property in Teck Township, Ontario that includes five of the seven past and present producing mines on the Kirkland Lake Break. Together, these mines have production of in excess of 23 million ounces from 1913 to the present. The properties held by Kinross include the presently producing Macassa mine and the former Wright-Hargreaves, Lakeshore, Teck-Hughes and Kirkland Lake Gold (Kirkland Minerals) mines. The Narrows Break is a secondary structure with known gold mineralization that occurs on Kinross property. This break strikes and dips subparallel to the Main Break and has been the object of intermittent exploration efforts by a number of companies since the early days of the camp.

Mineralization on the Narrows Break has been traced over a strike length of at least 13,000 feet from the Casakirk crosscut on the west to the Toburn property on the east and has been found from surface to at least the 5,000 foot level. Underground exploration on the structure includes drifting on the former Wright-Hargreaves, Lakeshore, Teck-Hughes and Casakirk properties. The North "A" vein of Sylvanite and the No. 9 vein of Wright-Hargreaves have been identified as the Narrows Break by Thomson (1950). The North "A" vein was mined to the 5,000 foot level and the grade, width and character of gold mineralization is thought to have been similar to that of the Main Break.

Early diamond drilling is poorly recorded and drill logs or assays are not available for most holes. Underground sampling on the 3,075 foot level of Lakeshore (3053 Dr W) indicates potentially economic gold mineralization with the best being the #4 shoot with an indicated grade of 0.47 opt Au over a width of 4.7 feet and a distance of 114 feet.

In the late 1980's Teck Corporation and Newfields Minerals Inc. completed a total of 135 diamond drill holes and 175 feet of drifting on the Narrows Break on the former Teck-Hughes property. Underground exploration yielded disappointing results but the surface drilling outlined two potentially economic zones. The Hangingwall Zone has an estimated resource of 275,000 tons @ 0.18 opt Au and the Footwall Zone has a resource figure of 100,000 tons @ 0.25 opt Au assigned to it. It is possible that the Hangingwall Zone could be developed and mined to a certain depth by means of a decline from surface. The Footwall Zone would require development from existing underground workings.

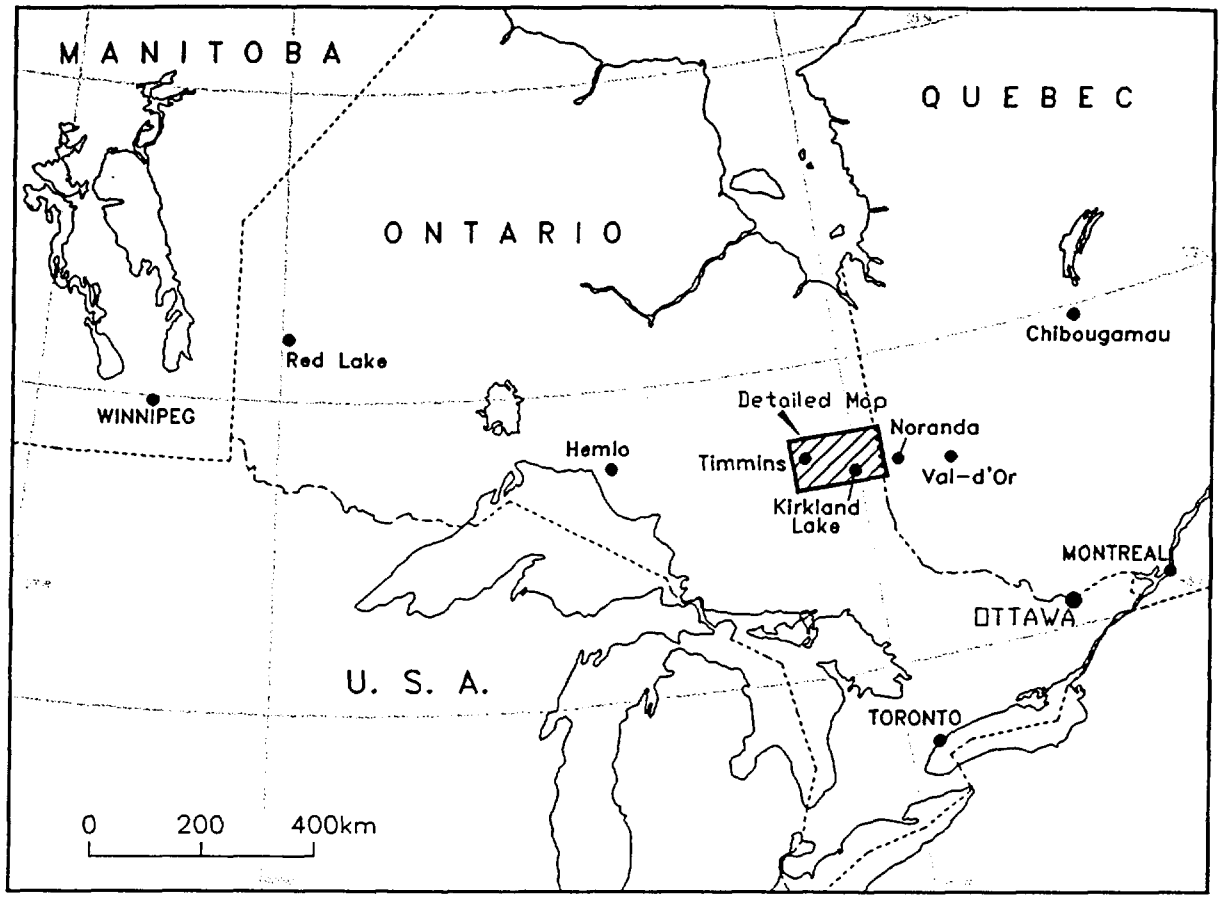
Lac Minerals Ltd. undertook surface diamond drill programs in 1988 and again in 1992 to evaluate the near surface potential of the Narrows Break on Macassa ground. The best results were in the 1988 program within 400 feet of the Macassa/Teck-Hughes boundary. An underground hole drilled by Lac in 1988 on the Macassa/Teck-Hughes boundary at the 4,500 foot level assayed 0.30 opt Au over 6.0 feet. There has been no follow-up drilling on this hit. The Narrows Break has been identified in the 1992 drilling 6,000 feet west of the Macassa/Teck-Hughes boundary but gold values near surface are generally low.

LOCATION, ACCESS and INFRASTRUCTURE

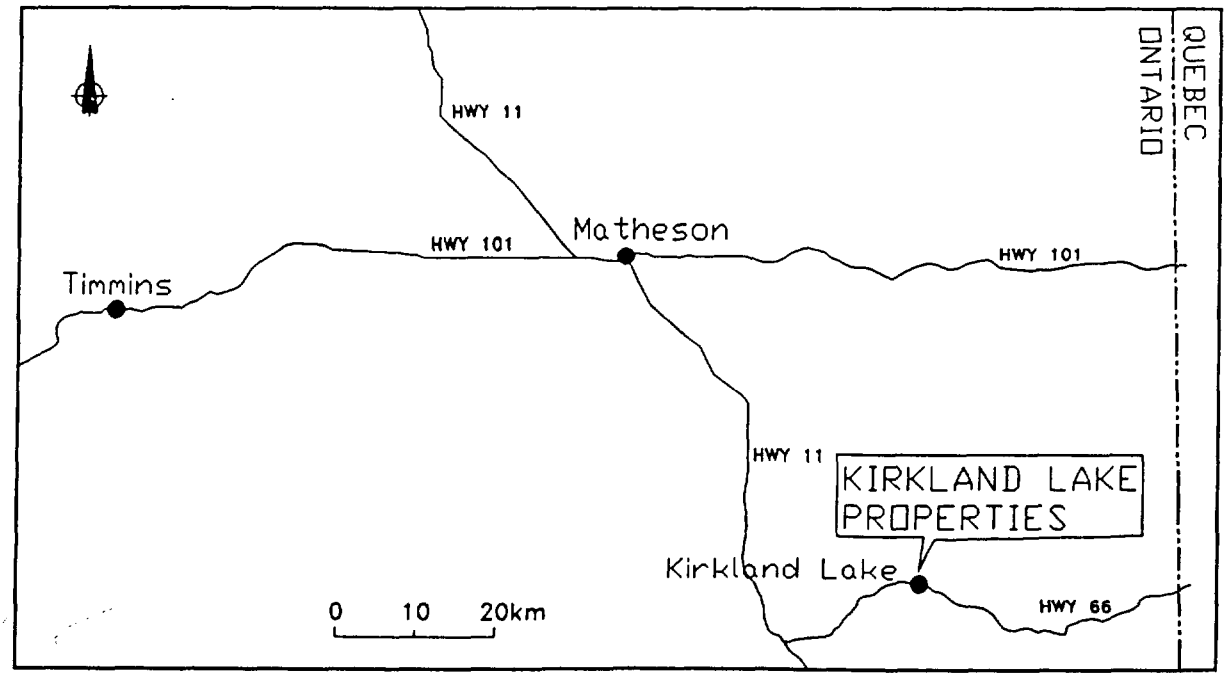
The mines of the Kirkland Lake camp are located in Teck Township, Larder Lake Mining Division, Ontario (N.T.S. 42 A/1) with a very minor amount of mineralization found in Lebel Township to the east. The town of Kirkland Lake is located adjacent to the former producers at the east end of the camp and provincial Highway 66 crosses the township (Figure 1). The area is well serviced and has a highly skilled mining work force available.

All the major mines are contiguous and, to a certain extent, were at one time connected internally. At present the only underground access is through Macassa No. 2 and No. 3 shafts. Lakeshore No. 5 shaft was rehabilitated to the 3,075 foot level in 1987-88. There is a ramp on the Lakeshore property that was used in 1987 for pillar recovery at the Lakeshore mine.

Figure 1: Kinross Kirkland Lake Property Location Map



Detailed Map



HISTORY

Gold was first discovered on the Kirkland Lake Break in 1911 and production began in 1913. The claim boundaries of the seven principal mines (Toburn, Sylvanite, Wright-Hargreaves, Lakeshore, Teck-Hughes, Kirkland Lake Gold and Macassa) are shown on Figures 2 and 3 and are roughly projected on Figure 4. Total production has been in excess of 23 million ounces at an average grade of approximately 0.45 opt Au. The only active mine is the Macassa. The history of the Kirkland Lake camp is well documented in Ontario government reports by Thomson (1950) and Charlewood (1964).

Almost all the historic mining has been along the Main Break which is in fact a series of highly variable, anastomosing faults that on average dip steeply south and strike ~067°. The Main Break has been stoped along a strike length exceeding 15,000 feet and from surface to a depth of 8,100 feet. This report is concerned with the potential of the Narrows Break which is a mineralized structure subparallel to, and from 400 to 2,000 feet north of, the Main Break. There are in fact several mineralized structures known to the north of the Main Break including the 05 Break at Macassa, the 29 Vein on the Kirkland Basin property and a series of veins that were mined (North "A", North "B" veins) on the Toburn and Sylvanite properties.

There has been only a limited amount of underground development of the Narrows Break. Lakeshore Mines drove crosscuts on the 3,000 and 3,700 foot levels, did some drifting along the structure and connected the two levels with a raise. Teck-Hughes drove a crosscut north to a structure known as the X-Vein on the 3,600 foot level and undertook a limited amount of drifting. The X-Vein projects directly along strike with the Narrows Break as identified on the Lakeshore property and is therefor considered to be also hosted by the Narrows Break. A crosscut was also driven north from the No. 1 shaft area of Macassa onto the Casakirk property on the 2,950 foot level. It intersected several faults and a short drift was driven on what may be the Narrows Break. Another short drift on what is probably the Narrows Break was driven on the 3,600 foot level of Wright-Hargreaves on the west side of the Lakeshore Fault. All this work was done prior to 1948.

In 1989 the Teck/Newfields joint venture drove a short drift on the Narrows Break on their property after a detailed underground drilling program from the 3,000 foot level.

Drilling that was done along the Narrows Break prior to the 1980's is poorly recorded. Some early underground drilling was done from Wright-Hargreaves, Lakeshore, Teck-Hughes and Macassa. These drillholes are shown on various plans and sections but no drill logs were located in the course of this compilation. A 1987 surface program by Lac Minerals Ltd. (Lac) on the Lakeshore and Wright-Hargreaves properties partially tested the break. A concerted program by Teck/Newfields in 1986-88 consisted of 75 holes drilled from surface and a further 60 holes from a drill drift on the 3,000 foot level. In 1988 Macassa drilled 14 surface holes near their boundary with Teck/Newfields and several underground holes as well. Macassa drilled a further 12 surface holes in 1992 to test for a near surface extension of the 05 Break. This drilling was interpreted to have intercepted the projection of Narrows Break.

To the east, on the Wright-Hargreaves, Toburn and Sylvanite properties the Narrows Break is offset to the north by the Lakeshore Fault. There is a high degree of uncertainty regarding which structure on the east side of this fault is equivalent to the Narrows Break. A copy of a longitudinal section for the Sylvanite mine shows stoping and development on a structure identified as both the Narrows Break and the North "A" vein from surface to the 5,000 foot level. A parallel mineralized structure further to the north (the North "B" vein) is also tentatively identified as the Narrows Break on some recent compilations. The distance between the Main Break and these mined structures is in the order of 400-800 feet which means that if one of them is the Narrows Break it must gradually approach the Main Break towards the east.

NARROWS BREAK MINERALIZATION

The best description of the Narrows Break comes from Thomson (pg. 81, 1950).

> "The Narrows Break is roughly parallel to the Kirkland Lake fault on the north side of the ore zone. In the Lakeshore mine it is called the No. 3 vein zone and lies from 1,200 to 1,600 feet north of the No. 2 (North) vein. To the west it is exposed on surface on Teck-Hughes ground and has been explored on the 30th level in the mine, where it lies 2,000 feet north of the Main break. Almost a mile further west there is a vertical break in a long crosscut from the Macassa mine that could represent a possible extension of the structure. Eastward from the Lakeshore, the Narrows Break has been explored by drifting and diamond drilling at many horizons in the Wright-Hargreaves mine to the bottom of the workings. It is represented at depth in this mine by No. 9 vein. At the Sylvanite mine the Narrows Break might possibly be represented by the North "A" vein, although it is out of alignment. Similarly one of the steep breaks in the northern part of the Toburn mine might be part of the structure.
>
> The Narrows Break appears to be a zone of discontinuous fractures arranged en-echelon, especially on the dip. For this reason it is lacking continuity. It has a steep overall dip, which is approximately parallel to the main Kirkland Lake fault. Where exposed in underground workings, the Narrows Break is generally a narrow, irregular slip. Nothing is known regarding possible displacement along it."

Twomey describes mineralization associated with the Narrows Break as zones of "numerous chloritic and hematitic fractures over a width of up to 1 foot wide in bleached, carbonatized intervals. Quartz is patchy and only a minor constituent. There is a correlation between gold grade and pyrite percent with 'ore grade' values associated with 1-5% disseminated pyrite. The style of alteration and fracturing varies somewhat as a function of host rock" (Blecha, 1989). This description is similar to the definition of *Break ore* as defined by Watson and Kerrich (1983). The distinction between Break ore and both Vein and Breccia ore being lesser amounts of quartz, pyrite, molybdenite and tellurides and greater amounts of chlorite.

The following sections give detailed descriptions of mineralization on the Narrows Break as described on individual properties. A summary of these descriptions is given in Table 1.

LAKESHORE

According to Thomson (1950) the Narrows Break was drilled from 1,400 to 5,450 feet below surface. It is hosted by augite syenite and is characterized by quartz veining where gold mineralization occurs (in contrast to Twomey's description given previously). A drift was driven along it at the 3,075 foot level (referred to on some sections as the 3053 Drift West) and five separate shoots were developed (Figures 3 and 6) as follows:

- #1 Shoot 65 feet @ 0.117* opt Au over a 4.2 foot width.
- #2 Shoot 30 feet @ 0.152* opt Au over a 5.0 foot width.
- #3 Shoot 32 feet @ 0.115* opt Au over a 4.2 foot width.
- #4 Shoot 114 feet @ 0.269* opt Au over a 4.5 foot width.
- #5 Shoot 175 feet @ 0.191* opt Au over a 4.2 foot width.

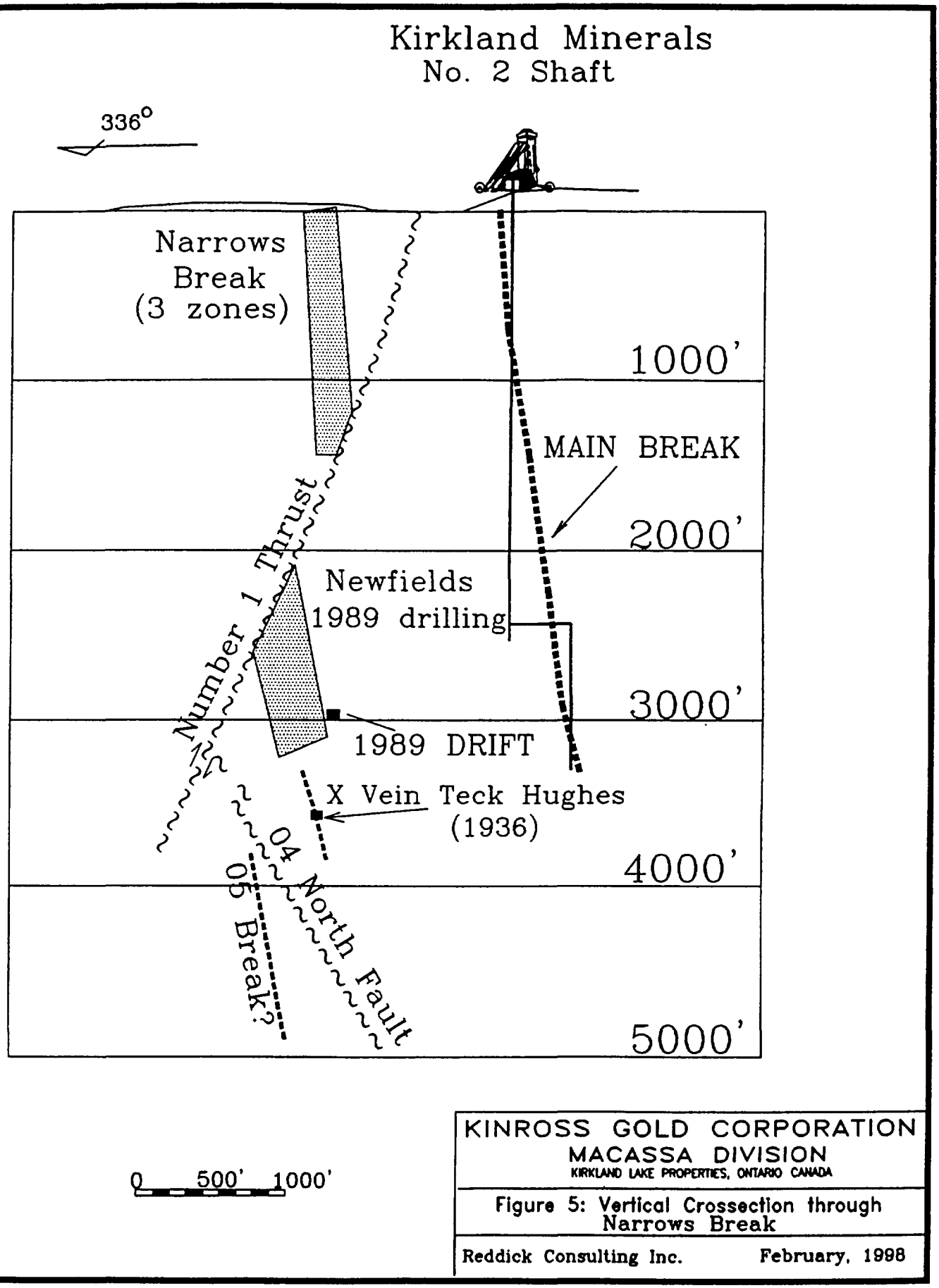
* Presumed to be uncut and based on chip samples.

A winze was sunk on the #4 Shoot and a sublevel established on the 3,275 foot level. In 1948 another drift was established on the 3,700 foot level and a raise driven to the sublevel. Cunningham (1990) quotes a former mine geologist at Lakeshore (Jim Harling) as saying that "while mineralization of possible ore grade existed it was never mined because it was too costly to get at and because they had better ore in and near the Main Break." Lac/Kinross has previously estimated a resource of 281,000 tons @ 0.20 opt Au for this zone.

TECK-HUGHES/ KIRKLAND LAKE GOLD /NEWFIELDS

Early work on these properties was a drift on the X-Vein by Teck-Hughes on the 3,600 foot level. A geology map of that drift shows little in the way of assays and a very narrow but continuous vein down the length of the drift (400 feet). It is described by Thomson (1950) as "a narrow slip with associated gold-bearing quartz veins and stringers at intervals." The Teck/Newfields joint venture drilled a total of 75 surface totalling 60,000 feet and a further 60 underground holes totalling 20,995 feet on the Narrows Break from 1986 to 1989 and then completed 175 feet of drifting on the Narrows Break on the 3,075 level. This drift was accessed from the drill drift driven from the Lakeshore No. 5 shaft and is about 525 feet vertically above the X-Vein. The bulk of the surface drilling was targeted on the Narrows Break above the 1,500 foot level although some holes were drilled to the 4,000 foot level.

The surface drilling outlined what are interpreted as three separate but closely spaced and subparallel structures referred to as the North, Middle and South veins of the Hanging Wall Zone. Resource figures of 275,000 tons at a grade of 0.18 opt Au and 238,000 tons @ 0.195 opt Au have been calculated for this upper series of veins (Blecha, 1989; Cunningham, 1990). This upper zone extends from surface to about 1,200 feet below surface. Yet another zone called the Footwall Zone was defined by four holes between the 2,200 to 2,600 foot elevation and below the No. 1 Thrust Fault Gap. This zone has an estimated resource of 100,000 tons @ 0.25 opt Au (Cunningham, 1990). The underground drilling program was limited to a vertical panel between the 2,750 to 3,250 foot levels and failed to outline any resource tonnage. It should be noted that the criteria used to estimate the resources are more liberal than those used for the operations at Macassa and in-fill drilling would be needed to convert the reported resource figures to proven or probable reserves.



KINROSS GOLD CORPORATION
MACASSA DIVISION
KIRKLAND LAKE PROPERTIES, ONTARIO CANADA

Figure 5: Vertical Crossection through Narrows Break

Reddick Consulting Inc. February, 1998

Figure 5 is a schematic vertical cross-section of the Narrows Break mineralization drilled by Teck/Newfields. The interpretation of the No. 2 Thrust Fault, taken from a Newfields report, shows this fault to be north dipping. This is consistent with some faults seen in the mines at the east end of the camp. If this fault is alternatively interpreted as a north dipping normal fault or, as a south dipping thrust fault, it would mean that the Hangingwall and Footwall Zones occur on two separate mineralized structures. The horizontal component of motion on this fault is not known.

Several holes on the Teck-Hughes/Lakeshore boundary east of the X-Vein returned grades in the 0.2 to 0.7 opt Au range over core widths of 3-5 feet. This area may represent the down plunge extension of the mineralization identified by Lakeshore Mines on the 3,075 and 3,700 levels. An underground hole drilled by Macassa into the Narrows Break crossed the Macassa/Teck-Hughes boundary and intercepted 0.3 opt Au over 6.0 feet at about the 4,500 foot level (see below).

MACASSA

A 721 foot long crosscut was driven from the 2,950 foot level of Macassa onto the Casakirk property to the north in 1940. Approximately 200 feet of drifting was done on a gold-bearing vein 50 feet north of the Macassa-Casakirk boundary but no assays are available (Thomson, 1950).

In 1988 Lac drilled fourteen surface holes plus one wedged hole over 1,200 feet of strike length near the Macassa/Teck-Hughes boundary (Sections 33E to 45E). These holes tested the Narrows Break from surface to about 1,000 feet below surface. Low gold values (<0.1 opt Au) were returned in seven of the eight holes on or west of Section 42E. The six holes from 43E to the boundary near 45E all returned short intervals of values at or above 0.16 opt Au with the highest grade interval in hole M-88-2 on 45E at 0.28 opt Au over 2.0 feet.

At the same time at least six long holes were drilled to the north from the 2,950 foot level of Macassa between the Macassa No. 1 shaft and the Teck-Hughes boundary. Three flat holes (30-156, 30-157 and 30-170) and one down hole (30-160) did not hit significant mineralization. Hole 30-158 drilled up at +10° hit a short shear with visible gold that assayed 0.07 opt Au over 1.3 feet. This intercept is close to the Teck-Hughes boundary but it appears as if this hole was not long enough to hit the Narrows Break. Another down hole (30-161) on the same section hit 0.30 opt Au over 6.0 feet on the Narrows Break at an elevation between variously reported at 4,500 and 5,000 feet below surface.

In 1992 a surface drill program of twelve holes by Lac tested the potential of the 05 Break from surface to the 1,000 foot level between Macassa No. 3 and No. 2 shafts (Sections 20E to 20W). Generally low values over narrow widths were encountered. Lac exploration staff in a memo dated October 28, 1992 state that the Narrows Break was traced across the property and that it cuts the 05 Break.

WRIGHT-HARGREAVES and SYLVANITE

No diamond drill logs were found for these properties other than the drilling done by Lac in 1987 and described previously under the Lakeshore section. It is possible that some original logs might be found in the archives that are currently being stored at the old Lakeshore office. Thomson (1950) and Cunningham (1990) are both of the opinion that some of the northernmost veins mined by Wright-Hargreaves, Sylvanite and Toburn are hosted by the Narrows Break. A copy of an old longitudinal section of the Sylvanite mine depicts stoping from surface to the 5,000 foot level (and also what are probably diamond drill pierce points) on what is labelled as both the Narrows Break and the Sylvanite North "A" vein. This is in agreement with the position of the Narrows Break (No. 9 vein) as shown by Thomson on a cross-section through the Wright-Hargreaves mine (Section N; Thomson, 1950). The pierce points and the stoping limits from the Sylvanite longitudinal section are shown on Figures 4 and 6.

If the stoped veins on the Sylvanite are part of the Narrows Break then it is only 400 to 750 feet north of the veins of the Main Break at this end of the camp. This is much closer than the 1,200 to 1,600 feet distance in the Lakeshore/Teck-Hughes area. Some recent interpretations show the Narrows Break to be equivalent to the North "B" vein of the Sylvanite mine as is shown on Figure 3. While this interpretation is more consistent in that it maintains an 800 foot distance from the Main Break it also introduces another mineralized structure (the North "A" vein) between the Narrows and Main breaks.

TABLE 1
NARROWS BREAK MINERALIZATION

PROPERTY	OCCURRENCE	LOCATION (Hopkins Grid)		MINERALIZATION	COMMENTS
		EASTING	ELEVATION		
LAKESHORE	3053 DRIFT on 3,075 foot LEVEL	71E to 84E	3,000 to 3,700 feet below surface.	5 zones on 3075 level, drift and raise from 3700 level.	Mineralization up to 0.47 opt Au over 4.6 ft width for 114 ft. Needs follow-up. Priority target.
KIRKLAND BASIN	NO. 29 VEIN	84E to 90E	± 3,000 feet below surface.	Short higher grade sections in long lower grade section of mineralized drift on 3075 level.	Best grade is 0.34 opt Au over 5.7 ft width for 45 ft. Drilled by Newfields. Additional potential unknown. Not ranked as it is a separate structure.
	BAZ	~ 105E	± 3,000 feet below surface.	Quartz-carbonate veins with erratic gold.	Drilled by Lakeshore; drilling and drifting by Newfields. Not ranked as a target.
TECK-HUGHES and KIRKLAND GOLD	X-VEIN	62E to 67E	3,600 feet below surface.	Drifting in 1940's on Narrows Break at 3600 ft level. Low values?	Not a target. See below.
	DRIILING EAST OF X-VEIN	~ 70E	3,800 - 3,500' below surface.	0.24 - 0.74 opt Au over 3.3-5.1 ft in underground Teck-Hughes drilling.	Downplunge of 3052 drift on Lakeshore. Deep target.
	HANGING WALL ZONE	47E to 57E (Approx.)	Surface-1,200' below surface.	Resource of 275,000 tons @ 0.18 opt Au	Some additional potential at depth and to west. Priority target.
	FOOTWALL ZONE	47E to 54E (Approx.)	2,200 - 2,600' below surface.	Resource of 100,000 tons @ 0.25 opt Au.	Additional potential along strike to east and west. Priority target.
MACASSA	TECK-HUGHES BOUNDARY NEAR SURFACE	33E to 45E	Surface to 1,000 feet below surface.	14 holes in 1988 encountered narrow widths of <0.25 opt. Grades diminish to west.	Potential below 1,000 ft and following rake down to west. Exploration target.
	TECK-HUGHES BOUNDARY AT DEPTH	45E	-4,500 feet (?)	0.3 opt Au in 30-161. No other mineralization known in immediate area.	Deep exploration target from Macassa underground workings.
	CASAKIRK CROSSCUT	18E	2,950 feet below surface.	200 ft of drifting on vein but no results known.	Possible exploration target. No grade recorded for mineralization.
WRIGHT-HARGREAVES	No. 9 VEIN	114E	5,000 - 7,000' below surface.	Investigated by drifting and drilling to depth (Thompson). Grades not known.	Exploration target west of Lakeshore Fault.
SYLVANITE	NORTH "A" VEIN	132E-146E	To 5,000'	Mined from surface to 5,000 ft level.	Ground held by Queenston. Mined out?
	NORTH "B" VEIN	133E-138E	?	Mined by Sylvanite. Narrows Break?	Ground held by Queenston. Mined out?

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42A01NE2022 2.19317 TECK

020 April 20, 1994

Database filenames = **05DM , UBDM , LBDM .**

The following short forms are to be employed in the Diamond Drill hole data-entry process for use with DATAMINE software.

RECEIVED
MAR - 8 1994
GEOSCIENCE ASSESSMENT OFFICE

DATAMINE DATA-ENTRY NOMENCLATURE -

i) Lithology

Short form	Long Form
L	Basic Syenite
P	Syenite Porphyry
BP	Bimodal Porphyry
F	Felsic Syenite
T	Tuff /Volcanic Ash /Lapilli
TRA	Trachyte
C	Conglomerate
Agg	Agglomerate
G	Greywacke
DK	Dyke
FDK	Felsic Dyke
IDK	Intermediate Dyke
LPDK	Lamp Dyke
DIA	Diabase Dyke

CAS CASING

12-3317

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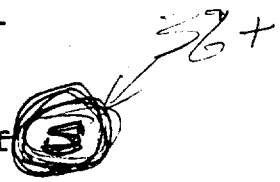
ii) Structural Features 3" SH

Short Form	Long Form
Brk	Break
Flt	Fault
X-flt	Cross-fault
shr	shear
shd	sheared
sm	seam
~~bx~~	brecciation
vn	vein
fra	fracture
myl	mylonitic
bnd	band
~~bed~~	bedding
slp	slip
alt	altered
chr	chert (y)
bl	bleached
crsh	crushed
lam	laminated
frag	fragment(al)
sil	silicified
stg	stringer
~~grd~~ G.C. L.C.	ground
dis	disced

..... 3 /

iii) Minerals (Primary and Acessory)

Short Form	Long Form
chl	chlorite
~~qtz~~ QV	quartz
crb QS	carbonate
agg QF1234	agglomerate
ank	ankerite
V.G.	visible gold
moly	molybdenum
epi	epidote
spt	serpentine
tell	tellurides
py	pyrite
~~suif~~ S	sulphides
ser	sericite
hem	hematite
cpy	chalcopyrite
STW	Stock Work
spec	specularite



* Enter Felsic syenite ribs as Lithology if width > 1.0'

iv) Assays

tr = trace

filename=data.wp

5%QF 次数

G.C.

LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT
OFFICE

Hole # : 98-12 Zone : POWDERHOUS Contractor: H&S

Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17310.00 N
Easting : 15967.00 E
Elevation: 78.07

Azimuth: 333° 0' 0"
Dip: -45° 0' 0"
Depth: 332.00P

Reference line :

Survey by:

Deviation tests :

Depth	Dip	Azimuth
322.00 P	-44° 0' 0"	333° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-12

2.19312

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
0.00	8.80	O\B							
8.80	115.50	T	2958	20.40	22.60	2.20	0.000		
			2959	30.30	31.50	1.20	.001		
			2960	114.80	115.50	0.70	.001		
115.50	128.60	G	2961	128.00	129.20	1.20	.001		
128.60	134.70	IDK	2962	134.40	135.70	1.30	.002		
134.70	152.00	G							
		137.70 - 139.40	2963	137.70	139.40	1.70	.001		
		2%PY							
		139.40 - 141.00	2964	139.40	141.00	1.60	.009		
		3%PY@41							
			2965	143.90	145.70	1.80	.002		
152.00	188.60	T	2966	161.60	162.80	1.20	.001		
			2967	168.00	169.60	1.60	.026		
188.60	207.80	G	2968	188.80	189.80	1.00	.003		
			2969	206.60	207.80	1.20	.003		
207.80	266.80	L							
		207.80 - 209.50	2970	207.80	209.50	1.70	0.429	.382	.476
		10%1/4"QV'S;3%PY;@77							
		209.50 - 210.40	2971	209.50	210.60	1.10	0.740	.728	.751
		2"QV;PY;SIL'D;FLT;@68							
		210.40 - 212.60	2972	210.60	211.80	1.20	.032		
		1/4"QSTR'S@71	2973	211.80	214.60	2.80	.003		
		235.80 - 237.00	2974	235.80	237.20	1.40	.036		
		FLT@52;50%3"QV'S;4%PY;FLT@63							
			2975	248.10	249.50	1.40	.002		
		248.80 - 248.80							
		FLT@67							
			2976	249.50	250.80	1.30	.001		
			2977	252.20	253.10	0.90	.013		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		252.70 - 252.70							
		FLT@67							
			2978	257.60	260.90	3.30	.002		
		257.70 - 257.70							
		FLT@37							
			2979	260.90	262.70	1.80	.096		
		261.30 - 262.20							
		7"QV@72&55;SHR							
		262.70 - 262.70							
		FLT;3/4"QV;@52							
		262.70 - 263.50	2980	262.70	264.10	1.40	.181	.163	.198
		4"QV@51&36;8%PY							
		263.50 - 265.20	2981	264.10	265.20	1.10	.046		
		SIL							
		265.20 - 266.80	2982	265.20	266.20	1.00	.068		
		SHR@84;Q-ALB VN;4%PY;FLT@72	2983	266.20	267.10	0.90	.089		
266.80	273.00	G							
		266.80 - 268.20	2984	267.10	268.40	1.30	.002		
		MYL@82							
			2985	268.40	270.80	2.40	.001		
			2986	270.80	273.20	2.40	.001		
273.00	332.00	L	2987	319.20	320.20	1.00	.001		
		319.50 - 319.50							
		FLT@71							
		326.10 - 326.10							
		SHR@37							
			2988	329.60	330.70	1.10	.001		
332.00	332.00	EOH							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 31						
		Total footage sampling : 46.20 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-14 Zone : POWDERHOUS Contractor: H&S Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17609.39 N Azimuth: 148° 0' 0"
Easting : 15916.93 E Dip: -41° 0' 0"
Reference line : Elevation: 69.50 Depth: 337.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00 P	-41° 0' 0"	148° 0' "
322.00 P	-41° 0' 0"	148° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-14

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
0.00	11.10	O\B							
11.10	22.30	G	82493	20.40	21.30	0.90	.001		
22.30	55.10	L	82494	27.90	29.50	1.60	.001		
55.10	56.70	G							
56.70	75.90	L	82495	67.70	68.70	1.00	.001		
			82496	75.70	76.60	0.90	.001		
75.90	158.00	G							
		75.90 - 75.90							
		SHR@81							
			82497	93.00	94.00	1.00	.001		
		103.10 - 105.20	82498	103.10	104.60	1.50	.001		
		3%PY	82499	104.60	105.60	1.00	.001		
			82500	138.20	139.30	1.10	.004		
			2901	157.70	160.10	2.40	.001		
158.00	242.00	T	2902	174.50	177.00	2.50	.258	.212	.303
		174.60 - 177.00							
		ALB;SIL;5%PY;@17							
			2903	195.00	196.10	1.10	.001		
		195.20 - 195.20							
		FLT;0.9'ALB;SIL;@48							
		198.30 - 199.30	2904	198.30	199.30	1.00			
		PY							
			2905	204.00	205.00	1.00	.003		
			2906	208.80	209.90	1.10	.009		
			2907	213.30	214.40	1.10	.001		
			2908	214.40	216.00	1.60	.079		
		215.30 - 215.80							
		SIL;10%PY;3/4"QV;@30							
			2909	216.00	217.50	1.50	.000		
			2910	233.40	235.60	2.20	.000		
			2911	235.60	237.00	1.40	.000		
			2912	237.00	239.00	2.00	.005		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		238.70 - 240.70	2913	239.00	240.80	1.80	.054		
		PY							
		240.70 - 242.00	2914	240.80	242.20	1.40	.022		
		FLT@30							
242.00	260.10	L	2915	242.20	244.50	2.30	.000		
			2916	244.50	247.20	2.70	.000		
			2917	254.00	255.00	1.00	.047		
		255.70 - 257.20	2928	256.20	258.20	2.00	.084		
		SIL;SHR'S;PY;@67							
			2918	258.20	260.20	2.00	.059		
260.10	269.00	G							
		260.10 - 269.00	2919	260.20	262.30	2.10	.069		
		ALB;SIL;3%PY	2920	262.30	263.90	1.60	.008		
			2921	263.90	265.60	1.70	.167	.171	.162
			2922	265.60	267.20	1.60	.105		
			2923	267.20	269.20	2.00	.059		
269.00	271.80	IDK							
		269.00 - 269.90							
		FLT'S@38							
		269.00 - 271.80	2924	269.20	271.80	2.60	.358	.334	.382
		7%PY;FLT@22							
271.80	337.00	L							
		271.80 - 273.90	2925	271.80	273.90	2.10	.408	.394	.421
		ALB-SIL VN;PY;@45;MOLY;FLT@153							
		273.90 - 276.00	2926	273.90	275.00	1.10	.939	.906	.971
		274.90 - 275.80	2927	275.00	277.00	2.00	.138	.140	.135
		SHR;5%PY;@32							
			2929	300.20	301.10	0.90	.005		
337.00	337.00	EOH							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 37						
		Total footage sampling : 58.80 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-15 Zone : POWDERHOUS Contractor: H&S

Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17309.11 N
Easting : 15965.50 E
Elevation: 77.34

Azimuth: 333° 0' 0"
Dip: -62° 0' 0"
Depth: 402.00P

Reference line :

Survey by:

Deviation tests :

Depth	Dip	Azimuth
390.00 P	-61° 0' 0"	333° 0' "

Remarks : CASING LEFT IN GROUND

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-15

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	9.20	O/B						
9.20	35.60	T	2724	17.90	18.70	0.80	.001	
			2725	22.70	23.40	0.70	.001	
		22.90 - 22.30						
		3%PY						
			2726	23.40	25.00	1.60	.001	
			2727	35.40	38.70	3.30	.001	
35.60	38.50	IDK						
38.50	127.80	T						
		126.20 - 127.80	2728	126.40	128.00	1.60	.001	
		DYKE@64						
		127.00 - 127.00						
		FLT@68						
127.80	142.40	G	2734	140.80	141.80	1.00	.002	
		141.20 - 141.50						
		10%1/4"QSTR'S;PY;@77						
142.40	147.30	T						
147.30	165.70	G	2729	149.20	150.30	1.10	.002	
			2730	150.30	152.30	2.00	.003	
			2731	152.30	154.00	1.70	.001	
			2732	154.00	157.00	3.00	.001	
			2733	157.00	159.20	2.20	.001	
165.70	194.70	T	2735	177.30	178.20	0.90	.001	
		177.90 - 177.90						
		1%PY@73						
			2736	186.00	187.00	1.00	.002	
		186.50 - 186.80						
		BRK@70						
			2737	192.10	193.20	1.10	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		192.80 - 192.80							
		FLT;1%PY;@43							
194.70	226.40	G	2738	200.40	201.70	1.30	.003		
			2739	201.70	202.80	1.10	.019		
		202.40 - 202.40							
		1"SIL;8%PY;@65							
			2740	202.80	205.60	2.80	.051		
		204.60 - 204.60							
		1/4"QV;5%PY;@72							
			2741	205.60	207.70	2.10	.001		
			2744	212.80	213.80	1.00	.007		
226.40	291.70	L	2742	228.90	229.90	1.00	.023		
		229.10 - 229.40							
		4%PY							
		229.40 - 229.70							
		2"QV@73							
			9983	230.00	231.40	1.40	.010		
			2743	231.40	232.60	1.20	0.173	0.172	0.174
		231.90 - 232.00							
		3/4"QV@70							
			9984	232.60	234.20	1.60	.003		
			9985	234.20	234.80	0.60	.001		
			9986	234.80	237.60	2.80	.001		
			9987	237.60	238.20	0.60	.013		
			9988	238.20	240.60	2.40	.000		
			9989	240.60	242.80	2.20	.060		
			9990	242.80	245.30	2.50	.002		
			2745	245.30	246.80	1.50	0.096		
			2746	246.80	247.90	1.10	0.450	0.421	0.483
		247.20 - 247.80							
		FLT;4"QV;4%PY;@60							
			2747	247.90	248.90	1.00	.025		
			2748	248.90	251.10	2.20	0.193	0.192	0.194
			2749	251.10	253.10	2.00	.053		
			9957	253.10	257.10	4.00	.010		
			9958	257.10	261.10	4.00	.010		
			9959	261.10	264.10	3.00	.010		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
			2763	264.10	264.90	0.80	.004		
			2750	264.90	266.40	1.50	0.190	0.204	0.182
		266.40 - 267.80	2751	266.40	267.90	1.50	0.160	0.151	0.163
		10%QSTR'S;5%PY;@82							
			2752	267.90	269.40	1.50	.017		
		268.50 - 268.50							
		FLT@46;1/4"QV@62;2%PY							
		269.00 - 269.00							
		FLT@56							
			2753	269.40	272.20	2.80	.057		
			2754	272.20	273.40	1.20	0.170	0.143	0.202
		272.60 - 272.60							
		FLT@40							
		272.60 - 273.10							
		4"ALB;SIL;1/2%PY							
			2755	273.40	277.00	3.60	.067		
			2756	277.00	279.70	2.70	.013		
			2757	279.70	280.50	0.80	.038		
		280.00 - 280.00							
		3/4"QV@71							
			2758	280.50	282.70	2.20	.057		
			2759	282.70	284.60	1.90	.015		
		284.50 - 284.50							
		FLT@56							
		284.50 - 291.70	2760	284.60	287.50	2.90	0.170	0.134	0.202
		Q-ALB ZONE	2761	287.50	289.90	2.40	.057		
		289.80 - 290.10	2762	289.90	291.70	1.80	.007		
		FLT@51;B.C.							
291.70	305.10	F							
		291.70 - 291.70	2764	291.70	294.20	2.50	.002		
		FLT@65							
			2765	294.20	295.70	1.50	.001		
			2766	295.70	298.30	2.60	.001		
			2767	298.30	300.90	2.60	.004		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
			2768	300.90	304.10	3.20	.001	
305.10	402.00	L	2769	319.80	321.00	1.20	.001	
		357.90 - 357.90 FLT@40						
			2770	386.30	387.00	0.70	.001	
402.00	402.00	EOH						
		END OF HOLE						
		Total samples : 58 Total footage sampling : 107.30 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-16 Zone : POWDERHOUS Contractor: H&S

Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17645.15 N
Easting : 15897.97 E
Elevation: 67.61

Azimuth: 153° 0' 0"
Dip: -49° 0' 0"
Depth: 450.00P

Reference line :

Survey by:

Deviation tests :

Depth	Dip	Azimuth
325.00 P	-40° 0' 0"	153° 0' "
450.00 P	-38° 0' 0"	153° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98 16

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
0.00	12.80	O/B							
12.80	79.40	P							
		1/8"CHL SLP@57							
		37.00 - 37.10							
		1/8"CHL SLP@57							
			3669	79.00	80.00	1.00	.000		
79.40	130.30	L	3670	98.10	99.30	1.20	.007		
			3671	128.10	129.20	1.10	.005		
130.30	156.50	G	3672	134.50	137.00	2.50	.001		
			3673	156.10	158.00	1.90	.003		
156.50	160.90	F	3674	158.00	161.40	3.40	.002		
160.90	167.60	G							
167.60	168.80	F	3675	167.60	169.10	1.50	.002		
168.80	180.90	G	3676	180.70	181.70	1.00	.003		
180.90	182.50	F	3677	181.70	182.60	0.90	.018		
182.50	240.30	G	9982	211.60	213.60	2.00	.063		
			3678	213.60	216.30	2.70	.049		
			3679	216.30	218.50	2.20	.016		
			3680	218.50	219.80	1.30	.08		
			3681	219.80	222.90	3.10	.081		
			3682	222.90	224.20	1.30	.443	.424	.462
			3683	224.20	226.40	2.20	.027		
			9962	226.40	229.40	3.00	.003		
			9963	229.40	232.40	3.00	.005		
			9964	232.40	234.50	2.10	.008		
			3684	234.50	235.80	1.30	.18	.187	.172
			9981	235.80	237.50	1.70	.009	WAS368	4
			9965	237.50	240.50	3.00	.003		
240.30	274.70	T	9966	240.50	243.50	3.00	.006		
			9967	243.50	246.50	3.00	.002		
			9968	246.50	249.50	3.00	.001		
			9969	249.50	252.50	3.00	.002		
			9970	252.50	254.20	1.70	.002		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
			3686	254.20	255.40	1.20	.36	.371	.349
		254.70 - 254.70							
		SHR@23;10%PY							
			9971	255.40	258.40	3.00	.018		
			9972	258.40	261.40	3.00	.002		
			9973	261.40	264.40	3.00	.010		
			9974	264.40	267.80	3.40	.003		
			9975	267.80	270.40	2.60	.002		
			9976	270.40	273.20	2.80	.001		
			3687	273.20	274.50	1.30	.004		
			3688	274.50	275.70	1.20	.096		
274.70	289.70	IDK	3689	275.70	276.80	1.10	.332	.319	.345
			3690	276.80	278.80	2.00	.151	.162	.139
			3691	278.80	280.90	2.10	.044		
			3692	280.90	284.00	3.10	.105		
			3693	284.00	287.10	3.10	.053		
			3694	287.10	289.30	2.20	.212	.212	.211
			3695	289.30	290.20	0.90	.216	.233	.198
289.70	295.30	L							
		289.70 - 290.00							
		BRK@37							
			3696	290.20	291.10	0.90	.317	.310	.323
			3697	291.10	291.90	0.80	.274	.269	.279
			3698	291.90	293.60	1.70	.295	.300	.289
			3699	293.60	295.90	2.30	.360	.346	.373
295.30	301.10	IDK	3700	295.90	298.70	2.80	.26	.27	.25
			82451	298.70	300.60	1.90	.27	.27	.26
			82452	300.60	301.70	1.10	.17	.18	.16
		301.00 - 301.10							
		SHR@27;10%PY							
301.10	316.50	F	82453	301.70	303.70	2.00	.409	.411	.407
			82454	303.70	305.60	1.90	.37	.374	.365
			82455	305.60	308.00	2.40	.394	.403	.385
			82456	308.00	310.40	2.40	.246	.269	.222
			82457	310.40	313.20	2.80	1.135	1.168	1.102
			82458	313.20	315.40	2.20	.129	.116	.141
			82459	315.40	316.60	1.20	.381	.361	.401

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
316.50	431.00	L	82460	316.60	318.60	2.00	.683	.677	.688
			82461	318.60	320.00	1.40	.472	.465	.478
			9977	320.00	323.00	3.00	0.186	0.162	0.209
			9978	323.00	325.40	2.40	.021		
			9991	325.40	327.00	1.60	.028		
			9992	327.00	329.30	2.30	.040		
			82462	329.30	331.00	1.70	.49	.508	.472
			9993	331.00	333.00	2.00	.002		
			82463	338.90	339.60	0.70	.01		
		339.20 - 339.20							
		FLT@35							
			82464	369.30	370.10	0.80	.01		
431.00	450.00	T							
		449.95 - 450.00							
		EOH							
		END OF HOLE							
		Total samples : 67							
		Total footage sampling : 137.40 P							

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-17 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17656.17 N Azimuth: 163° 0' 0"
Easting : 15985.94 E Dip: -53° 0' 0"
Reference line : Elevation: 63.07 Depth: 522.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
250.00 P	-55° 0' 0"	163° 0' "
520.00 P	-55° 0' 0"	163° 0' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-17

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	24.50	P SYENITE PORPHYRY-fresh, purple-grey, 3% mafic xenoliths to 1", pale off-white feldspar phenos throughout 23.80 - 23.80 FLT@53 2"CHL ANN BX @53 (FLT)	9851	23.20	24.40	1.20	.001	
24.50	70.90	L BASIC SYENITE- fresh, massive, competent, dark gn pseudomorphs pale green distributed evenly throughout, sharp natural leading contact @43 highly mag 24.50 - 27.00 moderately alt'd, locally bl'd & hem'd & sil'D 28.60 - 28.60 FLT@46 1/2"CHL-CARB FLT@46 29.70 - 29.70 STR SLP 1/8" carbonate-chlorite slip @45; ALMOST FLT 58.70 - 58.70 1/8" carbonate-chlorite slip @53 62.40 - 62.70 broken & ground core common; poor competency; 1/8" chlorite-carbonate slip @35 70.00 - 70.90 BL'D	9853	70.00	71.50	1.50	.001	
70.90	76.80	G GREYWACKE-BROWN-GREY; F.G.; HOMO; COMP; WY MAG						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		70.90 - 70.90						
		-sharp natural contact @65						
			9854	76.60	77.70	1.10	.002	
76.80	448.90	L						
		BASIC SYENITE- fresh, massive, competent, dark gn pseudomorphs pale green distributed evenly throughout, sharp natural leading contact @44						
		76.80 - 77.50						
		BL'D						
		77.50 - 77.70						
		1/8"QV@25						
		1/8"dull white bullish quartz VN @25						
			9855	90.90	92.20	1.30	.000	
		91.40 - 91.40						
		STR SLP@18						
		1/8" chlorite-carbonate slip @18; 5% BULL QTZ						
			9856	95.00	96.10	1.10	.000	
		95.40 - 95.60						
		1/4"QV@32						
		1/4"DK GY QV immediately followed by 1						
		1/2"BULL Q-CARB VN; @32						
		117.90 - 117.90						
		1/4"dull white bullish quartz vn@47						
			9857	129.40	130.60	1.20	.001	
		129.90 - 130.20						
		BL'D						
		20% 1/8"-1/2"dull white bullish						
		quartz-ank vn's @38 in 1' wy bl'd zone						
			9858	148.20	149.50	1.30	.001	
		148.40 - 149.40						
		30% 1/2"QV'S@34-45;HEM						
		30% 1/2"dull white bullish quartz-ank						
		vn's are almost cherty; with 5% hem'd bx						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		frag's & rare FeS2; immediately preceded by 1/8" wk chl flt @34; vn's @34-45; in hem'd red-brown zone						
			9859	218.40	220.70	2.30	.000	
			9860	220.70	222.50	1.80	.021	
		221.00 - 221.00						
		FLT;PY;@27						
		1/8"chl flt@27; q-ank vn's; 2% fine disseminated FeS2						
		221.70 - 222.10						
		1"QV;PY;@21						
		1"milk white quartz vein with hem'd/bl'd bx frags; 5% fine disseminated FeS2; @21; wy bl'd & shr'd following flt						
			9861	222.50	225.60	3.10	.010	
			9862	225.60	229.10	3.50	.041	
		226.80 - 226.80						
		1/8" chlorite-carbonate slip @51; vuggy						
			9863	229.10	230.20	1.10	.006	
		229.60 - 229.80						
		3/4"BL'D;PY;@25						
		3/4"bl'd zone; 3% fine disseminated FeS2; @25						
		230.20 - 230.80	9864	230.20	231.50	1.30	.012	
		35% ank in bl'd zone; rare FeS2						
			9865	231.50	232.70	1.20	.023	
		232.00 - 232.30						
		1"PY@24						
		1"bl'd, highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd; 6% fine disseminated FeS2; @24						
			9866	232.70	235.20	2.50	.000	
			9867	235.20	236.50	1.30	.060	
		235.50 - 236.20						
		PY;Q STR'S;@15						
		moderately alt'd, locally bl'd & hem'd &						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		sil'd; 20% 1/8"-1/2"dull white bullish quartz vn's @15; 2% fine disseminated FeS2						
			9868	236.50	238.80	2.30	.007	
		237.00 - 237.40 PY@36 highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd; 5% fine disseminated FeS2; immediately followed by 1/8" chlorite-carbonate slip @36						
		238.00 - 238.70 3"ank vn @20						
			9869	238.80	239.90	1.10	.013	
			9870	239.90	242.80	2.90	.035	
			9871	242.80	244.50	1.70	.000	
		244.50 - 244.60 PY@13 moderately alt'd, locally bl'd & hem'd & sil'd; q- ank fractures @13; 2% fine disseminated FeS2	9872	244.50	246.20	1.70	.003	
		246.20 - 420.00 freshens up again	9873	278.00	279.00	1.00	.069	
		278.50 - 278.80 1/2"BL'D;PY;@25 1/8" chlorite-carbonate slip @25; immediately followed by 1/2"highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd zone; bull disc. q frag's; 2% fine disseminated FeS2						
		301.70 - 311.00 wy bl'd	9874	301.80	303.00	1.20	.000	
		303.20 - 303.20 1/8" chlorite-carbonate slip @62						
			9875	309.90	311.00	1.10	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		310.70 - 310.80						
		1"SIL						
		1"dk gy silicious zone @72; spec?; 20% bx frag's						
			9876	322.40	324.40	2.00	.000	
		322.70 - 323.30						
		SHR@60						
		chl shr is silicious & dk gy; @60						
		324.20 - 324.20						
		SHR@66						
		1/4"chl shr @66; immediately followed by						
		1/4" dull white bullish quartz vn						
			9877	339.50	341.00	1.50	.000	
		340.30 - 340.30						
		1/4"QV@20						
		1/4"dull white bullish quartz vn @20 in						
		1'wy bl'd zone						
			9878	374.00	375.50	1.50	.000	
		374.30 - 374.50						
		FLT@36						
		chl flt zone @36; immediately followed by						
		1'wy bl'd zone						
			9879	402.50	403.70	1.20	.007	
		403.00 - 403.00						
		1/4"dull white bullish quartz vn on 1/8"						
		chlorite-carbonate slip @17						
			9880	403.70	405.60	1.90	.008	
			9881	405.60	406.60	1.00	.100	
		406.00 - 407.30	9882	406.60	408.40	1.80	.020	
		1"SIL;PY;@34						
		1"highly alt'd, bl'd buff-br, ser'n &						
		chl'n, & sil'd zone with 60% qtz @34; 5%						
		fine disseminated FeS2						
		413.80 - 413.80						
		broken & ground core common; poor						
		competency						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
			9883	413.80	414.80	1.00	.002		
			9884	424.80	425.70	0.90	.001		
		425.20 - 425.20 1/4"-1/2"dull white bullish quartz-ank vn @24							
			9885	428.20	429.20	1.00	0.136	0.127	0.145
		428.80 - 428.80 BL'D;PY;@22 1/2"highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd zone @22; 10% ank; 2% fine disseminated FeS2							
			9886	434.30	436.40	2.10	0.148	0.140	0.156
		435.50 - 435.90 1/4"QSTR'S;PY;@22 1/8"-1/4"milk white & pale grey quartz stringers in highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd zone; @22; 2% fine disseminated FeS2; in 2'bl'd zone							
448.90	474.60	G GREYWACKE-f.g. to c.g.; arenitic; comp.; wy mag; grey-brown							
		448.90 - 448.90 -sharp natural contact @30							
			9887	451.80	453.30	1.50	0.213	0.213	0.213
		452.00 - 453.30 moderately alt'd, locally bl'd & hem'd & sil'd; chl fract's @28							
			9888	462.00	465.10	3.10	.002		
		463.90 - 474.60 CONG? 15% clasts-almost a conglomerate; in ser-chl matrix mod'y fol'd @42	9889	465.10	466.10	1.00	.019		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		465.80 - 465.80						
		1/4"QV@48						
		1/8"-1/4"milk white & pale grey quartz stringer @48						
			9890	466.10	469.60	3.50	.021	
			9891	469.60	473.20	3.60	.018	
			9892	473.20	475.90	2.70	.016	
		473.70 - 473.70						
		FLT@36						
		1/8"chl-ank flt@36						
		473.70 - 475.80						
		BL'D;G?;PY;@45						
		buff-orange ank-albite-chl zone; highly alt'd, bl'd buff-br, ser'n & chl'n, & sil'd; could be highly alt'd fel rib or greywacke with a raft of B.S.@474.6'-474.9'@45; 1% fine disseminated FeS2						
474.60	485.00	L	9893	475.90	477.40	1.50	.002	
		BASIC SYENITE- highly alt'd, ser'n & chl'n; locally bl'd; not particularly comp.; fol'd@53						
		476.40 - 477.60	9894	477.40	478.40	1.00	.005	
		20%QF'S						
		20% bullish,cherty,milk white quartz fragments						
		477.60 - 478.30						
		6"QV@52&66						
		6"milk white quartz vein with hem'd/bl'd bx frags; @52 & @66 respectively; somewhat bullish cherty bone white; 1% fine disseminated FeS2						
			9895	478.40	479.90	1.50	.006	
			9896	479.90	482.30	2.40	.075	
		482.30 - 482.70	9897	482.30	484.30	2.00	.009	
		STR SHR@39						
		ser-chl shr is str @39						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		482.70 - 484.20 FLT;3"QV;FLT;@35 initially 3"pale grey QV immediately preceded by 1/4"chl-ank flt @34; altering to q-ank-chl-ser-alb zone downhole; 1/4"chl-ank flt @36 @483.5'						
			9898	484.30	486.40	2.10	.002	
485.00	488.00	F FELSIC SYENITE- fresh salmon-pink to brown, homogeneous, texture is massive similar to the basic syenite, <20% mafics,minor anker. stringers; competent; carb veining common						
		485.00 - 485.00 -sharp natural contact @42						
488.00	522.00	L BASIC SYENITE- fresh, massive, competent, dark gn4gy, homogeneous, felsic ribs up to 1" pseudomorphs pale green distributed evenly throughout, sharp natural leading contact @48						
		506.00 - 507.00 FELSIC SYENITE- fresh salmon-pink to brown, homogeneous, texture is massive similar to the basic syenite, <20% mafics,minor anker. stringer4; competent; carb veining common						
		522.00 - 522.00 E.O.H.						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 47						
		Total footage sampling : 81.60 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-18 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17658.18 N Azimuth: 148° 0' 0"
Easting : 15982.42 E Dip: -40° 0' 0"
Reference line : Elevation: 62.73 Depth: 367.00

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00	-40° 0' 0"	148° 0' "
367.00	-40° 0' 0"	148° 0' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-18

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
0.00	5.40	CAS						
5.40	12.00	P						
12.00	67.50	L						
		16.20 - 17.50	2771	16.40	17.80	1.40	.001	
		FLT@40						
		25.80 - 25.90						
		FLT@85						
			2772	44.30	45.00	0.70	.001	
		44.60 - 44.60						
		FLT@46						
			2773	61.10	61.90	0.80	.002	
			2774	67.40	69.60	2.20	.001	
67.50	87.10	G						
		68.20 - 68.20						
		SHR@66						
		69.30 - 69.30						
		FLT@54						
			2775	76.70	77.60	0.90	.002	
			2776	86.70	87.40	0.70	.001	
87.10	92.80	L						
		87.10 - 87.10						
		SHR@71						
92.80	186.60	G	2777	92.80	95.00	2.20	.009	
			2778	101.70	102.80	1.10	.000	
		102.40 - 102.40						
		3/16"QSTR;PY;@65						
			2780	106.80	107.60	0.80	.000	
			2781	117.00	118.50	1.50	.005	
		117.70 - 117.70						
		1/8"QSTR;3%PY;@28						
			2782	118.50	120.30	1.80	.003	

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )			
		120.30 - 121.50	2783	120.30	121.50	1.20	.089		
		SIL;5%PY							
			2784	121.50	122.60	1.10	.083		
		121.70 - 122.10							
		1/2"QV;3%PY;@25							
		122.60 - 122.60	2785	122.60	124.60	2.00	.211	.210	.211
		1/4"QV@60							
		123.50 - 124.20							
		40%1"QV'S;PY;@21&54							
			2786	124.60	125.70	1.10	.091		
			2787	125.70	127.00	1.30	.086		
		125.80 - 126.60							
		40%1/2"QV'S;BL'D;ALB;3%PY;@36&56							
			2788	127.00	128.40	1.40	.010		
		130.70 - 130.70							
		SHR@47							
			2789	139.60	141.30	1.70	.000		
			2790	163.80	165.60	1.80	.001		
			2791	165.60	168.60	3.00	.001		
			2792	168.60	171.60	3.00	.001		
			2793	171.60	174.60	3.00	.001		
			2794	174.60	177.60	3.00	.002		
			2795	177.60	180.60	3.00	.001		
		178.00 - 178.00							
		FLT							
			2796	180.60	183.60	3.00	.002		
		183.60 - 186.60	9551	183.60	184.70	1.10	0.05		
		10%QSTR'S;5%PY;6"QV;V.G.	2797	184.70	186.60	1.90	0.70	0.74	0.65
186.60	209.30	T	2798	186.60	189.60	3.00	.001		
			9514	203.60	206.60	3.00	.010		
		206.60 - 207.10	2800	206.60	209.30	2.70	.02		
		3%PY@40							
209.30	226.40	G							

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )			
		216.60 - 217.00							
		FLT@15							
			3001	223.40	226.40	3.00	.001		
226.40	236.00	IDK	3002	226.40	229.40	3.00	.001		
			3003	226.40	229.40	3.00	.01		
		229.40 - 236.00	3004	229.40	232.00	2.60	.06		
		HEM;5%PY	3005	232.00	234.00	2.00	0.39	0.35	0.43
			3006	234.00	236.00	2.00	.001		
236.00	277.00	T	3007	236.00	238.70	2.70	.01		
			3008	238.70	241.00	2.30	.001		
			3009	241.00	243.00	2.00	.001		
			3010	243.00	244.50	1.50	.001		
			3011	244.50	246.00	1.50	.001		
			3012	246.00	249.00	3.00	.001		
			3013	249.00	251.60	2.60	.001		
			3014	251.60	254.40	2.80	.001		
			3015	254.40	256.00	1.60	.001		
			3016	256.00	258.50	2.50	.001		
			3017	258.50	261.00	2.50	.001		
			3018	261.00	263.20	2.20	.03		
		263.20 - 263.20	9552	263.20	264.50	1.30	.006		
		SHR@54							
		264.50 - 264.50							
		FLT@25							
			3019	264.50	266.00	1.50	.001		
			3020	266.00	269.00	3.00	.001		
			3021	269.00	272.00	3.00	.001		
			3022	272.00	275.00	3.00	.001		
		275.00 - 277.00	3023	275.00	277.00	2.00	.01		
		1/2%PY							
277.00	290.60	G	3024	277.00	280.00	3.00	.001		
			3025	280.00	283.00	3.00	.001		
		281.20 - 281.20							
		FLT@30							
			3026	283.00	286.00	3.00	.001		

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
		283.80 - 284.20						
		FLT@8						
			3027	286.00	288.00	2.00	.001	
			3028	288.00	290.60	2.60	.03	
		290.50 - 291.70						
		BRK						
290.60	367.00	L	9553	290.60	291.80	1.20	.001	
			9554	291.80	293.30	1.50	.005	
		293.00 - 293.00						
		FLT@44						
		367.00 - 367.00						
		E.O.H.						
		END OF HOLE						
		Total samples : 61						
		Total footage sampling : 128.30						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-19 Zone : POWDERHOUS Contractor: H&S Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 16897.53 N Azimuth: 333° 0' 0"
Easting : 16076.76 E Dip: -66° 0' 0"
Reference line : Elevation: 52.66 Depth: 1250.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00 P	-66° 0' 0"	333° 0' "
100.00 P	-67° 0' 0"	337°30' "
200.00 P	-67° 0' 0"	348°30' "
300.00 P	-68° 0' 0"	349°30' "
400.00 P	-68° 0' 0"	348°30' "
500.00 P	-69° 0' 0"	349°30' "
600.00 P	-69° 0' 0"	349°30' "
700.00 P	-69° 0' 0"	351°30' "
800.00 P	-69° 0' 0"	348°30' "
900.00 P	-68° 0' 0"	356°30' "
1000.00 P	-68° 0' 0"	356°30' "
1250.00 P	-70° 0' 0"	358° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-19

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	7.00	O/B						
7.00	224.30	T	2989	22.70	23.70	1.00		
		23.20 - 23.20						
		FLT@57						
			2990	46.00	46.70	0.70	.001	
			2991	47.50	48.90	1.40	.003	
			2992	65.80	66.70	0.90	.001	
		66.20 - 66.20						
		V STR FLT@58						
		96.10 - 96.10						
		FLT@40						
			2993	97.00	98.30	1.30	.001	
			2994	223.90	224.90	1.00	.002	
224.30	237.50	P	2995	236.40	237.80	1.40	.001	
237.50	293.10	T						
		237.50 - 237.50						
		BL'D;FLT@32						
		247.70 - 249.50	2996	248.00	249.40	1.40	.001	
		BL'D;1/8"QSTR;3%PY;@18						
			2997	281.00	282.40	1.40	.002	
		281.10 - 283.00						
		BL'D						
			2998	292.00	293.30	1.30	.001	
293.10	333.20	P						
		293.10 - 293.10						
		SHR@37						
			2999	296.60	297.90	1.30	.002	
			2701	331.80	333.40	1.60	.001	
		332.20 - 332.50						
		FLT@27						
333.20	552.00	T						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		333.20 - 333.20						
		SHR@45						
			2702	342.10	342.80	0.70		
		342.30 - 342.30						
		SHR@50						
			2703	353.40	355.20	1.80	.001	
		353.70 - 353.70						
		FLT@37						
			2704	355.90	357.90	2.00	.001	
		357.50 - 357.70						
		3%PY						
			2705	357.90	359.70	1.80	.001	
			2706	390.70	391.60	0.90	.002	
		408.30 - 409.40	2707	408.80	410.70	1.90	.001	
		SHR@11						
			2708	419.00	420.10	1.10	.001	
		419.10 - 419.20						
		FLT@54						
		461.10 - 463.20	2709	462.00	463.40	1.40	.001	
		DYKE?@37;PY						
552.00	716.40	L						
716.40	783.40	P	2710	753.50	754.30	0.80	.001	
			2711	759.50	761.30	1.80	.001	
			2712	779.20	782.40	3.20	.001	
783.40	799.40	L						
799.40	802.30	F						
802.30	826.60	L	2713	809.30	810.70	1.40	.000	
		809.60 - 819.60	2714	810.70	811.60	0.90	.000	
		FLT ZONE;60%ANK;HEM;@7-24	2715	811.60	814.90	3.30	.011	
			2716	814.90	817.80	2.90	.001	
			2717	817.80	819.80	2.00	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
826.60	832.40	F						
832.40	999.10	L	2718	870.10	873.00	2.90	.001	
		873.00 - 879.00	2719	873.00	874.80	1.80	.002	
		FLT ZONE;70%ANK;HEM;@9&12	2720	874.80	877.00	2.20	.002	
			2721	877.00	879.20	2.20	.001	
			2722	894.00	894.70	0.70	.000	
			2723	899.10	900.00	0.90	.001	
999.10	1004.80	F						
1004.80	1030.00	L						
1030.00	1031.70	F						
		1030.00 - 1030.00						
		FLT@14						
			9674	1030.00	1031.80	1.80	.003	
1031.70	1153.00	L	9675	1048.60	1050.40	1.80	.002	
		1048.80 - 1050.40						
		40%QTZ STOC;HEM;PY;@13						
			9676	1058.60	1061.20	2.60	.001	
		1060.00 - 1060.00						
		FLT						
			9677	1077.90	1078.90	1.00	.003	
			9678	1085.30	1086.40	1.10	.003	
		1086.00 - 1086.00						
		SHR@33						
			9679	1107.00	1109.60	2.60	.010	
			9680	1119.40	1120.60	1.20	.000	
			9681	1125.50	1127.00	1.50	.000	
1153.00	1156.20	F						
1156.20	1250.00	L						
		1167.00 - 1167.00						
		FLT@24						
			9682	1195.50	1199.00	3.50	.003	
			9683	1199.00	1202.30	3.30	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
			9684	1202.30	1203.70	1.40	.012		
		1203.60 - 1204.60	9685	1203.70	1204.80	1.10	.101		
		SIL;ALB;BL'D;@47;5%PY							
		1204.60 - 1206.40	9686	1204.80	1206.20	1.40	.099		
		2%PY	9687	1206.20	1207.00	0.80	.213		
		1206.50 - 1206.50							
		FLT;6%PY-6";@68							
			9688	1207.00	1209.00	2.00	0.189	0.159	0.218
		1208.20 - 1208.20							
		1/8"QV@59							
		1209.00 - 1209.70	9689	1209.00	1209.90	0.90	0.27		
		SIL;ALB;8%PY;@57							
			9690	1209.90	1212.00	2.10	.008		
			9691	1212.00	1214.80	2.80	.001		
			9692	1214.80	1218.20	3.40	.000		
			9693	1218.20	1222.00	3.80	.011		
			9694	1222.00	1226.00	4.00	.001		
			9695	1226.00	1228.00	2.00	.001		
			9696	1228.00	1229.50	1.50	.001		
		1228.20 - 1230.80	9697	1229.50	1230.70	1.20	.000		
		DK GY SIL;2%PY;@27	9698	1230.70	1233.50	2.80	.001		
			9699	1233.50	1235.50	2.00	.001		
			9700	1235.50	1236.50	1.00	.004		
			9751	1236.50	1239.50	3.00	.065		
		1237.20 - 1237.30							
		1/8"QV;3%PY;@58;V.G.							
		1238.00 - 1238.10							
		50%1/8"QSTR'S;3%PY;@70							
		1238.80 - 1238.80							
		1/8"QSTR;3%PY;@67							
		1239.50 - 1240.50	9752	1239.50	1241.00	1.50	0.341	0.333	0.348
		BL'D;SIL;ALB;6%PY;@43-65;V.G.							
			9753	1241.00	1242.00	1.00	0.073		

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		1241.50 - 1241.70 10%1/8"QSTR'S;BL'D;3%PY;@52						
			9754	1242.00	1245.00	3.00	.009	
			9755	1245.00	1249.00	4.00	.001	
			9756	1249.00	1250.00	1.00	.001	
		1250.00 - 1250.00 E.O.H.						
		END OF HOLE						
		Total samples : 67 Total footage sampling : 121.40 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-23 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 16857.87 N Azimuth: 327°30' 0"
Easting : 14578.33 E Dip: -45° 0' 0"
Reference line : Elevation: 104.89 Depth: 650.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
325.00 P	-40° 0' 0"	327°30' "
650.00 P	-35° 0' 0"	327°30' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-23

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	0.80	CAS O/B						
0.80	97.00	T	3601	9.40	10.40	1.00	.002	
			3602	10.40	11.90	1.50	.002	
			3603	24.60	25.60	1.00	.001	
			3604	33.00	34.00	1.00	.001	
			3605	35.90	37.00	1.10	.003	
			3606	39.10	41.30	2.20	.040	
		39.80 - 39.90 BL'D;PY;@67						
			9994	41.30	43.00	1.70	.001	
			9995	43.00	46.00	3.00	.002	
			9996	46.00	49.00	3.00	.004	
		48.80 - 51.40 BL'D@66	3607	49.00	50.50	1.50	.023	
			3608	71.50	73.00	1.50	.004	
			3609	76.60	77.60	1.00	.003	
			3610	79.10	80.20	1.10	.001	
			3611	92.90	93.80	0.90	.002	
97.00	98.20	IDK	3612	98.00	99.50	1.50	.002	
98.20	192.50	T						
		99.00 - 99.00 FLT@43						
			9997	107.00	108.00	1.00	.001	
			9998	108.00	108.40	0.40	.016	
			3613	108.40	109.40	1.00	.027	
			3614	109.40	110.80	1.40	.002	
		110.40 - 110.40 *SHR@63;1/8"QV*						
			3615	113.90	114.80	0.90	.002	
			3616	117.30	118.80	1.50	.001	
			3617	136.90	138.90	2.00	.002	
			3618	143.10	144.20	1.10	.004	
			3619	144.20	145.60	1.40	.006	
		145.00 - 145.60 HEM;PY;@39	9999	145.60	148.00	2.40	.001	
			3620	148.00	148.80	0.80	.045	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		148.10 - 148.30						
		HEM;@67						
			3621	149.90	151.00	1.10	.013	
			3622	174.20	176.10	1.90	.001	
			3623	187.00	188.00	1.00	.004	
			3624	189.00	191.60	2.60	.006	
			3625	191.60	192.60	1.00	.005	
192.50	194.10	IDK	3626	192.60	194.30	1.70	.003	
194.10	202.00	T	3627	195.90	197.00	1.10	.003	
			3628	197.00	199.00	2.00	.004	
		198.70 - 198.80						
		FLT;B.C.						
			3629	201.50	204.60	3.10	.006	
202.00	204.30	IDK						
204.30	221.00	T						
		214.90 - 214.90						
		SHR@70						
			3630	220.70	222.50	1.80	.003	
221.00	226.00	P	3631	222.50	224.10	1.60	.004	
		224.00 - 224.00						
		STR FLT;5"SIL;@60						
			3632	225.70	227.50	1.80	.006	
226.00	231.70	T	3633	229.70	230.70	1.00	.006	
		230.00 - 231.70	3634	230.70	231.70	1.00	.008	
		BRK;4%PY;@69						
231.70	251.70	P	3635	231.70	233.40	1.70	.008	
251.70	341.00	T	3636	254.00	255.80	1.80	.011	
			3637	259.00	260.30	1.30	.017	
			3638	260.30	262.00	1.70	.007	
			3639	262.00	263.80	1.80	.003	
			3640	263.80	265.50	1.70	.005	
			3641	265.50	266.50	1.00	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		265.80 - 266.50						
		6%PY;SIL						
			3642	266.50	268.10	1.60	.001	
			3643	268.10	270.00	1.90	.007	
			3644	270.00	272.20	2.20	.001	
			3645	272.20	273.20	1.00	.006	
			3646	330.10	331.20	1.10	.008	
341.00	378.90	P	3647	342.50	343.30	0.80	.002	
			3648	344.60	345.70	1.10	.001	
			3649	378.40	379.20	0.80	.001	
		378.80 - 378.80						
		FLT@84						
378.90	645.30	T	3650	391.70	392.80	1.10	.002	
			3651	421.80	422.40	0.60	.001	
		422.20 - 422.20						
		FLT@74						
			3652	423.70	424.60	0.90	.003	
		423.90 - 424.10						
		SHR;PY;@75						
			3653	432.90	433.80	0.90	.003	
			3654	447.20	448.00	0.80	.003	
		447.80 - 447.80						
		SHR@55						
			3655	458.40	459.30	0.90	.006	
			3656	464.80	465.60	0.80	.002	
			3657	468.70	469.50	0.80	.003	
			3658	498.10	499.70	1.60	.002	
		498.40 - 498.40						
		SHR@78						
			3659	511.30	512.20	0.90	.002	
			3660	514.00	514.60	0.60	.002	
			3661	524.60	525.40	0.80	.001	
			3662	547.80	549.10	1.30	.000	
		548.70 - 548.70						
		SHR						
			3663	549.10	550.70	1.60	.002	
			3664	552.80	553.70	0.90	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		553.50 - 553.50						
		FLT@79						
			3665	561.20	562.20	1.00	.001	
		561.50 - 561.50						
		FLT@75						
		589.20 - 589.20						
		SHR@77						
			3666	598.50	599.80	1.30	.003	
			3667	617.60	618.30	0.70	.001	
645.30	650.00	C	3668	649.00	650.00	1.00	.002	
		END OF HOLE						
		Total samples : 74						
		Total footage sampling : 99.60 P						

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DRILLING LOG

Property: TECK

Hole # : 98-25 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 16561.28 N Azimuth: 327°30' 0"
Easting : 13911.48 E Dip: -40° 0' 0"
Reference line : Elevation: 79.10 Depth: 552.00

Survey by:

Deviation tests :

Depth	Dip	Azimuth
341.00	-31° 0' 0"	327°30' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-25

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
0.00	11.40	O/B						
11.40	40.10	C						
40.10	160.70	T	9556	41.00	42.30	1.30	.001	
			9557	77.00	79.00	2.00	.002	
			9558	79.00	80.30	1.30	.01	
			9559	80.30	81.90	1.60	.001	
		81.00 - 81.80						
		2"QV						
			9560	81.90	83.80	1.90	.001	
			9561	95.20	97.30	2.10	.001	
160.70	175.00	P	9562	166.30	167.50	1.20	.001	
		166.80 - 166.80						
		1/2%PY						
		167.50 - 168.10	9563	167.50	168.80	1.30	.01	
		2%PY						
			9564	172.00	173.30	1.30	.001	
			9565	174.00	175.40	1.40	.001	
175.00	262.30	T	9566	187.00	187.90	0.90	.001	
			9567	237.70	239.00	1.30	.001	
		238.30 - 238.30						
		BRK						
			9568	260.00	260.80	0.80	.001	
			9569	260.80	262.00	1.20	.001	
			9570	262.00	263.80	1.80	.001	
262.30	263.60	IDK						
263.60	552.00	T	9571	267.80	269.00	1.20	.001	
			9655	302.80	304.50	1.70		
			9656	310.00	311.10	1.10		
			9657	361.60	362.80	1.20	.001	
			9658	362.80	363.50	0.70	.002	
		363.10 - 363.20						
		1"QV;FLT						
			9659	363.50	364.70	1.20	.001	
			9660	382.60	383.20	0.60	.001	

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
			9661	384.60	387.60	3.00	.000	
			9662	416.20	417.00	0.80	.001	
			9663	420.80	422.10	1.30	.002	
			9664	434.10	436.70	2.60		
		435.60 - 435.60						
		FLT@44						
			9665	449.10	451.00	1.90	.000	
		450.50 - 450.50						
		FLT@85						
			9666	453.70	454.30	0.60	.000	
		454.00 - 454.00						
		SHR						
			9667	499.50	501.10	1.60	.000	
			9668	501.10	502.20	1.10	.000	
			9669	503.90	506.10	2.20	.002	
			9670	506.10	507.40	1.30	.001	
		506.20 - 507.20						
		BL'D;2%PY						
			9671	507.40	510.10	2.70	.000	
			9672	521.80	522.80	1.00	.001	
			9673	544.90	546.60	1.70	.001	
		552.00 - 552.00						
		E.O.H.						
		END OF HOLE						
		Total samples : 35						
		Total footage sampling : 50.90						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-26 Zone : POWDERHOUS Contractor: H&S Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17812.04 N Azimuth: 333° 0' 0"
Easting : 17183.59 E Dip: -45° 0' 0"
Reference line : Elevation: 17.06 Depth: 537.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
537.00 P	-40° 0' 0"	333° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-26

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	28.20	O\B						
28.20	28.70	L						
28.70	155.00	T						
		30.50 - 30.60						
		1"IDK						
			2930	37.00	38.20	1.20	.000	
			2931	50.30	51.30	1.00	.000	
		50.60 - 50.60						
		SHR						
			2932	77.00	77.80	0.80	.000	
		77.50 - 77.50						
		FLT@50						
			2933	79.70	81.20	1.50	.000	
			2934	88.50	89.70	1.20	.000	
			2935	89.70	91.70	2.00	.005	
		89.80 - 89.80						
		FLT@23						
		90.40 - 91.50						
		FLT'S@32&37						
			2936	109.00	109.80	0.80	.000	
		109.50 - 109.80						
		HEM;SHR;PY						
			2937	147.40	148.30	0.90	.001	
			2938	154.40	156.80	2.40	.001	
155.00	156.50	P						
156.50	201.70	T						
		156.50 - 156.70						
		PY;BL'D						
			2939	170.30	171.10	0.80	.001	
			2940	177.40	178.40	1.00	.001	
		177.70 - 178.10						
		PY@63						
			2941	192.30	193.50	1.20	.001	

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		192.70 - 193.00							
		BL'D@32							
201.70	220.60	G	2942	209.50	209.60	0.10	.001		
			2943	209.60	210.90	1.30	.001		
220.60	270.60	T	2944	239.10	240.10	1.00	.000		
		239.40 - 239.50							
		8%PY@67							
			2945	246.50	249.00	2.50	.000		
		248.70 - 248.70							
		FLT@51							
270.60	313.30	L							
		293.50 - 293.50							
		FLT@64							
			2946	297.20	298.20	1.00	.001		
		297.80 - 298.00							
		FLT@78							
		298.40 - 298.40							
		FLT@78							
313.30	318.30	P	2947	317.00	318.30	1.30	.000		
318.30	381.00	L	9960	357.00	359.00	2.00	.003		
			2948	359.00	360.20	1.20	.153	.162	.143
		359.20 - 359.20							
		3/4"SIL;HEM;4%PY;@66							
		359.20 - 360.30	9961	360.20	362.20	2.00	.002		
		5%PY							
381.00	384.10	F							
384.10	412.50	L	2949	412.40	413.40	1.00	.002		
412.50	419.00	F							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
419.00	537.00	P	2950	444.00	446.10	2.10	.008	
		444.30 - 444.30						
		3%PY@64						
		445.00 - 445.00						
		FLT?;G.C.						
			2951	446.10	447.00	0.90	.001	
			2952	460.50	461.30	0.80	.000	
			2953	488.20	489.00	0.80	.028	
		488.80 - 488.80						
		HEM@71						
			2954	492.10	493.30	1.20	.007	
			2955	493.30	494.40	1.10	.024	
		494.10 - 494.10						
		FLT;5"PY;@57						
			2956	497.00	499.00	2.00	.011	
		498.60 - 498.60						
		HEM						
			2957	535.10	537.00	1.90	.006	
537.00	537.00	EOH						
		END OF HOLE						
		Total samples : 30						
		Total footage sampling : 39.00 P						

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DRILLING LOG

RECEIVED
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GEOSCIENCE ASSESSMENT OFFICE

Property: TECK

Hole # : 98-27 Zone : POWDERHOUS Contractor: H&S

Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17758.23 N
Easting : 16091.04 E
Elevation: 45.12

Azimuth: 154° 0' 0"
Dip: -72° 0' 0"
Depth: 907.00P

Reference line :

Survey by:

Deviation tests :

Depth	Dip	Azimuth
300.00 P	-73°30' 0"	154° 0' "
600.00 P	-74° 0' 0"	154° 0' "
894.00 P	-74° 0' 0"	154° 0' "

Remarks :

Plugged:
Hole Diameter: BQ

Logged by : MIKE SUTTON Date logged: / / Hole no: 98-27

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	8.70	O\B						
8.70	387.70	P	82465	47.50	48.20	0.70	.001	
			82466	61.70	62.20	0.50	.001	
			82467	82.00	83.50	1.50	.001	
			82468	342.00	342.80	0.80	.001	
387.70	404.70	L	82469	401.80	403.90	2.10	.001	
		402.20 - 402.20 FLT;5"HEM;@25						
			82470	403.90	405.10	1.20	.001	
		404.30 - 404.70 STR FLT@35						
404.70	412.20	P	82471	405.10	407.40	2.30	.001	
		407.00 - 407.00 FLT@24						
412.20	483.80	F	82472	428.10	428.90	0.80	.001	
			82473	437.70	438.60	0.90	.001	
			82474	462.70	463.50	0.80	.001	
			82475	476.60	478.20	1.60	.01	
483.80	496.20	L						
496.20	513.60	F						
513.60	529.70	L						
529.70	551.80	F	82476	539.80	540.80	1.00	.001	
		540.40 - 540.40 STR SHR;5%PY						
551.80	575.60	L						
575.60	612.30	F						
612.30	619.40	L						
619.40	628.20	F						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
628.20	752.50	L	82477	750.50	752.50	2.00	.0001		
752.50	777.70	F							
		752.50 - 777.70	82478	752.50	754.90	2.40	.0001		
		SIL'D@15,32,52;6%PY	82479	754.90	756.10	1.20	.671	.660	.681
		755.00 - 755.60							
		MYL;3/4"QV;10%PY;@15							
			82480	756.10	757.70	1.60	.459	.477	.441
			82481	757.70	759.90	2.20	.133	.139	.126
			82482	759.90	762.50	2.60	.191	.203	.178
			82483	762.50	764.60	2.10	.271	.277	.264
			82484	764.60	766.40	1.80	.414	.505	.323
			82485	766.40	768.70	2.30	.414	.410	.417
			82486	768.70	770.30	1.60	.185	.190	.179
			82487	770.30	771.40	1.10	.162	.138	.186
			82488	771.40	774.00	2.60	.233	.235	.231
			82489	774.00	775.30	1.30	.195	.216	.173
		775.30 - 777.00							
		2'L.C.							
			82490	777.00	778.10	1.10	.290	.284	.295
777.70	796.60	L	82491	778.10	780.20	2.10	.042		
796.60	801.10	F							
801.10	820.20	L							
820.20	823.30	F							
823.30	907.00	L	82492	827.30	828.30	1.00	.019		
907.00	907.00	EOH							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 28						
		Total footage sampling : 43.20 P						

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LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-28 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17711.00 N Azimuth: 148° 0' 0"
Easting : 16064.54 E Dip: -40° 0' 0"
Reference line : Elevation: 49.21 Depth: 345.00

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00	-40° 0' 0"	148° 0' "
335.00	-38° 0' 0"	148° 0' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-28

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
0.00	12.00	CAS						
12.00	272.60	L	9743	23.50	24.80	1.30	.002	
			9744	31.00	32.00	1.00	.001	
			9745	33.50	34.50	1.00	.001	
			9746	43.00	44.00	1.00	.002	
			9747	49.10	50.10	1.00	.002	
			9748	53.80	54.80	1.00	.001	
			9749	58.00	59.00	1.00	.001	
			9750	59.00	61.00	2.00	.000	
		59.20 - 59.20						
		SHR@40						
			9801	79.50	80.50	1.00	.001	
		79.80 - 80.10						
		SHR@30						
			9802	80.50	83.00	2.50	.003	
			9803	83.00	84.00	1.00	.000	
		83.80 - 83.80						
		FLT;PY;@30						
			9804	84.00	85.10	1.10	.000	
			9805	85.10	86.10	1.00	.000	
			9806	86.10	87.30	1.20	.000	
			9807	87.30	89.00	1.70	.001	
			9808	89.00	91.00	2.00	.000	
			9809	91.00	92.00	1.00	.000	
			9810	92.00	93.00	1.00	.000	
			9811	117.00	118.20	1.20	.000	
			9812	118.20	120.00	1.80	.000	
			9813	133.70	136.70	3.00	.001	
			9814	146.00	147.50	1.50	.001	
			9815	149.00	150.00	1.00	.001	
			9816	154.00	156.00	2.00	.001	
			9817	177.40	178.40	1.00	.001	
			9818	178.40	180.70	2.30	.000	
			9819	180.70	182.00	1.30	.000	
			9820	182.00	183.00	1.00	.052	
		182.10 - 182.10						
		QV@30						

From ( )	To ( )		DESCRIPTION	Sample	From ( )	To ( )	Long ( )			
			182.70 - 182.70							
			2"QV@40							
				9821	183.00	184.00	1.00	.003		
				9822	184.00	185.60	1.60	.000		
				9823	204.40	205.40	1.00	.003		
				9824	216.00	217.00	1.00	.001		
				9825	217.00	220.50	3.50	.001		
				9826	220.50	221.50	1.00	.013		
				9827	221.50	223.50	2.00	.010		
				9828	223.50	224.50	1.00	.041		
			224.00 - 224.00							
			1/8"QV@60							
				9829	224.50	225.50	1.00	.001		
				9830	225.50	226.50	1.00	.004		
				9831	240.00	241.50	1.50	.001		
				9832	246.00	247.00	1.00	.023		
			264.90 - 266.40	9833	264.90	266.40	1.50	0.455	0.460	0.449
			2%QSTR'S;3%PY;@50							
				9834	267.90	269.80	1.90	.002		
				9835	271.60	272.60	1.00	.001		
272.60	298.80	G		9836	272.60	273.70	1.10	.000		
				9837	273.70	276.00	2.30	.003		
				9838	276.00	277.60	1.60	.000		
				9839	277.60	280.60	3.00	.001		
				9840	287.00	288.40	1.40	.001		
				9841	288.40	290.20	1.80	.000		
				9842	290.20	293.20	3.00	.001		
				9843	293.20	296.20	3.00	.001		
				9844	296.20	297.80	1.60	.016		
				9845	297.80	298.80	1.00	.006		
298.80	345.00	L		9846	298.80	299.70	0.90	.003		
				9847	299.70	301.70	2.00	.004		
				9848	301.70	304.00	2.30	.009		
				9849	304.00	307.00	3.00	.003		
				9850	307.00	309.30	2.30	.002		
				9951	309.30	311.90	2.60	.002		
			309.70 - 309.70							
			FLT@35							
				9952	311.90	312.90	1.00	.039		
				9953	314.50	315.50	1.00	.004		

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
			9954	320.10	321.90	1.80	.001	
			9955	321.90	322.90	1.00	.001	
			9956	324.90	325.90	1.00	.002	
		345.00 - 345.00						
		E.O.H.						
		END OF HOLE						
		Total samples : 64						
		Total footage sampling : 98.60						

RECEIVED
MAR - 9 1999
GEOSCIENCE ASSESSMENT OFFICE

LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-31 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: Azimuth: ° ' "
Easting : Dip: ° ' "
Reference line : Elevation: Depth: 7000.00P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
		-

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-31

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	47.50	CAS O/B-35.0'-47.0'diabase boulder; 5"sand @47.0'-47.5'						
47.50	900.00	P SYENITE PORPHYRY-fresh, purple-grey, 3% mafic xenoliths to 1", pale off-white feldspar phenos throughout; bullish q str's throughout @67-1/8"-1/4"	9905	72.90	73.80	0.90	.010	
		73.30 - 73.30 1/2"QV;FLT;@77 1/2"milk white & pale grey quartz stringer @77; immediately followed by 1/8"chl flt						
		86.40 - 86.50 hem'd to orange; on chl slips @73						
		95.50 - 95.50 1/8" chlorite-carbonate slip @59						
		103.50 - 103.50 1/8" carbonate-chlorite slip @66						
		121.10 - 121.10 1/8" chlorite-carbonate slip @37						
		153.20 - 153.20 1/8" chlorite-carbonate slip @36						
		165.00 - 165.00 E.O.H.						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 1						
		Total footage sampling : 0.90 P						

RECEIVED
MAR - 8 1993
GEOSCIENCE ASSESSMENT OFFICE

LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-31B Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 18877.49 N Azimuth: 153° 0' 0"
Easting : 18065.36 E Dip: -50° 0' 0"
Reference line : Elevation: 2.29 Depth: 1007.00

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00	-50° 0' 0"	153° 0' "
997.00	-36° 0' 0"	153° 0' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-31B

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )			
0.00	66.00	CAS							
66.00	514.20	P	9903	104.50	105.60	1.10	.001		
			9904	105.60	107.30	1.70	.001		
			9501	130.00	133.00	3.00	.001		
			9852	165.10	166.30	1.20	.002		
		215.00 - 217.20							
		FLT@10-30							
			9900	230.40	231.90	1.50	.002		
			9502	286.60	288.00	1.40	.001		
			9503	329.70	330.70	1.00	.001		
			9504	337.30	338.30	1.00	.001		
			9505	347.00	348.00	1.00	.001		
		347.40 - 347.40							
		2"QV;PY;@43							
			9506	358.00	359.00	1.00	.001		
			9507	361.00	362.00	1.00	.001		
		361.30 - 361.30							
		1"QV;PY;@52							
			9508	381.00	382.00	1.00	.001		
		381.60 - 381.60							
		1"QV@50							
			9509	409.50	410.50	1.00	.001		
		409.90 - 409.90							
		1/2"QV@75							
			9510	426.20	427.70	1.50	.001		
			9511	427.70	428.70	1.00	.001		
			9512	428.70	430.80	2.10	.000		
			9513	441.40	442.90	1.50	.000		
			9899	451.80	452.80	1.00	.001		
		452.30 - 452.30							
		2"QV;FLT@68							
			9601	459.50	460.50	1.00	.002		
		464.50 - 467.00	9602	464.50	467.00	2.50	0.301	0.312	0.290
		DK GY SIL'D?							
			9979	467.00	467.50	0.50	.006		
			9980	471.00	471.50	0.50	.001		
			9603	472.00	474.60	2.60	.005		

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
			9604	474.60	476.30	1.70	.001	
			9605	476.30	478.30	2.00	.001	
			9606	478.30	481.00	2.70	.006	
			9607	481.00	484.00	3.00	.001	
			9608	484.00	485.50	1.50	.005	
			9609	485.50	486.50	1.00	.004	
			9610	486.50	488.50	2.00	.001	
			9611	488.50	490.20	1.70	.001	
			9612	490.20	491.20	1.00	.001	
			9613	491.20	492.20	1.00	.001	
			9614	492.60	495.60	3.00	.001	
			9615	495.60	498.60	3.00	.001	
			9616	498.60	499.60	1.00	.001	
			9617	499.60	502.60	3.00	.001	
			9618	502.60	504.60	2.00	.001	
			9619	504.60	506.20	1.60	.001	
			9620	506.20	507.20	1.00	.002	
			9621	507.20	510.20	3.00		
			9622	510.20	512.20	2.00	.001	
			9623	512.20	514.20	2.00	.001	
514.20	517.00	IDK	9624	514.20	517.00	2.80	.001	
517.00	888.80	DIA	9625	517.00	522.00	5.00	.001	
		518.00 - 522.00 L.C.						
			9626	522.00	525.00	3.00	.001	
			9627	525.00	529.00	4.00	.001	
			9628	529.00	530.00	1.00	.001	
			9629	600.00	601.00	1.00	.001	
		845.00 - 845.00 FLT@40						
		856.00 - 856.00 FLT@30						
		857.00 - 857.00 FLT@20						
		884.50 - 884.50 FLT@25						
			9630	887.80	888.80	1.00	.000	

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
888.80	1007.00	P	9631	888.80	889.80	1.00	.000	
			9632	889.80	892.80	3.00		
			9633	892.80	895.80	3.00	.000	
			9634	917.00	918.00	1.00	.001	
			9635	930.00	933.00	3.00	.000	
			9636	965.60	966.60	1.00	.001	
		966.60 - 968.60	9637	966.60	968.60	2.00	.005	
		BRK@50						
			9638	968.60	969.60	1.00	.002	
			9639	969.60	971.60	2.00	.000	
			9640	978.00	980.00	2.00	.000	
		1007.00 - 1007.00						
		E.O.H.						
		END OF HOLE						
		Total samples : 60						
		Total footage sampling : 107.10						

LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-32 Zone : Contractor: H&S Date Started: / /
Date Completed: / /

Level : Section: Location: NARROWS

Northing: 17598.89 N Azimuth: 140° 0' 0"
Easting : 15847.17 E Dip: -40° 0' 0"
Reference line : Elevation: 74.63 Depth: 320.20P

Survey by:

Deviation tests :

Depth	Dip	Azimuth
341.00 P	-31° 0' 0"	140° 0' "

Remarks : CASING LEFT IN HOLE

Plugged: NO
Hole Diameter: BQ

Logged by : IAN RUSSELL Date logged: 12/10/1998 Hole no: 98-32

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
0.00	9.00	OB						
9.00	44.70	P						
		DK REDDISH, FRESH PORPH WITH ANGULAR TO SUBROUNDED FRAGS (1-3MM). PY OCCURS WITHIN MATRIX (<1%) AND ALONG FRACTURES/CHL SLIPS. MINOR WALL ROCK FRAGS THAT ARE CHL RICH (5-15MM). INTERVAL IS RELATIVELY COHESIVE, WITH THE EXCEPTION OF THE UPPER 12' WHICH IS BLOCKY AND BROKEN						
		19.70 - 19.70						
		1/8" QTZ VEIN @48-TCA						
		21.80 - 21.80						
		CHL SLIP @40-TCA						
		24.10 - 24.10						
		CHL CLIP @37-TCA						
		30.20 - 30.20						
		FLT 1/8" WIDE @47-TCA HEALED W/QTZ						
		33.40 - 33.40						
		1/8" QTZ/CHL SLIP @35-TCA						
		35.00 - 35.00						
		1/8" QTZ VN @60-TCA						
		35.70 - 35.70						
		CHL SLP @42-TCA						
		38.60 - 38.60						
		1/8" CHL SLP @41-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		39.10 - 39.10						
		CHL SLP @45-TCA						
		40.40 - 40.50						
		3 1/8" QTZ VN @77-TCA						
		42.50 - 46.20	9651	42.50	46.20	3.70		
		1/4"QSTR'S@80						
		43.90 - 43.90						
		CHL SLP @67-TCA						
44.70	56.20	G						
		GREYISH, GREENISH G, FG(1-2MM). UC SHARPLY GRADATIONAL W P. LC SHARP W F AND MARKED BY A 2" SHEARED RUSTY RED ZONE. 1% JASPER CLASTS (4-12MM). <<1% PY, <<<1%CPY (SEE INT BELOW). SERICITIZED/CHLORITIZED ALONG FRACTURES AND DISCREET INTERVALS.						
		44.70 - 44.70						
		-sharp natural contact @42						
		45.60 - 45.60						
		1/4" QTZ VN @80-TCA						
		45.80 - 45.80						
		1/4" QTZ VN @83-TCA						
		46.00 - 46.00						
		1/4" QTZ VN @85-TCA MLKY WHT, <<1%PY						
		46.80 - 46.80						
		1/4" QTZ VN @89-TCA MLKY WHT, <<1%EUH PY						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		46.90 - 46.90						
		1/4" MLKY WHT QTZ VN						
		FOLDED @88-TCA						
		47.50 - 47.50						
		1/4" MLKY WHT QTZ VN						
		@89-TCA <<1% EUH PY						
		47.70 - 47.90						
		4 MLKY WHT QTZ VN'S						
		1/8"-1/4" @70-85-TCA						
		1% CPY ASSOC WITH LAST VN						
		49.70 - 49.70						
		1/8" MLKY WHT QTZ VN						
		@80-TCA						
		ASSOC WITH 1" OF BRKEN CORE AND MINOR						
		HEM.						
		50.25 - 50.28						
		1/4" MLKY WHT QTZ VN						
		@80-TCA						
		50.65 - 50.68						
		1/4" MLKY WHT QTZ VN						
		@85-TCA						
		50.90 - 51.10	9652	51.00	52.80	1.80		
		2" ZONE OF HEM ALT						
		51.30 - 51.30						
		1/4"QV@78						
		1/4" QTZ VN						
		@78-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		51.40 - 51.40						
		1/4" MLKY WHT QTZ VEIN @80-TCA						
		51.60 - 51.70 FLT@40 1" WD FLT ZONE @40-TCA; CHL ANN BX						
		52.20 - 52.30 FLT@40 1" FLT ZN @40-TCA; CHL ANN BX						
			9653	55.00	56.70	1.70		
56.20	210.30	L MED GRN, GREENISH RED, WEAKLY ALT F. AUG EXTENSIVE THROUGHOUT, ANGULAR, 1-4MM. UC SHARP AND MARKED BY A CHL/SHR'D ZONE. LC SHARP, W A WEAKLY ALT P. BOTTOM 8' IS MODERATELY SHEARED WITH EXTENSIVE CHL ALONG SHEARS; BASIC SYENITE- fresh, massive, competent, dark gngy, homogeneous, felsic ribs up to 1" pseudomorphs pale green distributed evenly throughout, sharp natural leading contact						
		56.20 - 56.20 SHR@63 2"CHL-ANK SHR @63; WK						
		57.00 - 57.00 CHL SLP @40-TCA						
		58.10 - 58.10 1/16" MLKY WHT QTZ VN @80-TCA						
		58.70 - 58.70 1/8" MLKY WHT QTZ VN @70-TCA						
		59.60 - 59.60 CHL SLP @55-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		60.00 - 60.90						
		BLEACHED ZN						
		60.30 - 60.30						
		CHL SLP @40-TCA						
		62.40 - 62.40						
		1/4" QTZ CHL SLP/BRK @48-TCA						
		63.10 - 63.10						
		1/8" BRK?? QTZ/HEM @47-TCA						
		63.30 - 63.30						
		1/8" MLKY WHT QTZ VN @45-TCA						
		63.70 - 63.70						
		1/4" MLKY WHT QTZ VN @50-TCA						
		64.70 - 64.70						
		CHL SLP @65-TCA						
		64.90 - 64.90						
		1/8" MLKY WHT QTZ VN @55-TCA						
		65.40 - 65.40						
		1/8" MLKY WHT QTZ VN @55-TCA						
		67.40 - 67.40						
		1/16" QTZ/CHL SLP ASSOC HEM						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		@47-TCA						
		69.70 - 69.90						
		1/8" MLKY WHT QTZ VN @55-TCA BLEACHED ON EITHER SIDE OF QTZ VN						
		70.00 - 70.00						
		1/8" MLKY WHT QTZ VN @48-TCA BLEACHED FOR 1/2" ON EITHER SIDE OF VN						
		70.60 - 70.90						
		1/8" MLKY WHT QTZ VN @58-TCA BLEACHED ON EITHER SIDE OF VN (NOTE - VN AT CENTRE OF INTERVAL)						
		71.10 - 71.30						
		BLEACHED ZONE ASSOC WITH MLKY WHT QTZ STRINGERS. 1/16"-1/8" WIDE						
		74.50 - 74.50						
		1/8" MLKY WHT QTZ VN @80-TCA						
		75.30 - 75.40						
		BL'D ZN OF FRA SHD PORPH? ASSOC QTZ STG						
		76.10 - 76.10						
		1/8" MLKY WHT QTZ VN @57-TCA	9515	77.50	79.00	1.50	.003	
		77.90 - 107.50						
		highly alt'd, bl'd buff-br, ser'n &						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		chl'n, & sil'D						
		79.00 - 79.10	9516	79.00	82.00	3.00	.078	
		SHR@50						
		1/4" QTZ VN; IN 1"CHL-SER SHR						
		@50-TCA						
		80.00 - 80.40						
		3/4"QV;SHR;@30						
		BROKEN CORE ASSOC WITH HEM/CHL; 1"STR						
		SER-CHL-ANK SHR; DISC.UP TO 3/4"dull						
		white bullish quartz; @30						
		80.00 - 84.00						
		SHD, CHL RICH SLP'S @44/47-TCA						
		81.60 - 81.70						
		1/2"QV@48						
		1/2" BULLISH QTZ VN						
		@48-TCA						
			9517	82.00	84.70	2.70	.019	
		82.40 - 82.60						
		2"QV@48						
		1.5" BULLISH QTZ VN						
		@48-TCA						
		83.00 - 83.50						
		5"QV@48;3"SHR@34						
		.5' BULLISH QTZ VN. MINOR ANK ASSOC;						
		@48; immediately followed by						
		3"CHL-ANK-SER SHR						
			9518	84.70	87.90	3.20	.002	
			9519	87.90	91.00	3.10	.003	
		89.10 - 89.10						
		1/8" MLKY WHT QTZ VN (MIN VHL)						
		@35-TCA						
		90.20 - 90.20						
		1/8" MLKY WHT QTZ VN						
		@65-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		90.50 - 90.50						
		1/8" MLKY WHT QTZ VN @37-TCA	9520	91.00	92.00	1.00	.003	
		91.40 - 91.60						
		2"QV@80						
		1.5" MLKY BULLISH QTZ VN @80-TCA	9521	92.00	93.00	1.00	.003	
		92.40 - 94.30						
		30%1"QSTR'S@25-100						
		30%1/8"-1"milk white & pale grey quartz stringers; @25-100; 1/8"						
		carbonate-chlorite slipS @45-49; NO SULPH						
		92.50 - 92.90						
		OPAQUE (1/2") AND MLKY WHT QTZ VEINS (1/8"-1/4") @48-TCA						
		92.60 - 92.60						
		CHL SLP @45-TCA						
		93.00 - 93.50	9522	93.00	94.50	1.50	.009	
		3 OPAQUE QTZ VN'S (1/4"-1/2") @70/80-TCA						
		ASSOC CHL SLP @50-TCA						
		94.10 - 94.10						
		.5" MLKY QTZ VN @30-TCA	9523	94.50	97.40	2.90	.005	
		95.70 - 96.60						
		BROKEN CORE AND ASSOC HEM ALT; LIMONITIZED						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		96.30 - 96.30						
		1/4"QV@40						
		1/4" MLKY WHT QTZ VN						
		@40-TCA						
			9524	97.40	100.40	3.00	.008	
		98.40 - 98.60						
		REDDISH RUSTY ZONE OF ALT'D F. UC AND LC						
		ARE VERY ABRUPT AND MARKED BY THE ALT						
		HALO. MG 1-2MM PHENOS. HEM ALT??						
		99.20 - 99.60						
		60%1/4"QV'S@50						
		1/8"-1/4" MLKY WHT& PALE GY. QTZ VNS AND						
		ASSOC CHL SLPS (@50-TCA) MINOR ANK						
		100.40 - 100.40						
		1/8" MLKY WHT QTZ VN						
		@58-TCA						
			9525	100.40	103.30	2.90	.002	
		102.40 - 102.40						
		MLKY WHT QTZ VN						
		@50-TCA						
		CHL SLP ASSOC						
		102.65 - 102.65						
		CHL SLP @43-TCA						
		102.90 - 102.90						
		1/8" CHL QTZ VN						
		@45-TCA						
			9526	103.30	106.40	3.10	.002	
		103.95 - 103.95						
		1/8" MLKY WHT QTZ VN @80-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		104.40 - 104.40						
		1/8" MLKY/OPAQUE QTZ VN @88-TCA						
		104.80 - 104.80						
		CHL SLP @60-TCA						
		105.10 - 105.10						
		CHL SLP @43-TCA						
			9527	106.40	107.50	1.10	.001	
		112.70 - 113.20	9528	112.70	114.70	2.00	.009	
		BULLISH MILKY WHT QTZ VN'S (1/8"-1/2") @28/30-TCA ASSOC FLT???						
		114.70 - 115.30	9529	114.70	115.70	1.00	.001	
		5"QV@32 QTZ HEALED FLT. UC/LC SHARP @~32-TCA BULLISH QTZ.; milk white quartz vein with hem'd/bl'd bx frags BUT QV IS BULLISH + 30%ANK						
		117.05 - 117.05						
		1/8" MLKY WHT QTZ VN @58-TCA						
		117.50 - 117.70						
		1.5" MLKY WHT QTZ VN @32-TCA						
		119.90 - 119.90						
		1/8" MLKY WHT QTZ VN @65-TCA ASSOC CHL SLP						
		120.70 - 120.70						
		1/4" MLKY WHT QTZ VN@60-TCA						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		122.00 - 122.00						
		1/4" MLKY WHT QTZ VN@38-TCA						
		126.40 - 126.40						
		1/8" BULLISH MLKY WHT QTZ/ANK VEIN @ 56-TCA.						
		128.30 - 128.40						
		1/8" QTZ/ANK VN. QTZ IS MLKY WHT/OPAQ. @50-TCA. INTERVAL IS WEAKLY SHR'D.						
		128.70 - 129.00						
		2 QTZ/ANK VN'S. 1/2'-1/8". QTZ IS MLKY WHT/OPQ. UC-ANK VN. LC-QTZ VN. SHEARED BETWEEN VN'S. UC/LC @60.						
		130.20 - 130.60						
		ANK/QTZ VN'ING. UC/LC- ANK VN. MID OF INT IS A 1/8" MLKLY WHT QTZ VN. UC/LC @80. QTZ VN @50.						
		131.20 - 131.50						
		FOLDED SALMON PINK ANK VN@30. UC/LC SHARP.						
		134.70 - 134.70						
		CHL SLP@50						
		135.40 - 135.50						
		1.5" PINK, ANK/MLKY WHT QTZ VN.	9654	138.00	139.00	1.00		
		138.50 - 138.70 1"SIL VN@48 1"SILICIOUS DK GN-GY VN @48; 30%ANK; BULLISH; immediately followed by 1/8" chlorite-carbonate slip @48						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		140.75 - 140.75						
		1/8" QTZ ANK VN @48.						
		140.75 - 141.20						
		DISCON ANK VN'LTS. L IS BLEACHED AROUND ANK. 1-2CM.						
		141.90 - 141.90						
		CHL SLP@58						
		142.40 - 142.80						
		1" WD FELSIC RIB VN @25. FMLKY QTZ VN (1/8") AT CENTER OF RIB.						
		143.75 - 143.75						
		CHL SLP @48						
		144.00 - 144.10						
		1" FELSIC RIB VN @42. UC/LC SHARP.						
		144.30 - 144.30						
		1/8" QTZ/CHL VN @42						
		144.70 - 144.70						
		CHL SLP@50						
144.90	145.35	P MD GRN'D, SALMON PNK P. PHENOS 3-7MM. UC/LC @50 - MODERATELY ABRUPT.						
		145.00 - 145.00						
		1/16" MLKY WHT QTZ VN @50						
145.35	170.20	L FG GREENISH/PINK L. UC SHARP W P@50. LC GRADATIONAL.						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		145.70 - 145.70						
		1/4" MLKY WHT QTZ ANK VN @50						
		146.80 - 146.80						
		1/16" MLKY WHT QTZ STR @57						
		148.30 - 148.30						
		1/16" QTZ VN @30.						
		148.80 - 149.40						
		QTZ/ANK VN @85. 1" WIDE.						
		151.40 - 151.40						
		CHL SLP@ 45						
		153.40 - 153.40						
		1/16" QTZ STR @50						
			9530	154.50	155.60	1.10	.05	
		154.70 - 155.10						
		MLKY WHT/OPAQU QTZ VN @ 20. 2-3% S ON PERIMETER OF VN.						
		155.60 - 155.60						
		CHL SLP @57						
		157.30 - 157.40						
		FELSIC RIB @26						
		157.40 - 157.40						
		CHL SLP @26						
		158.00 - 158.00						
		1/4" MLKY WHT/OPAQUE QTZ VN @50. ASSOC						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		WITH FLT??						
		159.70 - 159.70						
		CHL SLP@42						
		159.80 - 159.90						
		SILIC FLT. FRAGS 4-8MM. UC/LC SHARP @38.						
		160.10 - 160.10						
		chl slp @54						
		161.60 - 161.60						
		chl slp @48						
		162.10 - 162.10						
		QTZ ANK VN @20.						
		164.40 - 164.50						
		QTZ ANK VN'S 7-15MM, @55						
		165.00 - 165.00						
		FELSIC RIB - 1" WD.						
		165.20 - 165.20						
		CHL SLP @55						
		166.20 - 166.20						
		MLKY WHT QTZ ANK VN (1/16") @25						
		167.40 - 167.40						
		CHL SLP @47						

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		168.50 - 168.50							
		FELSIC RIB @80. 3/4" WIDE.							
		169.30 - 169.30							
		CHL SLP @85							
		169.90 - 169.90							
		CHL SLP@44							
		170.40 - 170.40							
		1/4" QTZ ANK VN @47							
		171.30 - 171.30							
		FELSIC RIB							
		173.30 - 173.30							
		CHL SLP @40							
		173.40 - 173.40							
		CHL SLP @40							
		181.40 - 181.70							
		1"QV@21							
		DISC 1/8"-1"milk white quartz vein with							
		hem'd/bl'd bx frags BUT dull white							
		bullish quartz + 15% ANK; @21; NO fEs2							
			9531	184.10	185.00	0.90	.02		
		184.50 - 184.60							
		FLT;3/4"QV;@53							
		1/4"CHL FLT immediately followed by UP TO							
		3/4"dull white bullish quartz VN @53							
		184.60 - 187.90	9532	185.00	186.65	1.65	0.220	0.232	0.208
		PY;5% 1/4"QSTR'S; @47-60	9533	186.65	188.20	1.55	.03		
		highly alt'd, bl'd buff-br, ser'n &							
		chl'n, & sil'D; 5% 1/8"-1/4"milk white &							
		pale grey quartz stringers @47-60; 2%							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		fine disseminated FeS2 THROUGHOUT							
		197.50 - 210.30							
		moderately alt'd, locally bl'd & hem'd & sil'D							
210.30	221.00	GREYWACKE- moderately alt'd, locally bl'd & hem'd & sil'D; ARENITIC; HOMOGENEOUS; F.G.; BEDDING@29; BUFF-BROWN UC SHARP@75 LC SHARP@46	9901	215.00	216.20	1.20	0.331	0.420	0.241
		215.70 - 215.70							
		1/4"QV@47 1/4"milk white & pale grey quartz stringer @47 immediately preceded by 1/8" chlorite-carbonate slip @47							
221.00	232.40	BASIC SYENITE- fresh, massive, competent, dark gn. EUHEDRAL AUG (2-4MM) - VARIES FROM FRESH TO WEAKLY ALT. MINOR QTZ ANK STRINGERS AND CHL SLPS THROUGHOUT. 5" DIAM INCL OF PINKISH FG G. UC SHARP @40, LC SHARP@43							
		223.20 - 223.20							
		CHL/EP SLP @38							
232.40	242.50	GREYWACKE-FRESH TO WEAKLY ALT. FG TO CG, 1-11MM. FRAGS ARE ANGULAR TO SUBROUNDED. LOCALLY BLEACHED AND HEMATIZED. QTZ/ANK STRINGERS AND CHL SLP'S THROUGHOUT. COARSE INTERVALS COULD BE *CLASSIFIED AS A CONGLOMERATE.* UC SHARP@52 LC??							
		243.30 - 246.70							
		GREYWACKE - CLAST FINING DOWN THE HOLE. COARSE INTERVAL AT BOTTOM HAS CLASTS UP TO 10MM IN DIAM AND FINING TO 1-2MM.							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)			
		249.00 - 249.00							
		1/4"dull white bullish quartz-ank vn @33; immediately preceded by 1/8" chlorite-carbonate slip	9902	249.60	250.30	0.70	0.016		
		268.35 - 278.60	9534	268.35	270.90	2.55	0.072		
		ALTZN:PY1-3%	9535	270.90	273.30	2.40	0.383	0.407	0.358
		GREYWACKE - ALTERED ZONE, BUFF GREYISH	9536	273.30	275.90	2.60	.001		
		GREEN, FG.	9537	275.90	278.60	2.70	.002		
		UC SHARP@ ALT START							
		LC GRADATIONAL AND MARKED BY DECREASE IN PY FROM 3% , DOWN TO 0%	9538	281.00	283.50	2.50	.000		
			9539	298.40	299.90	1.50	.001		
		298.80 - 299.50							
		FLT@38-1%PY							
		FLT WITH ANK QTZ BRECCIA FRAGS (5-10MM).							
		SILICIFIED							
		UC/LC SHARP @38							
		1% PY.							
		308.30 - 320.20	9540	308.30	311.30	3.00	.002		
		2%PY	9541	311.30	314.20	2.90	.002		
		GREYWACKE SULPHIDE ZONE, 1-2%PY DISSEM	9542	314.20	318.30	4.10	.002		
		THROUGHOUT.	9543	318.30	320.20	1.90	.002		
		319.60 - 319.60							
		1/4" WIDE SILICIFIED SLIP. CHL/ANK							
		1%CPY							
		320.20 - 320.20							
		E.O.H.							

From (P)	To (P)	DESCRIPTION	Sample	From (P)	To (P)	Long (P)		
		END OF HOLE						
		Total samples : 35						
		Total footage sampling : 74.45 P						

RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT OFFICE

LAC NORTH AMERICA LTD
DRILLING LOG

Property: TECK

Hole # : 98-33 Zone : Contractor: Date Started: / /
Date Completed: / /

Level : Section: Location:

Northing: 17570.83 N Azimuth: 132°30' 0"
Easting : 15778.10 E Dip: -40° 0' 0"
Reference line : Elevation: 78.33 Depth: 320.00

Survey by:

Deviation tests :

Depth	Dip	Azimuth
0.00	-40° 0' 0"	132°30' "
310.00	-34° 0' 0"	132°30' "

Remarks :

Plugged:
Hole Diameter:

Logged by : Date logged: / / Hole no: 98-33

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
0.00	8.00	CAS						
8.00	61.00	P	9544	21.70	22.70	1.00	.001	
			9545	24.50	25.50	1.00	.001	
			9546	31.00	32.00	1.00	.001	
			9547	34.00	37.00	3.00	.001	
			9548	37.00	40.00	3.00	.001	
			9549	40.00	43.00	3.00	.001	
			9550	43.00	44.00	1.00	.001	
			9641	44.00	47.00	3.00	.000	
			9642	48.00	49.00	1.00	.000	
			9643	55.50	58.70	3.20	.010	
			9644	58.70	61.00	2.30	.000	
61.00	228.00	L	9645	61.00	63.50	2.50	.002	
		63.50 - 63.50						
		FLT@35						
			9646	63.50	64.80	1.30	.002	
		64.80 - 65.80	9647	65.80	67.00	1.20	.004	
		1'LC-SAND						
			9648	67.00	68.40	1.40	.002	
			9649	68.40	69.60	1.20	.001	
			9650	69.60	71.20	1.60	.001	
			9701	71.20	74.20	3.00	.000	
			9702	74.20	75.60	1.40	.007	
		75.50 - 75.50						
		3/4"QV@40						
			9703	75.60	78.60	3.00	.001	
			9704	78.60	81.60	3.00	.002	
			9705	90.70	93.20	2.50	.001	
			9706	97.00	98.00	1.00	.001	
			9707	99.00	100.00	1.00	.001	
			9708	100.00	102.00	2.00	.000	
			9709	102.00	104.30	2.30	.000	
			9710	104.30	105.30	1.00	.003	
			9711	105.30	108.30	3.00	.002	
			9712	108.30	111.30	3.00	.001	
			9713	117.50	120.50	3.00	.001	
			9714	120.50	121.90	1.40	.002	
			9715	121.90	124.90	3.00	.000	
			9716	124.90	125.90	1.00	.085	
			9717	125.90	129.50	3.60	.012	

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )			
		129.50 - 130.20	9718	129.50	133.20	3.70	.003		
		LC-SAND							
			9719	133.20	135.30	2.10	.002		
			9720	135.30	136.50	1.20	.053		
		136.00 - 136.40							
		QV;PY;@45							
			9721	136.50	139.50	3.00	.011		
			9722	156.00	157.00	1.00	.001		
			9723	184.00	185.50	1.50	.001		
			9724	194.00	195.00	1.00	.003		
			9725	206.60	208.70	2.10	.002		
			9726	222.80	223.80	1.00	.001		
			9727	226.40	228.00	1.60	.001		
		227.60 - 228.00							
		FLT@35							
228.00	248.50	G	9728	228.00	229.40	1.40	1.376	1.303	1.449
		228.50 - 229.40							
		QV;DYKE;SIL;@45-60							
			9729	229.40	230.40	1.00	0.108		
		229.50 - 229.50							
		1/4"QV;3%PY							
		230.40 - 231.40	9730	230.40	231.40	1.00	0.484	0.501	0.466
		1/6"QV;3%PY;@30							
		230.60 - 230.60							
		SHR@70							
			9731	231.40	234.40	3.00	0.060		
		232.00 - 232.00							
		FLT@40							
			9732	234.40	236.40	2.00	.011		
			9733	236.40	241.00	4.60	.003		
			9734	241.00	248.50	7.50	.002		
248.50	287.20	L	9735	248.50	249.50	1.00	.001		
			9736	253.90	254.90	1.00	.002		
			9737	286.20	287.20	1.00	.001		

From ( )	To ( )	DESCRIPTION	Sample	From ( )	To ( )	Long ( )		
287.20	320.00	G	9738	287.20	288.20	1.00	.000	
			9739	288.20	289.20	1.00	.000	
			9740	302.00	303.00	1.00	.001	
			9741	304.00	305.00	1.00	.000	
			9742	312.00	313.00	1.00	.000	
		320.00 - 320.00						
		E.O.H.						
		END OF HOLE						
		Total samples : 59						
		Total footage sampling : 116.60						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-12

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
0.0	8.8	O/B					
8.8	115.5	T > heterogeneous ...					
		20.6-20.9 bleached ...	20.4	22.1		2958	.000
		...					
		15.5-15.9 ...	30.3	31.5		459	.001
		30.7-31.3 ...					
		28.6 " 2" ...					
		69.5 ...					
		88.2 " "					
		114.9-115.5 ...	114.8	115.5		60	.001
115.5	128.6	W > ...					
		...	128.0	129.2		61	.001
		128.6 ...	134.4	135.7		62	.002
128.6	134.7	INT D > ...					
		134.7 ...	137.7	139.4		63	.001
134.7	152.0	W > ...	139.4	141.0		64	.009
		...					
		145.5 & 151.1-152.0	143.9	145.7		65	.002
		137.7-139.4 ...					
		139.4-141.0 ...					
		143.9-145.7 ...					
		152.0 ...					
152.0	188.6	T > as above					
		154.1 ...					

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2.19317

Page No. _____

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		156.4 Bedding @ 16°					
		162.0 - 162.5 Brecciated pale gy vn fm 1" QV @ 49° - 55° ; 5% ank ; vn. bkd wallrock	161.6	162.8		2966	.001
		162.5 - 169.5 " " " 4" dull pt QV's ; upto 4" in core. Brec gone. Light gy chloritic fld. @ 10°	168.0	169.6		67	.026
		188.1 Bedding @ 75°					
		188.6 shp dull ct @ 71°					
188.6	207.8	Wk > ox zone ; qtz stringers	188.8	189.8		68	.008
		189.4 Brecciated med gy 1/2" QV @ 69° is almost absent					
		201.0 - 202.0 10% clasts fm 1" ; well-rounded ; one plast is dk gy chl fld Fes @ 70°	206.6	207.8	1.2	69	.003
		2% plasts are siliceous pale gy w/ 10% fld Fes		209.5	1.7	70	.429 .382 & .476
		207.8 shp nat ct @ 51°		210.6	1.1	71	.740 .728 & .751
		194.2 - 196.0 pink - orange brec (oxidation ?)		211.8	1.2	72	.032
207.8	216.8	BS. ; initially highly fld & brec ; brecken up dark gy ; massive ; comp ; highly mag ; mod fld ; 2% augite ; 1% augite		214.6	2.8	73	.003
		235.8 - 237.0 50% vn fm 3" dull pt - pale gy QV's w/ 20% ank & 2% coarse fld Fes ; @ 75° ; Brec Horiz (ank) vn's @ 41° - 62° ; Between ½" chl. fltc @ 231.3' @ 52° & @ 237.0' @ 63°	235.8	237.2	1.4	74	.036
		207.8 - 209.5 10% 1/8" - 1/4" Brecciated dull pt D-ank vns w/ 3% coarse fld Fes ; @ 77° in extremely fld'd zone					
		209.5 - 210.4 most fld'd zone ; altd & sericitic ending w/ 2" dull white QV @ 68° ; 5% ank + 12% fld Fes in vn & 40% siliceous zones in rest of interval ; 1/8" chl. fltc @ 210.4' @ 68° & G.C. @ 210.2'					
		210.4 - 212.6 fld'd ; 10% Brecciated 1/8" - 1/4" pale gy QV's @ 71° (w/ 5% ank)					
		214.4 1/2" pale gy Brecciated QV @ 70° ; Brec thereafter					
		248.3 " [redacted] " " on 1/8" chl. slip @ 60°	248.1	249.5		75	.002
		248.8 3/4" " " " " " " " fltc @ 67° ; 10% sericitic fld'd thereafter (w/ Brecciation)					

0.55 / 2.8

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No._____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		253.8 DA/c 47°					
		250.2-250.5 Intrusive w/ 1" pale gy p-rk inc. Bu Blish; c 63°	249.5	250.8		2976	.001
		252.7 ⅛" clv Blt @ 17° preceded by 1" Bu Blish pale gy g-ark inc & followed by 3" blkd same dark+Blt pcs	252.2	253.1		77	.013
		257.7 ⅛" clv Blt c 37° imm. followed by 2" dk gy-rk inc, tight Blt-vein mat not oriented	257.6	260.9		78	.002
		261.3-262.2 med-pale arch Bu Blish massive 7" DV c 77° & less° perpendicularly; no inclusions immediately followed by 1/4" ser-chl shr.		262.7	1.8	79	.096
		262.7 ⅛" clv-ark Blt c 52°; preceded by 3/4" DV as above		264.1	1.4	80	.181
		262.7-263.5 pale gy 4" DV c 51° & 36°, perpendicularly; 456 and Bld. By frags; 86 fractured FeS2 only in Bx inters; 10% ark		265.2	1.1	81	.046
		263.5-265.2 silic'd; 15% ark; sl. Fe stained		266.2	1.0	82	.068
		265.2-266.8 intermediate-ark fragments w/ somewhat cherty) massively altering downhole to massive pale gy DV (c 266.2'-266.8') intensely Bx'd (Rounded siliceous pieces + 10% ark); 4% fd FeS2 c 266.1' & 266.8'; Numerous clv-ser fractures c 25° & c 151°; G.C. + 1" ser-chl shr c 265.2' c 84°; 1/4" stks blk Blt c 266.8' c 72°		267.1	0.9	83	.089
				268.4		84	.002
				270.8		85	.001
				273.2		86	.001
266.8	273.0	W = as above; mod Bxd; mod mag;					
		266.8-268.2 altered intermittent Blt Bu (pods, mgt); apt; pale brown; mod mag & mod chl shr at c 268.2 w/ ser c 82°					
		273.0 — " not clv c 37°	319.2	320.2		87	.001
273.0	332.0	BS = as above; 2% ark; lightly mag; wk Bld to 298.8' & v. sl. beds thereafter					
		319.5 ½" pink cobbly Bu Blish dull wt DV on 2" clv Blt c 77°					
		320.8-321.0 50% ankerm + Blts; c 44°	329.6	330.7		88	.001
		326.1 ¼" clv-carb shr c 37°; no effect on wallrock					
		330.0-330.4 Bu Blish pink carb-qtz Bx c 67° & 45°					
	332.0	E.O.H.					

0.10/6.2'

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-14

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	11.1	O/B					
11.1	22.3	LI) > B.C. intly Vfi (Kinetic) often pmd conglomerate (Pebble ≈ 2") + g; rmd'd. to tuff; mod chl + wk mag; Lmx contacts mod gu + Hem + pyrite	20.4	21.3		82473	.001
		22.3 C.A. shear not at c 45° 21.6 1/4" chl + hem dissem. Py/Po blebs OV c 72° in massive Kinetic					
22.3	55.1	BS, > fract. mod gu 1/4" (ea) quartz Vmx Vfi often stockworked (Wm) c 52°; Hem + mag; wk mod + comp; Lmx Contacts					
		26.6-30.6 ZOC ank. clasts mx c 52°; kinetic mod-Brown	27.9	29.5		94	.001
		28.4-28.6 1 1/2" dissem. Py/Po q-ank mx c 52°					
		29.2-29.4 at least 1" dissem. Py/Po gv in C.C. + in massive Kinetic zone c 64°					
		52.8 1/2" chl vein c 49°					
		55.1 sharp not at c 42°					
55.1	56.7	LI > as above					
		56.7 " " " " " 52°					
56.7	75.9	B.S. > as above					
		68.1-68.3 B.C. + hem + chl Vfi Kinetic porphyry dyke (Pebble elongate on wall)	67.7	68.7		95	.001
		73.3-73.6 ZOC ank mx of Hem zone c 55°					
		75.9 1/8"-1/4" chl-qz vein c 81°					
75.9	158.0	LI > as above. Int. lighter pale gu-grn hue; locally conglomerate clasts; wk-mod chl; non mag					
		76.4 1/4" Py/Po dissem OV c 47°	75.7	76.6		96	.001
		81.2 " " " " Q-ank vn c 38°					
		93.3 " " pale gu OV c 56° (Perhaps better than previous 2)	93.0	94.0		97	.001
		95.1 1/2" " " " " " 52°					
		98.7-98.9 conglomerate zone + clasts to 1" (mod. rounded + contains 2 ± fd FES)					
		103.1-105.2 " " " " " " " " " ; 2-3% fd FES + Hem alt;	103.1	104.6		98	.001
		chl; alte + cts c 37°; non chl + non mag		105.6		99	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-14

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		108.7 porphyritic intrusion					
		131.2-132.3 chl'c aph zone; med gy-dk gn; c 48°					
		136.0-137.6 " " " " " " " " 43°					
		138.3-139.1 aph. buff zone could be int. dyke; sharp chl'c ctc c 138.3' c 22°; sharp but ct (bedding?) c 139.1' c 52°; irregly chl'd; non mag	138.2	139.3		82500	.004
		128.0-148.0 wacke contains pebble-conglomerate sections w/clasts to ½" (incl. one ½" dk gy aph. quartz vein ct c 146.9')	157.7	160.1		2901	.001
		156.2-158.0 aph chl'c zone; dk gy-gn; 5% clasts up to 1"; irregular c 157.7'; ank vn c 156.2' c 53°					
158.0	242.0 T	= aph buff to pale gy ash tuff; non chl'd; non mag; not comp. (broken circa 4"); could be wacke/dyke					
		158.0 sharp nat ct c 48°; then pinkish (cherty almost) silicified zone					
		162.2 sil-up; bedding					
		174.6-177.0 pinkish hue; silicified; chl'd; trace chl'd; 5% fd FeS2; bld; c 17°; ir. silicified m.g. + stockwork (med gy); 3% coarse FeS2 in agg. shape in one place (almost like veining)	174.5	177.0		2	.258 .212 .303
		163.9-164.0 alter/ank? c 57°					
		195.2 "8" chl. blk c 40° immediately followed to 196.1' by pink silicic sil'd bld zone; no sulph	195.0	196.1		3	.001
		198.3-199.3 typical of surrounding bld at tuff, but 1% 2% fd FeS2	198.3	199.3		4	
		203.4 ½" chl. shp c 34° immediately followed by 2" silicified bld zone					
		208.0-211.1 pale brn gn, aph, could be int. dyke; shape not ct c 208.0' c 27° & c 211.1' c 38°	209.0	205.0		5	.003
		215.3-215.5 up to ¾" dk gy & dull wt occ c 30° w/ 10% fd FeS2	208.8	209.9		6	.009
		215.7 ¼" dull wt occ c 30° w/ 3% fd FeS2					
		215.3-215.8 highly chl'd w/ 8% fd FeS2	213.3	214.4		7	.001
		231.1 shp nat ct c 78°		216.0		8	.079
		231.1-242.0 progressively more bld downhole (+more altd); brown-red hem's locally		217.5		9	.000

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-14

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		~~altn~~ c 57°; non calc; clty + sericitic; 1% ank	235.4	235.6	2.2	2910	.000
		238.7 - 240.7 1-2% fd FeS2		237.0	1.4	11	.000
		240.7 - 242.0 Inalt zone; pale khaki green; sil + clty; 20% dissem sed mineral		239.0	2.0	12	.005
		Qtz/ank Grk; 3/4" Brecciated dy pt at intc 241.5" c 23°; 2nd qtz vein c 241.7°		240.8	1.8	13	.054
		main structure c 20°		242.2	1.4	14	.022
242.0	260.1	BS = Brecciated to pale grn, sericitic qtz/ank vn c 54°; clty matrix w/ attenuated & boudinaged shreds cut + 1% ank vns; Gt brown-red dty bibs; non calc & non magnetic		244.5	2.3	15	.000
		246.6 - 247.0 Brecciated dy pt & ank vn zone c 20°		247.2	2.7	16	.000
		255.7 - 257.0 Sericitic mgy faulted zones (shears + strips) c 58°					
		257.0 - 257.2 silic zone c 67°; grn + clty + ank zone; 2% fd FeS2; preceded by 1/2" dy pt at 0.28	254.0	255.0	1.0	17	.047
		254.2 - 254.6 1" ank vn c 2° w/ 3% fd FeS2	251.2	253.2	2.0	28	.084
		260.1 sharp silic ct c 67°	258.2	260.2	2.0	18	.059
260.1	269.0	IW = extremely alt'd; fissile to 1/2" flat generally qtz + ser schistic (could be tuff); very silic'd + albitized; comp; pale grn to buff (brownish); unfoliated & non mgc; 2% pl fd FeS2 cubes & anhedral: 1/2% - 3% fd FeS2 increasing downhole	260.2	262.3	2.1	19	.069
				263.9	1.6	20	.008
			0.28	265.6	1.7	21	.167
		267.2 - 269.0 most vertically alt'd; 3% v. f.d. FeS2	13.1	267.2	1.6	22	.105
		269.0 C.C. "E" clty pt c 38°		269.2	2.0	23	.059
269.0	271.8	INT D = chlx grn; sch; locally sil'd; 5% ank; non + clty common; mcc alt'd & non mgc; mtxt alt comp (1% ank, 1-2%); could be comp dyke (similar to B.S. above in mc, yet Brit angles are altered); 3-10% fd FeS2 locally conc. c 269.5' - 269.9'		271.8	2.6	24	.358
		269.9 1/8" clty pt is Stn c 20° preceded by most alt'd zone					
		271.8 1/4" " " " " " " 22°					
271.8	273.9	ALBITE-SILICA ZONE = Buff; highly sil'd & albitized; nothing left of original texture; very bxd c 45° c 272.6 - 272.9' (may be remnant dy pt); marked & non mgc; 1/2% fd FeS2; 15% clty (+ mnr qtz) fracture - filling	271.8	273.9	2.1	25	.408
		273.9 1/4" str clty pt in B.C. c 153° (definitely opposite other pt)					

PIECES TOGETHER

0.28/13.1 ↓

0.42/5.8

0.40/1.8

.171 & .162

.334 & .382

.394 & .421

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-14

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
273.9	337.0	B.S. = as above initially (to 282.6'), then V. fract/lineations only (some) highly	273.9	275.0	1.1	2976	.939	.906 & .971
		274.9-275.8 non-cl. obs zone in B.C. (chlor abundant); c32°, 5% +/- FS.		277.0	2.0	27	.138	.140 & .135
		293.1 1/4" ark vn + wk slip c35°						
		296.0 1/8" clr-ark. slip c30°						
		300.7 1/4"-3/8" dull wh-gy qtz c37° w/ ragged B.C. fragm; followed by 10% ark qtz 1"-2" then 1/8" cl. slip	300.2	301.1	0.9	29	.005	
		297.0 Block is actually c302' (5' extra Pictures Blocks 287 & 297'						
		332.0 E.O.H. by Blocks - is actually 337.0' (didn't notice any 5' difference carries in the hole).						
		337.0 E.O.H.						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-15

Footage From	Footage To	Description	Sample From	Sample To	Total	Sample No.	Ozs.
0.0	9.2	O/B.					
9.2	35.6	T = [illegible]					
		[illegible] @ 54°	17.9	18.7		2724	.001
		16.7-16.5 2" [illegible] @ 48° w/ 10% [illegible]					
		21.7-24.6 [illegible]	24.7	25.4		[illegible]	.001
		24.7-25.7 [illegible]		25.7		[illegible]	.001
		24.9-24.3 3% fd FeS2					
		35.6 [illegible] @ 72°					
35.6	38.5	[illegible]	35.4	38.7		27	.001
		"granitic" intr. occ. as [illegible]					
38.5	127.8	T = ark. dyke					
		59.0-59.9 15% ank. mat. 1/4"					
		81.3 bedding @ 57°					
		103.9-104.3 bdd. fr. Vn. @ 15° w/ ank.					
		126.2-127.8 Khaki grdn; could be dyke but think I can see ank. bedding @ 14°					
		127.0 Xln. fr. 1/4" bdg @ 68° w/ good chlor. & 10% coarse qtz	126.4	128.0		28	.001
127.8	142.4	W = fresh dk grn - Buff; f.g. sericitic; possible lapilli @ 137+; laminated. Bedding @ 68° down hole; mod. ckd. non mag; comp. bedding @ 68°; arenitic					
		139.4-142.4 Conglomerate zone; clasts are well rounded up to 2" & are dk grn; matrix-supported; 2-1/4" med-dk grn Qtz @ 77° @ 141.2' & 141.5' w/ 1% fd FeS2	140.8	141.8		34	.002
		142.4 shear not @ 73°					
142.4	147.3	T = dk grn qtz, could be dyke but definite fine bedding @ 71°; comp. lower; non ckd. non mag					
		147.3 shear not @ 47°					
147.3	165.7	W = pale grn (sericitic? & altered?) to Buff arenitic (quartzite); 1% fd FeS2 locally concentrated; non ckd. non mag					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-15

Footage From	Footage To	Description	From	To	Total	Sample No.	Ors
		165.7 ... sharp, not at c 61°	149.2	150.3		2729	.002
		166.6 - 165.7 massive silic. zone. Brick red alteration, V. broad. Intact to 1/4" core		≈152.3		30	.003
		1 1/2" (may be full unit. Just contacts are definitive at c 61°)		154.0		31	.001
165.7	194.7	T > as above, non mag; light V. ank		159.0		32	.001
		177.9 3/4" ank fm imm fol by 1" vug silic zone, 1% fd FeS2 in min. c 73° w/ 1/2% hem. for 1 inch. c 45°		159.2		33	.001
		186.5 - 186.8 Break zone. 3/4" limonitic zone w/ clay (in?) + 1/8" silic FeS; then fol'd ank then 3/4" silic zone. Brk c 70°	177.3	178.2		35	.001
		192.8 1/8" clay fault; imm prec. by 3/4" ank zone c 45° w/ 1/2 silicified hairline. Irreg. limonite + 1% fd FeS2. c 43° clay fol'd to pink-cream	186.0	187.0		36	.002
		194.7 sharp, not at c 61° (may not be contact - may be fold)	192.1	193.2		37	.001
194.7	226.4	W > as above but rare FeS2					
		198.5 - 199.0 fine bedding c 64° - 104° (contorted)	200.4	201.7		38	.003
		202.4 1/2" - 1" silic zone c 45° in undulations; 8% fd FeS2; mod qy prec. by zone, clay fault		202.8		39	.019
		204.6 1/8" - 1/4" mod qy clay w/ 5% fd FeS2 c 72°		205.6		40	.051
		205.4 - 207.8 no ore (could be obliterated)		207.7		41	.001
		220.8 - 221.1 limonitic; no FeS in min. silic than 1 metre	212.8	213.8		44	.007
		213.0 - 213.7 ank - sericite zone c 24 (good fold)	228.9	229.9		42	.023
		226.4 sharp not at c 20					
226.4		B.S. > comp. fol'd; non clay, non mag; 2% ank imm. c 45° & 2% fol'd silic c 105°	231.4	232.6	1.2	43	.173 .172 & .174
		229.1 - 229.4 3 - 4% fd FeS2					
		229.4 - 229.7 2" dull wt clay c 73° in brittle w/ 3% Fe ppt drops					
		231.9 - 232.0 at least 3/4" dull wt clay in brittle; G.C.; c 50°; limonitic					
		234.3 - 238.0 fresh dk gy	245.3	246.8	1.5	45	.096
		245.6 1/8" clay slip c 40°		247.9	1.1	46	.450 .421 & .483
		247.2 - 247.8 4" pale gy clay imm prec. by 1/8" clay fault c 20°; sericite; 3-4% fd FeS2 + 1%		248.9	1.0	47	.026

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-15

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
		5-4% f+cse d FeS2 ½" either side of	248.9	251.1	2.2	2748	.193	.192 & .194
	259.0 – 263.4	frash; ends at shop Rld ctd 57°		253.1	2.0	49	.053	
	264.6	⅛" clV. slip @ 45° in centre of Rld zone; imm. proc. by ¼" ank vn						
	266.3	" " " " 57°						
	266.4 – 267.8	ind pale gn D. stn @ 82° in highly Rld comm; 4-5% fd FeS2	264.1	264.9	0.9	63	.004	
	268.5	¼" clV. lft @ 46° imm. hd. by ¼" dull vnt DVC 62°; 2% fd FeS2; 20% ank		266.4	1.5	50	.190	.204 & .152
	269.0	½" " " " 54° " proc. by 1" ank vn → stn. slip		267.9	1.5	51	.160	.157 & .163
	272.6	⅛" " - occ. lft @ 40°		269.4	1.5	53	.107	
	272.6 – 273.1	4" sil'd & Rld zone w/ 5% f+cse FeS2; ½% fd FeS2		272.2	2.8	53	.057	
	280.0	½" - ¾" mod gn DVC 71°; occ. sulph		273.4	1.2	54	.170	.143 & .202
	281.6 – 284.5	relatively brk	out 272.1	277.0	3.6	55	.067	
284.5	291.7	ALBITE-QUARTZ ZONE – Original texture is totally obliterated; med-pale gn; 10% ank Rld & ltr Irreg; ank vnts – incr in % ank 279.1 – 285.1 & occ clV zone @ 285.1 – 286.9'; occ FeS2; comp.		279.7	2.7	56	.013	
				280.5	0.8	57	.038	
	284.5	⅛" clV. lft @ 56° in tight; accd. Rake		282.7	2.2	58	.057	
	289.8 – 290.1	B.C. – at least ½" clV lft here @ 51°		284.6	1.9	59	.015	
	291.7	V. tight clV. lft @ 65°	0.09 293.0	0.07 292.9	287.5	2.9	60	.170 .134 & .202
291.7	305.1	FEL 54 – Rld initially darkening up dowhole; fault – brown; mod Rld; occ mag; comp;			289.9	2.4	61	.057
		10% ⅛" – 3" pale gn Rld vns. Rock bx Rld & @ 50° – 60°			291.7	1.8	62	.007
	303.6 – 304.4	B.C. – mod. stn. invisible			294.2		64	.002
305.1	402.0	B.S. – fresh comp. massive, highly mag, highly Rld; ½% ank; long grn rds; 25% dk gn augites in wt Rld & brown Rld			295.7		65	.001
					298.3		66	.001
	320.2 – 320.3	1" dull vnt – dull siliceous vn w/ 5% grn Rld & f grn + 5% ank; @ 58°			300.9		67	.004
	354.0 – 355.0	V. wkly Rld			304.1		68	.001
	357.9	¼" clV. lft @ 40° w/ v. wk Rld B.S. 2" either side; not stn						
	378.0	⅛" " - pk carb. slip @ 45°	319.8	321.0		69	.001	
	386.8	¾" dull vnt Rld & Q-ank vn @ 54°						
	402.0 E.O.H.		386.3	387.0		70	.001	

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

0.32/44.3'cL 275.7-320'

Hole No. 98-16

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	12.8	O/B					
12.8	79.4	P > 2% stringer qtz ± chl ± py, locally ~5% py; fract; broken, very 5" (B.C. common locally); highly mag, highly chl; locally pink carb ± musc @ 30°					
		37.0 ½" chl slip @ 57°	79.0	80.0		3469	.000
		79.4 1" B.C. with a ¼" chl ± py slip + at least ½" pkg-ank; @ 56°					
79.4	130.3	L > fract; 3% pale grey qtz ± ank; ∥d @ 52°; highly mag; competent; highly chl.					
		85.6 ½" chl slip @ 36					
		90.4 " " " " 36					
		96.6-97.0 very ferr'd with ½" ank in @ 5°					
		98.9 ½" chl slip @ 37° preceded by ½" ferr'd zone ± 10% qtz-ank vns @ 14°; slicks	98.1	99.3		70	.007
		102.5 " " " " 47					
		115.9-116.5 ferr'd @ 57°					
		93.3 1" ∥d silic @ 55°					
		128.4-128.5 1" med gy silicious vn ± ½"-¾" ank in @ 51°	128.1	129.2		71	.006
		128.8-129.0 2" ∥d, pull zone, ends on ¼" ank vn @ 35°; 2% cmd FeS2 in ank vn					
		130.3 sharp mat ∥ @ 43					
130.3	156.5	W-T > cont mx; appears; competent; homogeneous, but increasingly ∥d down-hole; very chl ± mag					
		130.3-136.2 very ferr'd; B.C. common; patchy B.S. @ 134.7-135.2 w/ sharp mat ct's @ 43°					
		134.8-137.0 pale gy, wispy, up to ¼" chl ± silicious vns @ 14° (106) + 5% ank vns (@ 14°); rare fd FeS2	134.5	137.0		72	.001
		151.3-151.5 very chl ± mag ± chl developed; @ 57°; ∥ veins on ¼" scale; ∥ dykelet	151.1	158.0		73	.003
		157.6 ½" chl slip @ 38°	158.0	161.4		74	.002
156.5	160.9	FEL SY > pull-zone to schism; f.g.; intrusive with ∥d + chl groundmass + ∥d phenos; very chl; mod mag; chl @ 45° generally					
		160.9 ¾" chl-ank. slip @ 27°					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-16

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
160.9	167.6	W-T > as above						
167.6	168.8	FEL 54 > as above; shrp not dtc 168.8' @ 60°; other ct. is difficult to distinguish, but probably cde°						
		168.6-168.7 2% f.d. FeSz @ 62°	167.6	169.1		3675	.002	
168.8	180.9	W-T > as above						
		180.9 shrp. cdlr ct @ 63°	180.7	181.7		76	.003	
180.9	182.5	FEL 54 > as above, but more Bd'd to Buff colour + more clr fracture - foliation @ 57°;	181.7	182.1		77	.018	
		181.4 clr slip @ 67°						
		182.5 clr slip @ 59°						
182.5	240.3	W > as above; possible comp. zone @ 211.4-1212.6 w/ ct's @ 65° (thereafter initially looks like FeL 54 (shrp. not ct)						
		189.4-191.0 could be intrusive, but too f.g. to tell; brownish tone; 1% f.d FeSz; comp @ 6°						
		184.0 at least 1/4" ank-clr. Blt in C.G. @ 75°; little / no effect on wallrock	189.9	191.2		77	.018	
		213.6-226.2 Bd'd; v.l.d; homogeneous; comp; woody cBd; 1/2-1% f.d FeSz; in Dbtn; Bull-Qz; could be intr.	213.6	216.3		78	.049	
		213.8-213.9 clr. in-filling; 3% f.d FeSz; @ 47°		218.5		79	.016	
		219.2-219.4 1" zone by q-ank inc @ 5° w/ 2% f.d FeSz + 3% 4" either side		219.8	1.3	80	.080	
		223.0-224.3 more Bd'd w/ up to 1/2" rounded clasts (Lapilli?); 5% f.d FeSz @ 32°		222.9	3.1	81	.081	
		228.5 possible intrusive; blood red Fk"		224.2	1.3	82	.443 .424 .462	
		234.6-234.9 3/4"-1 1/2" dull ct (V) w/ 60% Bd'd Qz frag's; immed footwall by 1/8" clr slip w/ 10% Bd FeSz & Stks; 1% f.d FeSz in Dbtn		226.4		83	.027	
		234.9-237.5 same as at 213.6'-226.2'; decreasing FeSz from 3% to 1/2% down hole; 5% ank component	234.5	235.8		84	.180 .187 .172	
		240.3 1/8" clr. slip @ 44°; separates f.g. wacke from tuff with Lapilli		237.5		85		
240.3	254.7	T > heterogeneous; Lapilli units through out to f.g. ash tuff with bedding; pale blue gn to red Brown to purple; mod cBd; non mag.						
		254.7 3/4"-1 1/2" clr-sud Qz zone on 1/8" clr-ank veins; 10% v.f. FeSz (d); @ 23°	254.2	255.4		86	0.360 .371 .349	
		267.8 ct @ 48°, Bot f.g. bedded ash tuff + Lapilli bed						
		267.0 Bedding @ 20°-28°						
		273.7-273.9 1/2"-1" [illegible] @ 29° in FeS						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-16

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
274.7	289.7	INT DIKE > apl to f.g. dkr gn, homogeneous; mon clrd; soft (not silic'd); non-mag; comp; ill-def ind at termination @ 43°						
		274.7-278.8 - 1-4% f.d. FeS_2; sil'd, locally; cherty pale-med gy vns @ 275.0-276.0	273.2	274.5		3687	.004	0.324
		+10% ank+5% f. & 2% coa'd FeS_2; abd @ 17°-24°		275.7		88	.096	
		282.2 1/8" clr slip @ 40°	275.7	276.8	1.1	89	.332	.319 .345
		289.5-289.7 ank-ser-clr vns @ 40° in B.C.		278.8	2.0	90	.151	.162 .139
289.7	295.3	B.S. > extremely altd; augites rarely visible (such as @ 294.3'); dkr gn; ser'd; clr'd; alb'd; sil'd; 10% ank; mon clrd; non mag; B.C. common (broken away @ 2"		280.9	2.1	91	.044	
				284.0	3.1	92	.105	
		289.7-290.0 2" major fault (Break) in B.C.; ser-clr-ank gouge + brick red mineral; abd @ 37° ending on 1/8" clr gouge		287.1	3.1	93	.053	
				289.3	2.2	94	.212	.212 .211
		290.0-291.7 B.C. & G.C.? extreme alteration & sil'n to pale gy color (similar to Cavamax zone across from Hdt-Mc D.); 2% f.d FeS_2 locally concentrated; clr on fltd core bnds @ 291.3'-291.5' @ 22° & 150°		290.2	0.9	95	0.216	.233 .198
				291.1	0.9	96	0.317	.310 .323
				291.9	0.8	97	0.274	.269 .279
		295.3 ser-ank vbr (1/4") in wk @ 57°		293.6	1.7	98	.295	.300 .289
295.3	301.1	INT DIKE > as above but abd apl		295.9	2.3	99	0.360	.346 .373
		297.0-298.5 G.C.; no structure visible		298.7	2.8	3700	0.26	0.27 0.25
		298.8-301.1 3% v.f.d. FeS_2; 5% bull'ish qtz vns 1/16"-1/4" @'s @ 41°; 5% ank		300.6	1.9	82451	0.27	0.27 0.26
		301.0-301.1 1/2"-3/4" ser-clr vn, vbr @ 27° in core; 1/8" clr gouge zone in middle; 1% f.d FeS_2		301.7	1.1	52	0.17	0.18 0.16
301.1	316.5	FEL SY > could be anything but looks intrusive; red-brown dol'd in Bx frags throughout; 10% ank bull'd dull'd wit qtz+alb'te?; locally f.g. dkr gn sections; mon clrd; non mag; very hard (sil'd); 1% f.d FeS_2 (one v.f. looked like arsenic)		303.7	2.0	53	.409	.411 .407
				305.6	1.9	54	.370	.374 .365
				308.0	2.4	55	.394	.403 .385
		301.1-301.5 cherty pale gy silica zone w/ 2% f.d FeS_2 immediately after fltg; @ 27°; 1/2"		310.4	2.4	56	.246	.269 .222
		315.7-316.5 " " " " " (+alb'te+ank); @ 40°; 2% f.d FeS_2; ending @ 316.5'		313.2	2.8	57	1.135	1.168 1.102
		not least 1/2" clr-ank fltg (str) + 1/8" milk wt QV; all @ 34°; in G.C.		315.4	2.2	58	.129	.116 .141
316.5	431.0	B.S. > freshening up down hole; initially fltd to pale gy-gn w/ mod shearing + ser + clr (& mon clrd & mon mag) & 4% wt augites are attenuated @ 45°; then typical fresh grn-Black Lamp after ≈ 350'; lightly mag & clrd		316.6	1.2	59	.381	.361 .401
				318.6	2.0	60	.683	.677 .688
		316.5-317.4 2% f.d FeS_2						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-16

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
		318.5-319.5 Brkd fol rib (30%) + 10% ank-bull qtz. blebs & vns @ 35° w/ up to 3% fd FeSz	318.6	320.0	1.4	82461	.472	.465 .478
		319.3 ank 1" @ 319.3'.						
		322.3 1" of 12% fd FeSz plane chl fr. - fldsp @ 33°						
		329.8 - 330.7 1" blk-ank, bull, pink alt vn @ 17° succeeded by 1/4" chl-ank vn	329.3	331.0	1.7	62	0.490	.508 .472
		329.2 - 330.7 3/4" " " " " " " @ 35° immediately followed by 1/2" ank-						
		brick red mineral vn & 1cm 1/8" chl filt; no effect on wallrock	358.9	339.6		63	.01	
		339.2 - 343.3 10% 1/2" brick red fol ribs @ 17°; 1% ank-bull qtz vns @ 145°; wy bound						
		344.0 - 347.0 B.C.; vns & structure visible						
		369.6 - 369.9 3" pk-lt carb-bull qtz vn @ 44°; no effect on wallrock	369.3	370.1		64	.01	
		376.5 1/8" chl slip @ 30° to C. 1/2" fol int.						
		340.0 - 431.0 extremely brk & comm fol brecc zones.						
		389.0 1/8" chl-carb-qtz slip @ 40°						
		431.0 - 432.2 chl-carb-qtz vn; @ 38°; unmin int						
431.0	450.0	T. = dk grn, apl-f.g. ank tuff; v. brk; int & lt, highly vnd; bedding @ 44°						
	450.0	EOH						

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LAC MINERALS LTD./HACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-18

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	5.4	O/B					
5.4	12.0	P > fresh wht coarse f/g feldspar crystals (avg ≈ 3"); homogeneous, barren; 15% fld, abund +2% mafics; strongly ... non-foliated, massive; core not oriented 5.4 @ 12.0'					
		11.7 F.R. ½" clay 14 @ 30° (could be wider)					
12.0	47.5	B.S. > fresh coarse homogeneous dk gry; highly chloritic & foliated					
		12.0-18.0 incr. chl & foliation @ 50°					
		16.2-17.5 F.S. ? ank-brn/blk stained @ 42° with chl/qtz @ 120°; @ 17.0' in ? B.C. is at ... ½" thick chl. vein @ 40°	16.4	17.8		2771	.001
		25.8-25.9 massive C.C. at top & ½" chl-carb. vein @ 85°					
		29.6 ½" chl vein @ 37°					
		30.0 " " " " "					
		44.6 ½-¼" fracturing chl vein @ 46	44.3	45.0		72	.001
		58.4-62.0 1% ? ank inclusions @ 17°					
		47.5 shear vein @ 45°	46.1	46.7		73	.002
47.5	87.1	BIO > fresh coarse massive, moderately chl; med gry; fg; massive, abundant veining up to ... 1" angular-subangular, pale brn carbonate.	47.9	49.1		74	.001
		48.2-49.3 irregular to patchy altered B.S. vein @ 48.2 a ½" chl shear @ 46°					
		49.3 ½" chl vein @ 54° to CA					
		77.0-77.3 more fractured, veined & at least 1" qtz-ank inclusions + ½-1" chl B.S. @ 23°	77.7	77.6		75	.002
		87.1 1" ank-chl ink shear @ 71°					
87.1	92.8	B.S. > as above with fresh & highly chloritic veining	86.7	87.4		76	.001
		92.8 shear vein @ 53° to CA					
92.8	102.8	CBX > as above but brecciated homogeneous & fractured	92.8	95.0		77	.009
		94.4-94.9 4" ank inclusion @ 55° (could be vein) with qtz; 10% bx boundary lined					
		102.4 discontinuous 3/16" pale qtz & carbonate vein, fractured, brecciated & altered; possibly ... @ high B.A.; @ 65°; 2% fine FeSx	101.7	102.8		78	.000

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

511-889

Hole No. 98

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
106.8	107.1	FEL SH zone: Drill - common; mod Pd. Pc silicified wacke & dike of some quartz inj. at ~ e 71° & 57° Respectively; core not; mon Dissem & mon vugs 1½ % fd FeS_2; dk gy wacke	106.8	107.1		2780	.000
		within unit	117.0	118.5		81	.005
107.1		Qtz zone above		120.3		82	.003
		118.1 - 118.4 Pd dissem silicified Drill		121.5		83	.089
		117.0 - 118.2 " " " " "		122.6		84	.085
		117.7 1/8" qtz vn @ ~ to e 28° in 1" of 3% fd FeS_2		124.6		85	.211 .210 & .211
		120.3 - 121.5 4 - 5% fd FeS_2 in mod silicified		126.7		86	.091
		121.7 - 122.1 1/2" qtz vn @ 25° to core mod mineld w/ 3% fd FeS_2 & 10% hem'd dk frags in 1" @ 20° zone 10% 3% fd FeS_2		127.0		87	.086
				128.4		88	.010
		122.6 1/4" mod to f qtz @ 40° 1-1½% fd FeS_2 & 5% dk frags (hem'd)					
		123.5 - 124.2 4 qtz 1/2" - 1" qtz vn @ 54° & 21° in mod hem'd zone; 1-2% fd FeS_2					
		125.8 - 126.6 " " " 1/2" " @ " " 56° & 3½° " Highly Pd + silicified zone; 3% fd FeS_2					
		128.4 - 137.8 Mod dk gy ore	137.6	141.3		89	.000
		130.7 1/4" clr qtz @ 47°					
		128.3 1" dk gy ore @ ~ 60°					
		139.6 - 141.3 Type sample of BD dyke					
		147.6 - 152.5 10% clasts to 2" - almost conglom.					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-10

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
		152.5-165.6 PALE GREEN, SLIGHTLY BLEACHED fg HMMAG, WKLY SER. 0-Tr vfg DISS. CUBIC PY, NON MAG						
		BED @ 40°, X-CUT BY LATE 1/4" GLASSY WHITE/RED QTZ CARB STRS 35-55° TCA; BARREN.	163.8	165.6	1.8'	2790	.001	
		164.2-164.4 PATCH OF ALB.						
		165.6-186.6 - LT. BUFF TO REDDISH, V. HARD, ALB., UC DISTINCT, IRREG AT 15°. NON-MAG, 0.5% vfg DISS PY	165.6	168.6	3'	2791	.001	
		165.3 1/2" RUST, X-CUT BED AT 65°	168.6	171.6	3'	2792	.001	
			171.6	174.6	3'	2793	.001	
		177.0 BND ALT - 4" ALB HLFS SER AT 35°	174.6	177.6	3'	2794	.002	
		178.0 1/4" calc-ank flt	177.6	180.6	3'	2795	.001	
		182.6 0.5% vfg CUBIC PY 3% CPY CLOTS ALONG FRAC.	180.6	183.6	3'	2796		.002
		183.6-186.6 5% vfg SPECS PY DISS. BX W 10% GLASSY/WHITE INTERST QC. 0.5% CPY	184.7	186.6	1.9	2797	0.70	0.74+0.65
		185.2-186.0 VG - WITH NG GLASSY ffs (N22-420) 6" [illegible]	183.6	184.7	1.1	9551	↑ V.G	0.05
186.6	203.6	TUFF UC DISTINCT IRREG @ 35°, LC. ROUGHLY 35°	186.6	189.6	3'	2798		.001
		MSV TO VWK FOL ~52°. GRANULAR MATRIX LT GREY TO YELLOWISH, 1-3mm, W 10% SUB-ROUND/ANG CLASTS						
		JASPER ≤ 4mm DISS. 0.5% vfg DISS. PY, NON-MAG.						
						9514		
203.6	209.3	ASH FLOW	203.6	206.6		[illegible]		
		LT RED - LT. GREENISH-BROWN, vfg-fg W 10% BLOCKS TUFF, STR ALB, MOD SER, 10% QTZ-ANK STRS,	206.6	209.3		2800		.02
		IRREG, WAVY, UP TO 1/4" WIDE, ROUGHLY 27-35°, 5% vfg PY DISS. THROUGHOUT W.R.						
		206.6-207.1 - [illegible]						
209.3	226.4	GW SHARP DISTINCT UC OF 50° (RARE CLAST JASPER)						
		MED BRWN fg HOMOG MSV, Tr-0.5% vfg SPECKS PY DISS						
		216.6-217.0 1/16" CHL/FAULT GOUGE AT N15°, 10% BARREN QTZ CARB, WHITE/RED STRS AT N 30°.						
		223.0-226.0 WKLY-MOD ALB W/N SER; MED BROWN TO RED vfg-fg, 0.5-1% PY DISS.	223.4	226.4		3001		.001
		225.6 BED 45°	226.4	229.4		3002		.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 9078

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs	
229.4	236.0	IDK' FELSITE UPPER CA 35° SHARP, LC 45° IRREG SERD	226.4	229.4	3	3003		.01
		STR FD/SYN, WK SER, V. HARD, APHANITIC, GLASSY, OPAQUE JADE GREEN TO BROWNISH-RED (HEM)	229.4	232.0	2.6	3004		.06
		FRACTURED, HEALED W QTZ-CARB-CALCITE & 5% INTERST. PY.	232	234	2	3005	0.39	0.35-0.4
236.0	244.5	-TUFF VCG/fg (ALT. TUFF/"GW").	234	236	2	3006		.001
		236.0 - 238.7 MED REDDISH-BROWN MSV, fg, HOMOG. MOD SYEN/WK ALB. TR PY	236	238.7	2.7	3007		.01
		238.7-244.5 BLEACHED, GREENISH-BUFF TO REDDISH BUFF, MOD. SYEN & ALB/FELD, WK SER, TR PY	238.7	241.0	2.3	3008		.001
		AS vfg SPECS DISS. 10% INTERVALS 2-4" OF VCG TUFF W CLASTS UP TO 8mm,	241.0	243.0	2	3009		.001
		(10% JASPER). BND 33°	243.0	244.5	1.5	3010		.001
		→ 243.0 - 244.5 STR ALB/SER, 0.5% vfg DISS PY. LT YELLOWISH-GREEN BUFF, fg, HO MOG, SHR ZONE @ 35						
244.5	246.0	-FELSITE UC SHARP 25°, LC SHARP 22°	244.5	246.0	1.5	3011		.001
		FELSITE; APH, GLASSY OPAQUE JADE-BROWN-REDDISH, 0.5% vfg DISS PY, (FD SYN/SER)						
246.0	275.0	-TUFF (ALT. TUFF/"GW") UC SHARP 22, LC SHARP 40° (AT 251.6)	246.0	249.0	3	3012		.001
		246.0-251.6 MED. BROWN-RED, V. HARD, APHANITIC, SEVERELY SYEN. TUFF, BARELY DISCERN. CLASTS UP TO 6mm ACROSS.	249.0	251.6	2.6	3013		.001
		0.5% vfg-fg CUBIC PY DISS.						
		251.6 - 254.4 MED BROWN, HOMOG, fg, GW WK FD/SER 252.1 hlft ch 144°/fault	251.6	254.4	2.8	3014		.001
		254.4 - 256.0 VCG TUFF, CLASTS UP TO 8mm ACROSS, MATRIX BROWNISH RED, STR SYN/FD,	254.4	256.0	1.6	3015		.001
		GRADUALLY FINER GRAINED DOWN HOLE. UPPER CONTACT SHARP AT 43°						
		256.0 - 263.2 WKLY-MOD AT "GW". MSV. NO MOG (WK-MOD SER/SYN) - BROWN/REDDISH/BUFF	256.0	258.5	2.5	3016		.001
		263.2 1/4" ser chl c 54°	258.5	261.0	2.5	3017		.001
			261.0	263.2	2.2	3018		.03
→	→	263.2 - 275.0 STR ALT "GW" (SER/SYN/FD); REDDISH-BROWN. SLIGHTLY BX WITH 5-10%	263.2	264.5		9552		
		INTERST. QTZ-ANK. 0.5% vfg DISS PY.	264.5	266.0		3019		.001
			266.0	269.0	3.0	3020		.001
		264.5 1/8" QV INT @ 75° cm LAY 1/2 to 1" QV and BRX parr @ 90° to C.A.	269.0	272.0	3.0	3021		.001
		274.6 TWG-1/4" GLASSY/WHITE QL STR, IRREG ~ 45-90° BARREN	272.0	275.0	3.0	3022		.001

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-18

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
275.0	277.0	FELSITE → ANK-ALB-Q ZONE UPPER CA SHARP 40°, LOWER CA IRREG, ROUGHLY 60° STR ALB/SYEN/SER	275.0	277.0	2.0'	3023		.01
		APHANITIC, V. HARD, BUFF TO REDDISH (+/- WK SYN) FRACTURED W 10% INTERST. HLEE'S						
		BLACK CHL/GREENISH SER, CA'S LC'S 45°, 0.5% vfg DISS PY.						
		276.4 - 277.0 BROKEN 1/4" FAULT GOUGE, CA 0-30°. 5% PINK CALCITE W 2%						
		fg DISS PY; ↓ DK GRN @ 124°						
277.0	283.0	"GW"	277.0	280.0	3'	3024		.001
		fg MSV, HOMOG, REDDISH-BUFF, MOD FRD/WK SYN/SER/ANK. SLIGHTLY FRAC W 1% GLASSY/WHITE-	280.0	283.0	3'	3025		.001
		BARREN INTERST QC, OCCAS HLEE CHLORITE, APPROX 2 PER FOOT, CA'S ~ 26-45°.	283.0	286.0	3'	3026		.001
		283.8-284.2 FAULT BX, CA ROUGHLY 8°, INTERST CHLORITE/PINK CALCITE	286.0	288.0	2'	3027		.001
		284.2-288.2 BUFF TO REDDISH APHANITIC, V. HARD, SHATTERED-HEALED W 5% GLASSY/WHITE						
		QC & 5% SERICITE. 0.5% vfg SPECKS PY DISS						
		281.2 1/16" QC @ 30°						
283.2	290.6	FELSITE - UC WAVY 15° LC SHARP 23° STR FD/SER/ANK						
		LT. YELLOWISH-BUFF V HARD APH. GRAIN, SHATTERED & HEALED W 10% GLASSY QTZ. 10% Fmp WISPS	288.0	290.6	2.6	3028		.03
		SERICITE. 1/4" WAVY QC // TO UC AT 15° W 2% vfg PY. 0.5% vfg SPECKS PY DISS IN WR.		291.7		9553		
		288.1 1/16" chl Stn, CA 27°		295.=		+		
		290.5-291.7 [illegible] 20% bull qtz-carb [illegible] 0.5% Pink mod mineral						
290.6	cont.	BASIC SYENITE						
		MSV, DK GREEN CA W 20% ANG-SUB-ANG FRAGS CHLORITIZED AMP. UP TO 0.4 cm; NO P.O. STR. MAG.						
		1 STR/2' OF WHITE/ORANGE QC, 1/8-1/4", CA'S W 22-28°; BARREN.						
		290.6 - 297.0 BROWNISH/RED, MOD-STR SYEN. * 290.6-292.0 FAULT						
		293.0 1/16" LIM FAULT GOUGE CA 44° // TO 1/4" FAULT GOUGE.						

Page No. _____ 0.0 to 1017.0

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Az = 333°
Dip = -60°
Acid Test = -67° @ 1007'

Hole No. 98-19

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	7.0	o/b					
7.0	224.3	> heterogeneous, mgm, f.g. ark tuff; dk grn.-blk grn, mgm, mas, wk chl; bedding @ 43°; PPd fractures @ 45°; highly fract'd					
		mgm PPd int. with ang. and sub ang. c/z. aggregates not often at bedding					
		1/8" qtz-chl. PPd @ 55° in fine grained pink-red sericitized matrix	32.7	33.7		7989	
		1/8-1/2" PPd chl PPd qtz vn. imm. lft. Occ 1/8" vein @ 60°					
		PPd mgm @ 59° (many fractures) in pink-grey sericitized matrix	46.0	46.7		90	.001
		1/4" qtz vein @ 41° @ 80° in black fgm PPd					
		1/8" chl slip is highly diminutive @ 58°	47.5	48.9		91	.003
		1/2" mgm-chl-ank qtz (abn) irr. vein @ 58° in diorite gn in 1" PPd					
		PPd & PPd mgm fgm dk grn brk tuff	15.8	16.7		92	.001
		PPd mgm, fgm PPd, PPd-porphyritic, mic. pyrite					
		1/8" chl PPd @ 40° dark tuff appearance	97.0	98.2		93	.001
		PPd pale pink-pink					
		1/8" chl PPd slip @ 55°					
		Bedding @ 37°					
		mgm PPd PPd in homogeneous & fractured PPd x 1.0' of continuous					
		heterogeneous tuff, fract'd					
		Bedding @ 52° //					
		// // 58°					
		1/8" chl slip @ 53°					
		dk gy homogeneous ark tuff					
		1/8" chl slip @ 42° in fine brecciated					
		abn mat @ 27°					
224.3	237.5	P > fg, comp, ark vns @ 43°, mgm PPd; mod. mag; 2% magnetic pyrrhotite 1"-15%	223.9	224.9		94	.002
		fg gy green phenos; brown calc					

Page No. _____

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	Sample From	Sample To	Total	Sample No.	Ozs.
		227.7-227.7 > 2" [illegible] @ 12°					
		237.5 1/4" clv-ser. [illegible] @ 32° [illegible] preceded by 3" Bld grey	237.4	237.8		2995	.001
237.5	293.1	T = as above; v. fine-; some Hall. mon					
		247.7-249.5 Bld: 1/8" [illegible] @ 18°	248.0	247.4		96	.001
		253.5-259.0 carb-; Bld grey [illegible] (1/2") [illegible] @ 37°					
		281.1-283.0 Bld Hall-. [illegible] 5% ank' @ 55°	281.0	282.[illegible]		97	.002
		261.0-293.1 [illegible]					
		293.1 1/4" ser-clv-ank shear @ 37° 1/m 1' Bld zone	292.0	293.3		98	.001
293.1	333.2	P = as above; initially Bld; [illegible] 3% carb-ank [illegible]					
		295.1-298.0 (DD'd); ser'd; Bld; calc on [illegible]	296.6	297.9		99	.002
		332.2-332.5 2" ser-clv [illegible] 1/2"-3/4" Bld zone (hem'd?)-ank; VF @ 27°; [illegible]					
		a str-feature	331.8	333.4		2701	.001
		333.2 1/4" ank-clv str @ 45°					
333.2	552.0	T = as above. [illegible] Hall. clrd & non mag; [illegible]	342.1	342.8		2	
		342.3 1" ser-clv-qtz [illegible] @ 50°; w/ 1/2" Bld tuff either side					
		353.7 1/4" clv [illegible] @ 37° [illegible] Bld by [illegible] ank zone	353.9	355.2		3	.001
		356.1-357.5 pale gy [illegible] apk [illegible] @ [illegible] @ 23°					
		357.5-357.7 3% fd FeS2	355.9	357.9		4	.001
		356.1-362.0 Bld, becoming [illegible]		359.7		5	.001
		360.6 1/2" ank? vn @ 30° (looks like another mineral-pale gy)					
		374.3 Bedding @ 55° carb	370.7	391.6		6	.002
		391.2-391.3 1" [illegible] 1/8" clv; slip @ 50°; 1/16" vn @ 15° cse FeS2					
		408.3-409.4 1 1/2" ser-clv [illegible] zone @ 11° + Bld [illegible] dull gy qtz (5%)	408.8	410.7		7	.001
		419.1-419.2 3/4" dull gy [illegible] preceded by 1/8" ser-clv [illegible] @ 54° +/- [illegible] ank; [illegible] by 3" [illegible]					
		419.2-430.0 sup-up [illegible] (5%) in Bedding @ 50°	419.0	420.1		8	.001
		461.1-463.2 Khaki green (dk BG) [illegible] Bed; Bld @ 37°; 3/4" ank vn zone @ 462.8' w/ 1% fd FeS2					
		ank; Hall. clrd & non mag	462.0	463.4		9	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		465.0-466.5 > as @ 761.1-763.2'; @ 11°					
		534.5 - 535.0 > B.C.; no sts in Pb					
		507.0 > below 507' is pale brown & dk gun thereafter					
		552.0 > Kno mst at @ 32° in B.C.					
552.0	716.4	B.S. > brecd, massive; lt brn; comp; 1% ank; 20% qtz sts, stwk; occ. fol. sts; modrd lt Fe, mag; mod qtz; unfr 2" d.V. sils @ 70°-90°					
		600.0-604.3 > B.C.; no sts in.					
		623.4 > " " " sl slip @ 18° in mm. fol. by 1" d.V. sils @ 82°					
		650.6 > 1/8" cW, slip @ 37° preceded by 1" ank; sts					
		686.0 > 1/2" " - cbrb. slip @ 33°					
		710.5 - 716.4 > B.C.; unrecord core, from drilling problems; no sts. via.					
		716.4 > ct. lost in B.C.					
716.4	783.4	P > brecd, mon mag; 2½% vnlts to 1/2"; 25% fol'd stwks; mst comp.					
		753.5-754.0 > mst fol'd to comp; Bx'd; 10% qtz to 1/2" ank @ 68°	753.5	754.0		2710	.001
		752.0 > 1/8" cW-cbrb slip @ 32°-34°					
		760.0-760.8 > 2" fol'd @ 18°; 50% ank in brecd Bx'ts in wallrock	759.5	761.3		2711	.001
		783.4 > ship mst at @ 23°					
		760.0-783.4 > fol'd	777.2	782.9		2712	.001
783.4	799.4	B.S. = as above but fol'd less; mon mag; less chl					
		799.4 > ship mst at @ 57°					
799.4	802.3	FEL S > brecd, dk mst; calcareous; mon chl; 2% ank vns @ 54°; comp; homog.; mon mag					
		802.3 > ship mst at @ 45°					
802.3	826.6	B.S. as above but mst comp					
		808.3-808.8 > fol sils @ 45°					
		807.6-819.6 > massive, lt grey, v ch'd mm, Bx @ 807.6'-811.5' & @ 817.7'-819.6'					
		fol @ 11-15°; massive ank Bx'ts in wallrock (20% brecd Bx frags);					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage		Description					
From	To		From	To	Total	Sample No.	Ozs.
		[illegible]	[illegible]	[illegible]		[illegible]	.000
		826.6 at contact in BC		[illegible]		[illegible]	.000
826.6	832.4	FS. = dark grey-brown; non clay; non mag; wkly carb; weakly to strongly fract. at		[illegible]		[illegible]	.011
		@ 832.4		[illegible]		[illegible]	.001
832.4	999.1	FS = as above; dark; strongly mag; non clay comp		[illegible]		[illegible]	.001
		837.7 - 838.2 fract zone @ 26° to c					
		852.3 - 853.2 " " " 29°	870.1	[illegible]		[illegible]	.001
		870.1 - [illegible] fract zone		[illegible]		[illegible]	.002
		873.0 - 879.0 similar to 809.6 - 819.6; 10% chl fracture @ 75° & @ 27° to c;		[illegible]		[illegible]	.002
		chl fract @ 9° & 12° to c; 70% carb vein & hem'd fract zone at		[illegible]		[illegible]	.001
		lower contact					
		879.0 - 882.0 non mag					
		894.3 1/4" carb-chl vein @ 43° + 1/4" mod oil stained fract @	894.[illegible]	[illegible]		22	.000
		899.5 1/2" chl fract + 1/2" pale grey clayey fracture @ 42° to c	899.1	900.[illegible]		23	.001
		900 - 999.1 V. fract; fairly strongly mag; comp					
		967.2 "B" chl-carb vein @ 74°					
		968.2 " " " " " 56°					
		980.8 " " " " " 47°					
		992.5 " " " " " 47°					
		999.1 sharp upper ct @ 23°					
999.1	1004.8	FEL = as = med-dark brown; fresh; fairly mag; comp; non clay; good ct @ 1004.8'					
1004.8	1017.0	BS = as above but lighter grey & less clay					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-17A

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
1028	1030.0	Basic dyke - fresh; med-dk gy w/30% augites; comp.					
1030.0	1031.7	Basic dyke - fresh, comp. dk med-brown; 10% chl. bxrt - filling; 1% dk gy stks c/a	1030.0	1032.8		9674	.003
		discontinuous 6" long fractures @ 15°; parallel PPD FeS2					
		1030.0 - 1/8" chl diffe 14°					
		1031.7 - shear fract @ 38°					
1031.7	1153.0	B.S. - as above but locally PPD, PPd, xu					
		1041.0 - 1041.8 15% ank vns (1/8") @ 54°					
		1048.8 - 1050.4 40% dk gy qtz stockwk @ 13° in bnd zone w/ 1% fd FeS2 & 1% chl's	1048.4	1050.4		75	.002
		1058.9 - 1061.8 30% ank vns in PPd zone w/ 1/16" chl diffe 1060.0 imm prec. by 2" chl zone					
		& fol'd - by 2" purple alt'n shrd zone	1058.6	1061.2		76	.001
		1078.3 - 1078.5 1/2" chl slip @ 37° imm fol. by 1" PPD q-ank vn					
		1101.0 - 1/8" " " " 51°	1077.9	1078.9		77	.003
		1086.0 - 1/4" chl-ank vns @ 33°					
		1087.0 - 1088.6 PPd zone					
		1119.7 - 1120.3 chl brxn fox @ 25°					
		1126.0 - 1127.0 w/i PPd; ank vns @ 37° (10%)	1085.3	1086.4		78	.003
		1133.5 - 1133.6 1/8" chl slips @ 60°					
		1107.0 - 1109.6 PPd w/ gy(a) imod qz, siliceous, wispy chl (+chl → spec possible); 5% ank	1107.0	1109.6		79	.010
1153.0	1156.2	Basic dyonite - as above but fracture; shrp cts @ 37°					
1156.2	1250.0	Basic dy - as above	1119.4	1120.6		80	.000
		1167.0 - 1/8" chl diffe imm prec. by 1" ankvn; vns diffuse on country rock; @ 24°					
		1203.6 - 1209.8 fract zones are PPd w/ mid gy qtz stks (5%); 2% fd FeS2	1125.5	1127.0		81	.000
		1203.8 - 1204.6 PPd; @ 47°; buff; sil'd; altered; 5% fd FeS2; 5% qtz stks (gy 1/2")					
		1204.6 - 1206.4 Local PPd; PPd; 10% ank; 2% fd FeS2	1195.5	1199.0	3.5	82	.003
		1206.4 - 1207.0 PPd; 50% med-dk gy hairline - 1/4" qtz stks; 1/2" chl diffe 1206.5'; 2% fd FeS2					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 88-19A

Footage From	Footage To	Description	From	To	Total	Sample No.	Oz/t	
		dd@68°	1197.0	1202.3	3.3	9683	.001	
	1208.2	1/8" md gy dd@59°		1203.7	1.4	84	.012	
	1209.0-1209.7	sil'd, pale gy-buff, dd'ed, 5% dd fs-filling; 7-8% fd FeS2; @57°		1209.8	1.1	85	.101	
	1228.2-1230.8	dk gy siliceous zone w/ angular fgr frags (dd'd); possibly specular-related; @27° w/ drop not clr; 2% fd FeS2		1206.2	1.4	86	.099	
				1207.0	0.8	87	.213	
	1238.0-1238.1	5% 1/8" pale gy str'g in dd'd buff-br zone w/ 3% fd FeS2; @70°		1209.0	2.0	88	.189	.159.218
	1237.2-1237.3	1/8"-1/2" sil'd zone w/ 1/8" g-ank fgr @58°; 3% fd FeS2; 2 meters of buff gouge		1209.9	0.9	89	0.27	
	1238.8	1/8" pale gy Q str @67°; 3% fd FeS2		1212.0	2.1	90	.008	
	1239.5-1240.5	dd'd buff-brown; 1% fd FeS2; sil'd+dd'ed; @15°-43°; two meters of gouge		1214.8	2.8	91	.001	
				1218.2	3.4	92	.000	
	1241.5-1244.7	40% 1/16"-1/4" pale gy Q str @52° in dd'd buff gouge; 3% fd FeS2; 10% ank		1222.0	3.8	93	.011	
				1226.0	4.0	94	.001	
	1248.6	1/4" pale gy Q-ank vn @30°; Bulk-no sulph		1228.0	2.0	95	.001	
	1242.0-1250.0	fresher (darker) B.S. than previously (may be just local through)		1229.5	1.5	96	.001	
				1230.7	1.2	97	.000	
				1233.5	2.8	98	.001	
				1235.5	2.0	99	.001	
				1236.5	1.0	9700	.004	
	1250.0	E.O.H.		1239.5	3.0	9751	.065	
				1241.0	1.5	52	.341	.333 .348
				1242.0	1.0	53	.073	
				1245.0	3.0	54	.009	
				1249.0	4.0	55	.001	
				1250.0	1.0	56	.001	

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-23

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
0.0	0.8	O/B					
0.8	97.0	T = med gy-dk. brown, F.G., heterogeneous; local lapilli units with fragments to 3/8"; v.v.slly, bedded; moderately carbonated; moderate competency (Broken ≈ 5"); highly magnetic; frost					
		8.1-8.4 Bedding (1/8" maroon beds) c 51°					
		9.6-9.7 3/4" bl'd zone (Bed) - may be primary feature; c 62°; 1/2" ank vnc 8.6'	9.4	11.4		3601	.002
		8.4-13.0 Lapilli unit with interval beds c 20°					
		10.2-11.6 muggy, dusty, limonitic; in B.C.; c 63°	10.4	11.9		3602	.002
		17.0-18.3 Tuff unit is probably primary feature; undulatory, sharp ct. c 18.3' c 67°					
		24.0 possible slip - up dext is 3/4" x 1/8"					
		25.1-25.4 bl'd zone with bedding c 59°; no FeS2; aphanitic; dk. gy	24.6	25.6		3603	.001
		28.2-28.4 Bedding c 58°					
		29.1-29.5 ank vnlts (1/16") c 22° => 15%					
		31.8-32.1 " " " " "					
		40.5 1/8" cly slip c 55°; immediately followed by 5" bl'd lapilli zone with 10% ANK blebs					
		34.4-36.7 1/8"-1/4" dk-dull gy ANK-cly vnlts c 32°; bulbed; in gy bl'd zone (5')	35.9	37.0		3605	.003
		39.8-39.9 1/2" dk gy tuff unit in ct with bl'd zone; 1-2% coarse FeS2 in bl'd unit; c 67°	39.1	41.3		3606	.040
		47.5-47.8 B.C.; no structure visible					
		48.8-51.4 bl'd areas c 12 = 15°; primary?; no FeS2	49.0	50.5		3607	.023
		33.7 1/8" cly slip in 4" bl'd zone; c 60	33.0	34.0		3604	.001
		62.5-62.7 2" bl'd zone - looks primary; c 59°					
		71.8-72.0 1 1/2", bulbish, milk wt-cream D-ANK vn c 65° immediately followed by 4" zone of 30% ank (+ lesser qtz)	71.5	73.0		3608	.004
		71.8-74.0 bm'd zone (bulbed, ?primary) red-brown; 5% ANK					
		76.8-77.4 40% ANK vnlts to 1/4" (+ qtz); c 11° - 70°; bulbish	76.6	77.6		3609	.003

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-23

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
7		79.1-80.2 356 1/8"-1/4" ANK-QTZ VN's @ 79°; 5% cse. blebs FeS2 @ 80.0'-80.2' @ 14° (along cl) fractured; ank vns in bcm'd red-brown zones	79.1	80.2		3610	.001
		81.5-81.9 10% ank vns & blebs in red-brown bcm'd zone; @ 67°					
		67.0-92.0 non-magnetic					
		93.5-93.7 70% Q-ANK bullish stockwork in bcm'd red-brown zone	92.9	93.8		3611	.002
92.0	98.2	INT. DIKE = pale green, v f.g.; possible chill margin @ 98.2' (1/8") at sharp ct (cl slip?) with dk grey tuff; G.C. @ 92.0° (& warped core); weakly mag; highly cbd.; @ 48° @ 98.2'; @ 57° @ 92.0' @ possible cl slip					
			98.0	99.5		3612	.002
98.2	182.5	T = as above; fresh					
		99.0 at least 1/4" cl fault in B.C.; cl and Bx; @ 43°; immediately followed by purple-brown fresh tuff; 2" B.C.					
		108.0-110.8 limonitic; yellow-brown; non magnetic); 1% chlorite fractures in bcm'd zone centred @ 108.7'-108.9' where G.C. on non-cl-ank shear @ 63°; at least 1/8" cl. fault @ 110.4' in B.C.; 1/8" bullish QV @ 110.8' @ 35° (+ANK)	108.4	109.4		3613	.027
			109.4	110.8		3614	.002
		112.8-113.4 limonitic; no structure visible					
		117.0 B.C.; " " "					
		117.4-118.7 bld zones (primary?) @ 68°	117.3	118.8		3615	.001
		136.2-136.5 f.g. med grey unit contains brick red fragmentals; everything else around is tuff but there may be xenoliths; sharp ct @ 154.5' @ 63° is non-baked bedding					
		137.0 B.C. with stringers that are limonitized; possible structure @ 65°	136.9	138.9		3617	.002
		110.8- highly magnetic					
		140.0-143.2 Lapilli unit					
		143.5 1/4"-1/2" bullish milky qtz QV @ 65°; 10% spec. here on downhole ct.	143.1	144.2		3618	.004
		138.8 1/2" bcm'd brick red Bx ank-cl zone @ 65° with 12% cubic FeS2	144.2	145.6		3619	.006
		114.4-114.6 1 1/2" ANK-QTZ VN @ 49°; bullish pale grey qtz	113.9	114.8		3615	.002
		145.0-145.6 10 7/8" ank vns @ 59° in weakly bcm'd zone; 1% f.d. FeS2					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-23

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
	148.1-148.3	25% ank+hem'd zone; c/67°	148.0	148.8		3620	.045
	150.3	Bedded; 1/4" weakly hem'd zone with 3-4% fd FeS2; bedding c 58°; immediately preceded by 1/8" c/P slip	149.9	151.0		3621	.013
	157.4	Bedding @ 35°					
	158.7	1/4" cm. diss. FeS2 in a horizon (60%); c 41°					
	162.7	1" limonite zone @ 45°					
	168.0-169.1	Bl'd pred. primary; c/63°					
	174.5-174.6	30% ank in weakly Bl'd zone; G.C.; c/60°	174.2	176.1		3622	.001
	174.6-175.2	10% red fragmental as before - not apparent (hem'd breccia)					
	175.2-178.8	highly Bl'd zone (primary?) & shp. bedded @ c 175.2' c 55°					
	183.4-185.3	Bed with 1/4"/10% ank-filled cracks (looks like vesicles would) in gph. dk purple ash tuff					
	187.2-192.2	Limonitized (50%) Sbrown (rusty); not competent; 2% cm'd FeS2					
	187.2-187.5	slip (cP) c 37° with intervening ground; rusted	187.0	188.0		3623	.004
	187.6-188.0	Bl'd pale gy-grn zone @ 4°; undulatory bed'g; immediately followed by rusted zone centred on fracture c 52° w/ 1% fd FeS2					
	189.0-192.2	extremely rusted (limonite) c 57°; 80% rusted; fresh otherwise	189.0	191.6		3624	.006
	192.1-192.2	moderately shpd w/tuff bedding ripped up; attenuated c 57°; immediately followed by dk gy tuff	191.6	192.6		3625	.005
192.5	194.1	Int dyke - f.g.; dk Sbn; fresh except for 5% cP fract-filling c 24°; weakly mgg; wk. cld.; maybe bed c 29°					
	193.6	> 1/8"-1/4" cP slip c 24° in 1" bl'd zone	192.6	194.3		3626	.003
194.1	202.0	T - as above Int bed cdn is both primary & hem'd (parallel; ≈ 10%); non-mgg; not comp.	195.9	197.0		3627	.003
	196.7-197.0	Bl'd & hem'd; mggy; 1/8" cP slip c 53°	197.0	199.0		3628	.004
	198.2-199.0	" " "; centred on G.C. & B.C. c 198.7-198.8 (probable Mt bx); 1/16"-1/8" pale gy q. stx c 198.2' c 50° w/ 1% fd FeS2 & 1/8" cP slip c 198.3' c 69°					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-23

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
202.0	204.3	INT. DYKE = same as @ 182.5-194.1'; not competent; shrp not ct ∝ 204.3' @ 52° ∝ @ 202.0' @ 38°	201.5	204.6		3629	.006
204.3	222.0	T = same as above; heterogeneous; highly mag; 208.1 1/2" cld, shp @ 32 214.9 1/2" cld, shp @ 70; wider 208.5-208.6 Bld zone @ 1-2c; primary?					
221.0	226.0	P = Bld pophi 1% anhed are clast on ∝ up to 1/2"; 30% Bld phenos; shrp not ct @ 221.0' @ 29° ∝ @ 225.0' @ 24°; not comp. (Probably ≥ 2"); very mag; mw Cbd.	220.7	222.5		3630	.003
		222.5-224.0 B.C.; intense Bg; centred on v. str. Bld @ 224.0 where 30% cld in 1/2" zone ∝ immediately preceded by 5" sil'd, mgl zone ∝ then B.C. with cld stringers and ∝ non cbd @ 15°	222.5	224.1		3631	.004
226.0	231.7	T = Lapilli tuff (up to 1/4"); med primary calc; Bld @ both ct.a; 1% ank vns; non cbd; very mag; comp.	225.7	227.5		3632	.006
		226.0-227.4 Bld; weakly brecciated; very shrd					
		230.0-231.7 " (mod bxd); non cbd, sil'd; 3-4% f.d. FeS2 (extremely fine); 5% ank Bleb; primary texture is lapilli until within 2" of Bld where it is shrd out ∝ deteriorated → best zone in hole (WREXOS?); both sharp (brecciated) contacts; non-cbd hairline fractures ∝ anastomosing stockwk; 10% dark grey siliceous "eyes"; @ 70° @ 229.8 (ctct)	229.7	230.7		3633	.006
		231.7 3/4" cld concealed by BREAK; @ 29°	230.7	231.7		3634	.008
231.7	251.7	P = fresh; as above throughout; comp.; shrp not ct @ 33° @ 251.7'; shrp not ct @ 35° @ 231.7'					
		232.0 1/2" Bullish g-ank vn @ 14° in 1" bxd zone	231.7	233.4		3635	.008
		233.1 1" " " " " " @ 14°; immediately followed by 1/4" of 1% coarse FeS2					
		248.7 1/2" " " " " " @ 62°; with 10% ank cld					
251.7	341.0	T = as above; mainly dk gy; 1% ank vns throughout ∝ locally concentrated to 5%; highly mag; highly cbd.; more homogeneous than previous; 3% carb vns (usually @ 40°); comp.					
		254.0-255.7 Bld. Bull zone; partially primary; @ 62°	254.0	255.8		3636	.011
		260.8-266.5 " where zone starts as a Bxd with lapilli to 1/2" ∝ then becoming gpd	259.0	260.3		37	.017
			260.3	262.0		38	.007

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		dk mafic with fine 1/16" ank beds c 65°; 1/2% fd FeS2 c 261.7 - 265.8 & 5-6% fd FeS2 c 265.8" - 266.5' (extremely fine); mod'd; highly cbd.; non-mgg	263.8	265.5		3640	.005
			265.5	266.5		3641	.001
	266.5	"B" int cbl-ser shr c 64°	266.5	268.1		42	.001
	272.5 - 273.1	wy bld & mod'd 1/2% fd FeS2; c 52°; C.C. c 272.5'	268.1	270.0		43	.007
	267.5 - 273.1	wy bld'd porph dyke; c 27°	270.0	272.2		44	.001
	259.3 - 259.9	" " to lwr. con (INT DYKE?); 2% fd FeS2; highly mgg; c 54°	272.2	273.2		45	.006
	313.4 - 314.0	10% ank 1/8" vns c 65°; in wy bld zone					
	330.9 - 331.2	lwr. con zone gradational to dk grey-dk green-buff-brown-buff-thereafter; shp. bed? ct c 330.9 c 52°; 3/4" dull int grey-ank vn c 330.9 c 52°	330.1	331.2		46	.008
	331.7	thin bedding c 66°					
	335.7 - 336.0	70% ank in wy bld zone; c 48°					
	341.0	cbl not ct c 75°					
341.0	378.9	P = as above; fresh; massive; not comp; wy mgg; non-cbd; 1/2% ank vns c 54°					
	342.7	1/4" q vn c 54°; 5% ank; buff-pink; dull int; in 1" bnd orange-red zone; s/c cbl	342.5	343.3		47	.002
		shrs immediately followed by "B" cbl, slip c 54°					
	345.2	discontinuous 1/8"-1/4" dull int qtz vn "B" cbl; shrs followed by "B" mylt, both dk mafic	344.6	345.7		48	.001
		f. con vn; c 59°; mod buff-pink, but no sulphs					
	363.7 - 364.2	B.C.; no structure later visible					
	378.4 - 378.8	rock ground with shrs not ct c 378.4 c 70° & "B" cbl flt c 378.8 c 84° (not much alteration with rock)					
	378.9	shrs bed flt ct c 64	378.4	379.2		49	.001
378.9	645.3	T = as above; mostly dk grey & v. highly mgg; comp; highly cbd.					
	392.0 - 392.5	wy shrd & bnd; 12% cbd FeS2; cbl. blends in altd zone; c 52°; ending on "B" cbl flt c 74°	391.7	392.8		50	.002
	422.2	4" cbl-ank-ser flt (+shrs); c 74; no effect on wallrock	421.8	422.4		51	.001
	423.9 - 424.1	2" dull int q-ank buff-pink cbl ending on "B" cbl-ank shrs in G.G. & 1" ank-q vn thereafter with 5% cbl & frags + fg. d. FeS2; first cbl flt c 75° & second c 27°	423.7	424.6		52	.003

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		428.2-429.6 ltd'd buff zone (primary); c 65°					
		433.5 1/8" buff q-ank vn c 67°	432.9	433.8		3653	.003
		447.8 wk 1/8" sbx-clp slip (sbx) c 55; immed. preceded by 6" ltd'd + limonitic zone	447.2	449.0		54	.003
		457.0-645.3 more heterogeneous with brown colr, more prevalent f. lapilli units scattered					
		458.4-459.2 hem'd; 15% ank vns to 1/8"; c ld. (hem) & c 10° (ank)	458.4	459.3		55	.006
		465.2-465.4 1" creamy ank vn c 35°; 5% chalcox blebs; 30% gn-gy siliceous blebs; hem	464.8	465.6		56	.002
		468.8-469.3 B.C.; brick red hem'd zone with vuggy zone with at least 3/16" pale gy QV on 1/8" clp slip c 72°; very gossanous	468.7	469.5		57	.003
		486.5 Bedding c 72°					
		498.4 1" buff dull ltd with q-ank vn preceded by 1/2" vn-clp vn c 78°	498.1	499.7		58	.002
		503.2 1/8" cxx FeS2 vn c 109° & bedding appears to truncate it downhole c 63°					
		511.5-512.2 ltd'd (primary) to buff & red hem'd cxx; c 70 (Bedding?); 1/8" cxx FeS2 vn c 52.0 c 77 (with Bedding)	511.3	512.2		59	.002
		514.4 1/8" dk gy siliceous zone c 70° on Bedding - spec dem assm?	514.0	514.6		60	.002
		550.0-522.0 intermittent wkly bx'd & c 76° & local sip c 11pa'					
		524.9-527.2 ltd'd to buff (primary)					
		525.1 1/2" d 30% cxx, blk FeS2 c 74° // to Bedding	524.6	525.4		61	.001
		548.7 1/2" clp-ser. sbx preceded (by 4" B.C. (hem'd)	547.8	549.1		62	.000
		553.5 1" B.C. with 1/8" clp. flt c 79° (probable); strong; followed immed. by 8" hem'd zone (decreasing downhole)	549.1	550.7		63	.002
		561.5 1/4" cN-ank. flt c 75° immediately followed 1" downhole by another 1/8" clp flt with 1/4" pale gy QV - then 3" hem'd zone with 15% ank blebs	552.8	553.7		64	.001
			561.2	562.2		65	.001
		570.0-571.1 5% ank vns to 1/2" c 67					
		589.2 1/4" clp-ser-ank sbx. c 77°					
		585.0-608.0 lapilli units (up to 1/2")					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		598.7 lam'd, brick red, Bedding @ c 80°	598.5	599.8		3666	.003
		599.3 1/8" cNP slip @ 80° (deformed by 1" wy lam'd					
		613.0 1/8" cga FeS2 vn @ 90°					
		617.7-618.1 wy bld to brown; 1% fd FeS2; wy silic; otha @ 77°	617.6	618.3		3667	.001
		645.3 shap ct (mat) @ 55° (last 20' non-mag)					
645.3	650.0	C - well rounded clasts are 50% mafic & 50% felsic in clast-supported in aphanitic white (ank?)					
		matrix; fresh; highly mag.; non cld; up to 5% fd FeS2 locally; clasts to 2"	649.0	650.0		68	.002
	650.0	EOH					

JUBILEE GOLD

Page No. 01

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 97-55

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	11.4	O/B					
11.4	40.1	C - mg - migmatitic matrix - silicified; well rounded clasts to 5" approx 60% mafic; 35% clasts in migmatitic matrix (med gy - grn); mod comp (fracture every ≈4"); wy chl; lightly mag					
40.1	160.7	T - dk pur - gy fg ash tuff; homog; lightly mag; chl; mod comp	41.0	42.3		9556	.001
		41.9-44.4 dk pur - grn zone in v. mag					
		41.0 1" limonitic zone @ 44° (slip)					
		49.2-50.0 BC. limonitic sections					
		41.5-41.9 4" qtz-ank buff zone @ 57°; crosscut vn					
		77.0-79.0 BC; limonitic; 1/8" CV. slip @ 78.4° @ 55°.	77.0	79.0		57	.002
		79.2 mgy limonitic 3/4" zone @ 33°; 50% ank.		80.3		58	.01
		79.7 1/2" Rale gy q-ank vn on 1/8" CV. slip @ 55°; limonitized		81.9		59	.001
		80.6-81.0 limonitic ank-spec vns @ 24° approx up to 1/4"		83.8		60	.001
		81.0-81.8 B.C. contains at least 2" milk wh QV (no contacts visible) in chips 3"; mgy					
		95.0-98.6 40% ank vns @ 40°	95.2	97.3		61	.001
		118.8 1/8" CV. slip @ 47°					
		120.5 " " " " "					
		128.2-128.5 pk carb vns @ 61°					
		129.5 Bedding @ 61°					
		133.5-133.6 1" pk carb vn @ 64° prec. by 1/8" CV. slip					
		160.7 slip not ct @ 47°					
160.7	175.0	P - fresh, massive, dk pur, comp, mod mag; 30% felsic phenos; 3% mafic phenos	166.3	167.5		9562	.001
		166.8 3/4" felsic zone @ 45° on 1/8" carb-spec vn 1/2 ft. dilation	167.5	168.8		63	.01
		167.5-168.1 felsic buff zone w/ 1/2 ft dilation 5% ank; CV @ 42°; wy silicified					
		168.7 1" felsic " @ 62°					
		172.5-172.7 wy felsic on 1/8" CV-ank vn/pod @ 45°	172.0	173.3		64	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-285

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
175.0	262.3	T - v. brec. tonal comp. dk grn calc-silic fragmental	174.0	175.4		95/65	.001
		175.6 - Dyke not at c 57°					
		187.4 - Limonitic calc-silic 1/2" fit c 58° has vnl. Pyd core	187.0	187.9		66	.001
		189.6 Bedding c 71°					
		235.6 - 241.0 Pebble Dike					
		238.3 1/8"-1/4" chl Breccia 1 1/2" chl vnt c 238.5° w/ 15° qtz stringers in 1" wall hem core	237.7	239.0		67	.001
		260.2 - 260.7 qtz, chlorite dk grn fragmental c 70°					
		260.7 - 262.3 fg. mod grn-gry Pebble Dike (?) c 15°	260.0	261.8		68	.001
262.3	263.6	ITK - qtz chlorite Dike (?) c 70° 30% Pyrite bearing qtz stringers & qtz fractures c 70° &		262.1		69	.001
		c 156°; 1/2" core Pyrite Fracture at c 90° core shows not.		262.8		70	.001
263.6		T - biotite garnet dk grn fg. comp. mod mag					
		264.5-264.8 1/8"-1/4" qtz vnt c 21° 20% Pyrite					
		265.5 Bedding c 74°	267.8	269.6		71	.001
		268.0 - 268.7 vnl Pyrrh in Sil. Sed. Pyrite c 35°					
		303.1 - 304.5 Limed mod. altered grn mag qtz fit 1/2" chl filling c 30° 3.6' imm. prec.	302.8	304.5		96/55	
		by 35° Pyrite-qtz vn					
		310.6 1/4" qtz vnt c 40° in 1" wall Pyrite core	310.0	311.1		56	
		317.3 3/4" Pyrite cont. vn c 71°					
		356.5 Bedding c 77°	356.6	362.8		57	.001
		363.1 - 363.2 1" pale grn-wht DV w/ 10% hem Sed fragments; mod chl/Pyrite filling fractures		363.5		58	.002
		imm prec by 1/2" chl vnt & then by 4" Pyrite gouge + qtz vnt		364.7		59	.001
		364.5 1/2" chl slip c 85°					
		383.0 " " " " 78° imm prec. by 1/4" qtz vnt c 78°	382.6	383.2		60	.001
		384.8 - 387.2 25% qtz vnt mg c 55°					
		406.6 Bedding c 74°	384.6	387.6		61	.000
		416.8 1/4" qtz vnt c 80°	416.2	417.0		62	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-25

Footage From	Footage To	Description	From	To	Total	Sample No.	Ors
		421.0-421.2 1/8" cc. FeSz mod. c 72° w/ ll. bedding	420.8	422.1		9463	.002
		435.6 1/8" cN. dlt c 44° in B.C. w/ limonitic zone (2") ; no effect on competency					
		436.2-436.4 B.C.; limonitic ; no str. structure visible	434.1	436.7		64	
		440.3-440.6 1/4" ank-g vnc c 30° & c 15°					
		449.3-451.0 lam'd zone c 77° contact on 1/8" cN. dlt c 450.5' c 85°	449.1	451.0		65	.000
		454.0 1/4" vn-cl. calc w/ limonitic & milky wtz (V/disc.)	453.7	454.3		66	.000
		459.8-493.0 dk grn-gy aph-f.g. hbnr. w/ tuff in vn zones					
		499.6-500.1 Drill - Bx. zone w/ ank-g vnlts/vnlg c 77°	499.5	501.1		67	.000
		501.7-501.9 calc. mineral vn. w/ 3% Py/Asp c 78°		502.2		68	.000
		504.6 1/4" ank zone c 85° in pale gn zone (primary)	503.9	506.1		69	.002
		506.2-507.2 Drill - Bx. zone w/ ank-g fract'd FeSz ; vn'd w/ hbnr. clst.		507.4		70	.001
		493.0-519.5 Rapilli limits in mottled/banded lithocrystalline zone		510.1		71	.000
		519.5-552.0 dk gy hbnr. zones					
		545.0 3/4" FeSz ank-g vnc c 72°					
		546.1-546.4 3" cN-ank vnc 85° ; mod. by 1/8" cN. dlt. ; FeSz ; 5% cN. clst					
		522.0-522.3 vnlg silicious cN zone w/ 20% ank c 84° ; oxid'd FeSz	521.8	522.8		72	.001
		552.0 E.O.H.	544.7	546		73	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-26

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	28.2	OB					
28.2	28.7	B.S - probable boulder; fresh, non mag					
28.7	155.0	T - fresh, heterogeneous, variably dk purple - mainly a fg. ash tuff; comp; lightly cbd.; non mag; 12 ann ∠ mineln ∠ 13°					
		30.5-30.6 1" dk grn, fgd, clr. knit D in ground on other side a mainly at ∠ to core					
		33.2-33.7 B.C.; no structure visible					
		37.9 1" hematitic zone on mineln ∠ 77°	37.0	38.2		2930	.000
		38.0 Kspdding ∠ 77°					
		77.7 DIO into Kspdding vein	77.0	77.8		2932	.000
		77.5 1/2" clr NE ∠ SC preceded by 3/4" clr rimrocked vein					
		80.0-80.8 ank-fgd. strongly Kspthic to Kspd tuff ∠ 22°	79.7	81.2		2933	.000
		50.6 1/2" clr ∠ sec. vein, Kspd mineln by wispy Kspd tuff	50.3	51.3		2931	.000
		87.0 - 89.8 increasingly bedded dominantly ∠ Kspd - Kspthion					
		89.8 1/4" clr-wht NE ∠ 23°	88.5	89.7		2934	.000
		89.8-90.4 broken dk grn knit, last 1" is sec-clr vein ∠ irregular Kspd bound		91.7		2935	.005
		90.4-91.5 3/4" clr-ank ∠ NE ∠ 32°-37° at each end w/ ank vn between which is Kspd by 25% clr + 10% Kspd in wk brk ank-grn bound (tx); non mag Fe Sx	109.0	109.8		2936	.000
		109.5-109.8 tension sec-clr vein zone (ank); 10% ank; 2% 1/8" med grn sph; ∠ 25°-27°	FeSx				
		140.0-155.0 dk purp; 12 ank wisps (∠ to sided) core; recovered 1/4" pulverized; Kspdding ∠ 77°					
		147.4-148.2 Fault coln (dk purple) - looks primary; ∠ 57°; 1% coarse Fe Sx	147.4	148.3		37	.001
		155.0 vein not at ∠ 74°					
155.0	156.5	P > fresh, comp, lightly mag; non sfd; 25% Kspd phenos + 5% mafic phenos up to 1/4"	154.4	156.8		38	.001
156.5	201.7	T - as above					
		156.5-156.7 1% fine Fe Sx in Kspd tuff					
		177.7-178.1 Bulk dull wht qv w/ 1% ank; 3" DV; 2% fine ∠ coarse Fe Sx; ∠ 63°; clr-sec	177.4	178.4		2940	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-26

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		151.4-152.0 [illegible] c 140.0-145.0' Knit Kimm (1/8") @ 3:					
		170.6-171.0 [illegible] 1/8" [illegible] c 90°; mod 1" [illegible] @ 74°	170.3	171.1		2939	.001
		192.7-193.0 1" [illegible] 2% [illegible]					
		[illegible] 3% [illegible]	192.3	193.3		2941	.001
		[illegible] 3" [illegible]					
		201.7 [illegible] c 30°					
201.7	220.6	W > [illegible]	209.5	209.6		2942	.001
		[illegible]		210.7		43	.001
		219.5-220.0' [illegible]					
		209.5-210.0 [illegible]					
220.6	270.6	I ? [illegible]					
		228.0 [illegible] c 81° C	239.1	240.1		44	.000
		246.9-247.2 [illegible]					
		239.4-239.5 3/8 [illegible]	244.5	249.0		45	.000
		248.7 [illegible]					
		270.6 [illegible]					
		253.0-270.6 [illegible]					
270.6	313.3	B.S. > [illegible]					
		293.5 [illegible]					
		297.8-298.0 1½" [illegible]	297.2	298.2		46	.001
		298.4 ½" [illegible]					
		308.5 1/8" [illegible]					
		313.3 [illegible]					
313.3	318.3	FOR > [illegible]					
		up to 1"; [illegible]					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		318.3 chip not at c 45°	317.0	318.0	1.0	447	.000
318.3	381.0	BS: = as above					
		351.2 - 351.7 Jcd sil + 1/2" ank on P. slip c 47°					
		359.2 3/4" alk sil dk in ... Jcd by 1/2" blk ank ... c 46°	359.2	360.4	1.2	49	.153 .162 .143
		4% v. f. d. FeS2 disseminated					
		360.3 ... 1/2" dk ank 1/8" clr slip c 44°					
		359.2 - 360.3 5% fd FeS2 in ...					
		381.0 chip not at c 52°					
381.0	384.1	Fe Y S4 = fine grained; salmon-pink - tan; comp; mm scale crystals (to 16 mm) in fine matrix; moderate to strong alteration; strong at moderate mag					
384.1	412.5	BS = as above; 1% FeS2					
		408.0 - 409.4 1% Jcd sil c 47°					
		412.5 chip not at c 42°					
412.5	419.0	FS = as above					
		412.8 1/8" discontinuous chl/sil dd. Fine qtz in band ... c 47° none	412.4	413.4		49	.002
		FeS2					
		419.0 chip not at c 40°					
419.0	537.0 P = as above; fract; recement of Jcd c 46° (ank)						
		444.1 - 446.7 Fract with orange - red; B.C. common	444.0	446.1		50	.008
		444.3 1/8" slip (chl) c 24°; preceded by 1/2" zone fd FeS2		447.0		51	.001
		445.0 B.C. < C.C.; pinched at base of 1/4" chl ank bracketed by (1/4") parallel c 70°; 20% ank					
		446.6 1/8" - 1/4" dd int over 1/2" chl slip c 81°					
		447.0 - 450.2 1/8" limonite slips c 77° - 84°					
		459.5 - 459.8 1/4" broad dd int c 26°					
		460.9 - 461.3 1" " " " Q-ank vnc 33° w/ 1/8" ank slip through the middle (with	460.5	461.3		52	.000

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		[illegible]					
		[illegible]					
	488.8	1" [illegible] @ 71° [illegible]	488.2	489		E753	.028
	492.7-494.1	[illegible]					
	494.1	½" [illegible] @ 57° [illegible]	492.1	493		754	.007
	498.1	½" [illegible] @ 75° [illegible]		499		755	.024
		[illegible]					
	534.0-537.0	[illegible]	497.0	499.0		56	.011
	537.0	EOH	535.1	537.0		57	.006

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-27

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.0	8.7	O/B (vol.) // Bx - boulder; cored c 8.4'-8.7'					
8.7	387.7	P = V. fresh; 30% felsic phenos; 2% mafic dk gy - black, minos; comp; homogeneous; highly sil'd; vy unmag; purple-orange; 1% ank+carb vns c 60°-70°					
	48.0	1/4" dull wisp. Pu/Pink CV followed by 1/8" ank, slip c 52° (sh); buff-yellow alt'n (ank?); slicks on slip	47.5	48.2		82465	.001
	62.0	same as c 48.0; c 63°	61.7	62.2		66	.001
	67.0	1/8" CV slip c 62°					
	82.2	1/4" CV-ank slip c 62°	82.0	83.5		67	.001
	83.2	" " " " c 58° in B.C.					
	90.1	1/8" pink carb slip c 84°					
	110.5	1/4" CV-pk carb slip c 57°					
	112.7	1/8" CV slip c 64°; sil'd, by 2" bld+CV vns c 90°					
	118.6	1/8" CV-ank slip c 74°					
	120.7-120.9	B.C. - no str vis.					
	147.3	1/8" CV-ank slip in B.C. c 74°					
	154.5-155.0	B.C. - N.S.V.					
	184.2	1/16" ank-CV slip c 57°					
	208.0	1/8" CV slip c 27°					
	220.4	1" buff g-ank vn c 70°					
	226.0	1/4" CV-ank slip c 68°; str slicks.					
	293.9-294.1	B.C. slip w/ slicks; CV slip c 40°					
	308.5	1/2" pk carb/ank - CV slip c 77°					
	331.0-332.0	10% 1/4"-1/2" carb-ank-CV vns c 40°-c 105° (randy?)					
	342.3-342.6	1/8" CV slip + up to 1/4" dull wt discontinuous RVF c 27°	342.0	342.8		68	.001
	355.1-355.2	B.C. N.S.V. (no str vis.)					
	372.8	1/8" ank-CV slip c 67°					

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Page No. 02

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-27

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		387.7 shrp nat ct c 42					
387.7	404.7	B.S. - fresh; comp; massive; 30% quartz; pale grey, interstitial, irregular, patchy; 70% dk grey, fine grained; mod chl; highly mag; increasing chl down hole					
		390.0 1/8" chl slip c 40°					
		397.0 - 402.2 5% ank vnlts & blebs					
		402.2 1/8"-1/4" chl lft c 25° w/ 5" hem'd zone either side (brick red) + in 3" ank veining (70% — creamy)	401.8	403.9		82469	.001
				405.1		70	.001
		402.2 - 404.3 hem'd fract'g & vamp in ank massive vn c 33°; trace FeSz (f.d.)		407.4		71	.001
		404.3 - 404.7 chl ann Bx fract lft; v. str; c 35°, ending in C.C.; provided 5-10% fragments					
404.7	412.2	P = as above, except for initial portion	428.1	428.9		72	.001
		404.7 - 407.0 = 60% fg-ank (creamy) Bx'ation; Py; hem'd frags; incr chl					
		407.0 1/4" chl lft c 24° to ca					
		412.2 shrp nat ct c 78° to und'lying					
412.2	483.8	FELSY = v. lt brown - brown; 2% ank vns throughout & locally intc. at c 67°; mod chl; highly mag; homogeneous; comp.; fg	437.7	438.6		73	.001
		428.6 1/8" chl slip c 40° in 1" hem'd zone; 1-2 f.d. FeSz					
		438.1 - 438.3 " " " " 50° " 1½" " " " " " " " " ; str					
		462.0 - 474.2 more mafic - might be considered basic equiv; with gradational cts					
		477.4 - 477.7 2" milky lft ank vn c 57°; 15% coal-black quartz blebs emanating from the centre (extensional) looks like tourmaline but is softer - chl	476.6	478.2		75	.01
		463.0 1/8" dull qtz-py (glassy) bull'd vn c 74°; no effect on und'lying rock	462.7	463.5		74	.001
		480.0 - 483.8 hem'd to red-brown					
		483.8 shrp nat ct c 55°					
483.8	496.2	B.S. = fresh; yellow-green Py black augite (chl'd.) c 38°; 3% ank blebs + vns; v. well cbd; v. highly mag; comp; ct c 496.2' is grad.					
		489.4 1/8" dull grey Q. str on 1/16" chl slip c 46° imm. followed by 1/2" ank vn					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-27

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
496.2	513.6	FEL 54° > as above; mod ct @ 513.6'					
		508.7 1/8" clay, dip @ 44°					
513.6	529.7	B.S. > as above					
		517.0-517.9 bx, clay, ~2" @ 57°					
		527.0 1/2" clay, dip @ 22°					
		529.7 shp not ct @ 59°					
529.7	551.8	FEL 54° > as above, but more matic, more +4% pyrite; ct @ 551.8' is good, mod hard					
		540.4 1/2" clay, dip in bx; 1-2% cm. blk FeS2 + 1-2% fd FeS2 within 1-2" fd	439.8	440.8		82472	.001
		FeS2 within 1" proximal; bx/fractured by 2" bx/fracture + pyrite					
551.8	575.6	B.S. > as above; v. dk grn, v. mag, mod hard					
		564.7-566.2 bx, dip; shp not ct @ 43°					
		575.6 shp not ct @ 43°					
575.6	612.3	FEL 54° > as above, but more homogeneous, +2% pyrite; good ct @ 612.3'					
612.3	619.4	B.S. > " " ; good ct @ 619.4'					
619.4	628.2	F.S. > " " ; shp not ct @ 628.2' @ 35°; mod ch'd; ~1% mag					
		621.7-621.9 BC; no structure visible					
628.2	752.5	B.S. > as above; v. dk grn; blk; highly mag; comp; 2-3% 1/8" bx, 1% pyrite in mat - pink alt'd, rounded					
		693.9-695.0 bx, dip; shp not ct @ 45°; 5% glassy terminated 1/8-1/4" qtz vns; one bulk ct @ 68°					
		702.0-703.1 bx, dip w/ good ct					
		708.9-711.3 " " w/ shp not ct @ 45°					
		752.5- shp not ct @ 62° Vocally	750.5	752.5		77	TR
752.5	777.7	F.S. > mod ch'd; mod mag; BX'd to pink-buff color; 1/8" primary texture totally					
		obscured; 75% pink-wt, fd plag in blk-grey chl. matrix (otherwise 25%); 5% qtz vnlts					
		fractures-dipping w/ associated weak limonite @ 15°, 32°, 52° + w/ assid Fe 92; 5-10% fd FeS2 throughout					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. _____

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.	
		Normal core to 752.5	752.5	754.9		87478	TR	
		752.9-753.9 1ft 2½"-¼" pk marks @ 1½ DH ∠ 62°-66° to CA		753.1	1.2	79	.671	.660 .621
		755.0-755.6 ¼" mix mill. In Vn limited by 1½"-¾" dk gy, sil'd sericite/QV vn ∠ 70° to CA		756.7	1.6	80	.459	.477 .441
		Rpt'd By Finlay as 1½/10½ FeS = 4 thin 0.9" & 1-½" fd Fe Sx in Fel'n		758.9	2.2	81	.133	.139 .126
		abt'd w/ Pk Brk (40% vn + cl'd); abt ∠ 15° to CA		761.5	2.6	82	.191	.203 .178
		757.5-760.0 1% fd FeSx in broken F.S.		763.6	2.1	83	.271	.277 .264
		763.8 ¾" Pk vn ∠ 57° to CA + stringers		765.4	1.8	84	.414	.505 .323
		770.4-770.9 "E" Pk gy QV/sil'd vn ∠ 75° to CA > ∠ 19°; 8% fd FeSx	769.0	771.3	2.3	85	.414	.410 .417
		774.5-775.3 G.C. - no structure visible	773.4	775.0	1.6	86	.185	.190 .177
		775.3-777.0 L.C. (2' lost on Pk brk)		776.4	1.1	87	.162	.138 .186
		777.7 shrp mat ct ∠ 23° (immediate conditional)		779.8	2.6	88	.253	.235 .231
777.7	796.6	B.S. > no core; v. broken immediately in (no FeSx visible)		779.5	1.3	89	.195	.216 .173
		790.5-792.0 fld sil'd ∠ 42° to CA		L.C.	1.7		.243	∑ .195 & .290
		796.6 shrp mat ct ∠ 21°	777.0	778.1	1.1	90	.290	.284 .295
796.6	801.1	F.S. > broken mod. mag, v.v. chl mat comp (Broken ∝ 2-3"); 5-8% pk ½"-¼" vn's/- vns ∠ 74° (one w/ minor clots)		780.2	2.1	91	.042	
		801.1 shrp mat ct ∠ 31°						0.290 2/Ho
801.1	820.2	B.S. > broken, no core						
820.2	823.3	F.S. > " " "						over 20.4'
		820.2 ½" carb-chl. slip ∠ 18°						EL
		823.3 shrp mat ct ∠ 24°						
823.3	907.0	B.S. > no core						
		827.3-828.3 fld sil'd ∠ 42° (shrp mat ct); 1% fd. FeSx	827.3	828.3	1.0	92	.019	
		835.1-836.0 " " ∠ 61° " " " & ending on "8" chl. slip ∠ 16°						
		836.0-837.0 B.C.						
		862.6 ¼" chl-carb. slip ∠ 21°						
		873.0 ½" " " " ∠ 11°						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. ________

Footage		Description					
From	To		From	To	Total	Sample No.	Ozs.

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-28

RECEIVED
MAR - 8 1993
GEOSCIENCE ASSESSMENT OFFICE

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
0	12.0	OB ; 11.0-12.0 RUBBLE - VAR. LITH					
12.0	272.4	BASIC SYENITE					
		DARK GREEN MSV. HOMOG. STR MAG					
		1 QC STR PER 10' CORE ± 1/4", CA's ~28-38°					
		12.0-58.0 RQD 70%					
		23.5-23.9 FELSIC RIA BROWNISH-RED, CA ROUGHLY 17° // TO HLFE SUP CHLORITE, ≤0.5% PATCHY WHITE QC.	23.5	24.8	1.3	9743	.002
		24.3 1/2" PATCHY GL. BX QC, CA 32°, BROKEN BOTH SIDES AT 32°	31.0	32.0	1.0'	9744	.001
			33.5	34.5	1.0'	9745	.001
		68.0-83.0 RQD=65% ± 1 QC STR PER 10' CORE ± 1/8"	43.0	44.0	1.0	9746	.002
		21.6 1/4" PATCHY QC, CA ±5°					
			49.1	50.1	1.0	9747	.002
		52.0- RQD 60%	53.8	54.8	1.0	9748	.001
		58.7 1/4" ORANGISH WHITE QTZ CARB-, CA 28°	58.0	59.0	1.0	9749	.001
			59.0	61.0	2.0	9750	.000
		SHEAR ZONE					
		59.2- 1/4" SL. SH/FDG AT 40°, CHL ON FRAC & BREAKS/SH AT 40-48°					
		59.8-60.1 BX-SH AT UC 48°/LC 28°, 10% PATCHY ANG QC					
		60.1-60.5 BX W 10% FELSIC FRAGS					
		60.5-60.7 SH AT 50°, ? BREAKS // 50° RUSTY					
		60.7-61.0 BX W 30% PINKISH FELSIC FRAGS					
		77.0 1/8" [illegible] QC, CA 24° 78.0-124.0 +/- 0.1% V FG SPECKS PY DISS.					
		79.8-80.1 SHEAR ZONE FG GREENISH BROWN STR SERICITIC CA 30°, BX W 1% QC, [illegible] SZ.	79.5	80.5	1.0'	9801	.001
		71.3 PATCHY BX: PINKISH QTZ CARB ~ 1/8" CA // S.Z.	80.5	83.0	2.5'	9802	.003
		→ 83.0-124.9 RQD=80%	83.0	84.0	1.0	9803	.000
		83.2-83.3 BROKEN, SHEARED AT ROUGHLY 60°					
		83.8 BREAK, 1/32" CHL GOUGE, 2% VFG PY SMEARED ALONG BREAK, CA 30°, 1% PINK QL, PATCHY					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-28

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		85.1-86.1 1" FELSIC RIB, SLIGHTLY SHATTERED W 1% INTERST. QC, CA 40°	84.0	85.1	1.1	9804	.000
		SINGLE 1/4" BLK ANH PY ON FRAC. SURFACE	85.1	86.1	1.0	9805	.000
			86.1	87.3	1.2	9806	.000
		87.3-89.1 WKLY FELDSPATHIZED +/- V. HARD, fg (<0.5%) / CG, SLIGHTLY BLEACHED, HBN (4%) CARB.	87.3	89.0	1.7	9807	.001
		87.3 1/32" CHL FRAC. CA 26°	89.0	91.0	2.0	9808	.000
		91.3 FOL AT 50° X CUT BY WISPY 1/16" QC, CA 70°	91.0	92.0	1.0	9809	.000
		92.2 <1/8" DISCONT. BLEACHED WHITE QZ CA 22°, WKLY BX W 2% HR FRAGS	92.0	93.0	1.0	9810	.000
		92.3 <1/8" " " CA 50° " "					
		115.0 3 DISCONT. <1/4" PINKISH QC, CA 50°					
		117.7 1" VWK FELD, fg, DK GREY BAND W 0.5% PATCHES QC, CA 30°. 0.5% vfg DISS PY	117.0	118.2	1.2	9811	.000
		117.1 WISPY LT GREY QTZ CARB. CA 15°	118.2	120.0	1.8	9812	.000
		119.1 WISPY WKLY QC <1/8" WIDE CA 30°					
→		124.0 - 237.0 RQD - 90%					
		133.7 CONTACT BETWEEN DK GREY MSV. HBNDA CG. AND SLIGHTLY FELD, CARB, LIGHTER GREY +/- V. HARD AT 45°. 1% vfg DISS. PY. 10 HUFFS QC // FOL/BND ALT AT ~45°	133.7	136.7	3.0	9813	.001
		146.5 1" fg BAND DARKER GREY, CA 45° SLIGHTLY SHATTERED W 2% INTERST PINKISH QC 2% CLOTS ANH. PY.	146.0	147.5	1.5'	9814	.001
		147.6 1/2" FINER GRAINED, NV FELD. DK GREY, CA 30°, 1% INTERST. PINKISH QC	149.0	150.0	1.0	9815	.001
		154.0 - 156.0 V. WK FELD. +/- FINER GRAINED, DK. GREY, 0.5% WISPY. DISCONT QTZ CARB, CA's ~ 50°	154.0	156.0	2.0	9816	.001
		177.0 WISPY 1/32-1/16" QC, CA 50° // FOL	177.4	178.4	1.0		

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-28

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		177.7, 178.1 TWO 1/16" QC, CAS 25°	173.4	180.7	2.3	9818	.000
		181.9 1/8" QC, CA 60°	180.7	182.0	1.3	9819	.000
		182.1 FF UP TO 1/2" WIDE, WHITE QTZ ANK, UC 30°, LC 40°, BX W 10% WR FRAGS					
		182.7 2" PINKISH-WHITE QTZ CARB, CA 40°, 5% WR FRAGS.					
		183.0 FOL ~ 40° W 2% FAINT BANDS QTZ ANK, CAS // FOL, X-CUT BY 2 HLFFS					
		QTZ ANK, CAS 40°.					
		184.2 GREY 1/8" QTZ ANK CA 30°	182.0	183.0	1.0	9820	0.052
		184.4 1/8-1/4" WHITE-ORANGE QTZ CARB CA 30°					
		185.5 1/8" WHITE-ORANGE QTZ CARB, CA 55°.					
		185.5-202.0 MSV, DK GREY, CG, ITMAG, TR 0.5% WISPY QTZ ANK, TR py.	183.0	184.0	1.0	9821	.003
		204.6-204.9 1/2" CREAMY WHITE QTZ ANK / PATCHY PINK QTZ CARB = 30% INTERVAL,	184.0	185.6	1.6	9822	.000
		CA ROUGHLY 25°	204.4	205.4	1.0	9823	.003
		213.3 1/8" QTZ CARB CA 25°					
		216.6 PATCHY, DISC. 1/8-1/4" QTZ CARB CA 50	216.0	217.0	1.0	9824	.001
		220.9 1/4"-1/2" QTZ ANK CA 25 & 30°					
		224.0 DISCONT. 1/16" QTZ ANK CA 35°, X-CUT BY GREY 1/8" QTZ 60°	217.0	220.5	3.5	9825	.001
		226.1 2 GLASSY 1/4" QTZ STRS, CAS 30° 3% fg CLOTS PY MONG CONTACTS					
		226.2 1/3" GLASSY WAVY QTZ STRS, CA 60° 3% fg CLOTS PY MONG CONTACTS	220.5	221.5	1.0	9826	.013
		240.3 1/8" WHITE QTZ ANK CA 20° ALONG FRAC W 2% 1/3" BLEBS ANH PY					
		240.7, 241.3 PATCHY, PINKISH 1/8" QC STRS, CA'S 40°, X-CUT FOL	221.5	223.5	2.0	9827	.010
		246.3 1/2" GLASSY QTZ STR, CA 30°, BX W 25% ANG FRAGS W.R. 5% vfg SPECS	223.5	224.5	1.0	9828	.041
		PY IN FRAGS, 3% vfg PY IN STR	224.5	225.5	1.0	9829	.001
		247.5-248.6 LOW ∠ ~ 15°, 1/32-1/16" QTZ ANK STR	225.5	226.5	1.0	9830	.004

→ 237.0-295.0 RQD = 80%

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-28

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		257.6 1/4" YELLOWISH WHITE QTZ ANK STR, CA 30	240.0	241.5	1.5	9831	.001
		258.0 - 261.7 B.S. BECOMES COARSER GRAINED.					
		261.7 - 262.6 30% MED GREEN CHL. AUGITE, 262.6 - 264.9 MED GRAINED, 2% WISPY HLFFS QTZANK	246.6	247.0	1.0	9832	.023
		264.9 - 266.4 25% MED ORANGE FELD. ALT HALOES AROUND GLASSY HLFFS QTZ (CACB) HFS:	264.9	266.4	1.5	9833	.455 .460 .449
		CA'S 50°. 30% CHL. AUGITE. 3% vfg PY DISS.					
		266.4 - 268.6 MED - DK GRY, CG, B.S W 30% CHL AUGITE					
		267.1 1/3" FELSIC RUB, CA 50° W 2% WHITE QTZ ANK HERRING					
		267.9 269.9 FIVE IRREG, BROKEN, QTZ ANK STRS, CA'S 30 TO 40°, X-CUT FOL	267.9	269.8	1.9'	9834	.002
		268.6 - WK. FELD, MED BROWNISH-RED, GREEN CHL AUG.					
		269.9 1/8" CHL SUP CA 35°, X-CUTS ABOVE. Q.A. STRS	271.6	272.6	1.0'	9835	.001
		269.9 - 272.6 MED BROWNISH RED, 30% CHL. AUGITE, FOL 60°.					
272.6	298.8	GWKE					
		272.6 - 273.0 DISTINCTIVE, SHARP U/C AT 25°					
		STR RED AT 30°, f.g. TAN, TO MED REDDISH BROWN, STR. FELD, SYENITIZED	272.6	273.7	1.1	9836	.000
		2.0% vfg PY SPECKS DISS < 0.5% QTZ ANK HLFFS.					
		273.0 1/8" WHITE/GLASSY QC, CA 25°					
		273.8 SINGLE 1/8 x 1/4" ANG. CLAST JASPER.	273.7	276.0	2.3	9837	.003
		293.0 10% CLASTS GEN UP TO 1/8" ACROSS (UP TO 1/4"), VAR LITH., BED 35°.					
		OVERALL IMG. MED GREY.					
		276.0 - 277.6 SLIGHTLY BLEACHED, LT. GREY	276.0	277.6	1.6'	9838	.000
		277.6 - 280.6 70% REDDISH TO ORANGE FELSIC ALT, FINER GRAINED. 20% vfg PY DISS.	277.6	280.6	3.0'	9839	.001
		0.5% HLFFS QTZ ANK.					
		280.0 - 280.6					

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 92-28

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		280.6 – 286.0 MED GREENISH GREY, WKLY BEDDED AT 35°, WK CHL, <5% CLASTS OVER 1mm Ø, TR QTZ ANK AS HEE'S					
		286.8 1/8" WHITE QC, CA 35°					
		287.1 1/8" GLASSY QTZ STR, CA 40°, X-CUT BY LATER WHITE QTZ ANK, CA 30°	287.0	288.4	1.4	9840	.001
		288.6 1/4" BAND CHL SILT, CA 65°					
		288.65 FELSIC RIB, CA 65°					
		288.8 – 290.2 STR. FELDSPATHIZED, BLEACHED ORANGE-BUFF, SHATTERED W 5% CHL HEMA	288.4	290.2	1.8'	9841	.000
		289.0 GLASSY/WHITE 1/8" QC, CA 25°					
			290.2	293.2	3.0'	9842	.001
		290.2 – 296.2 2 STRS/FOOT GLASSY/WHITE QC, CA'S 27-30°, W.R. CONTAINS 40% PATCHES BRIGHT ORANGE FELD., GEN. 1/8-1/4" Ø & FELD. ALT. HALOES AROUND QC'S, 0.5% vfg PY DISS.					
			293.2	296.2	3.0	9843	.001
		295.2 1/16" WHITE QC, CA 25°, X-CUT BY 1/8"–1/16" CREAMY WHITE QTZ ANK AT 30° W 1% fg BLEBS PY	296.2	297.8	1.6'	9844	.016
			297.8	298.8	1.0	9845	.006
		297.8 – 298.8 +/- WK-MOD ORANGE FELDSPATHIZATION					
298.8	345.0	B.S.					
		SHARP UC AT 50°, MED-LT. GREY, CG,					
		298.8 – 303.0 10% LT. GREENISH-GREY, ANG. ANCHITE, STR. CARB.+/-VWK CHL, WK FELD	298.8	299.7	0.9'	9846	.003

295.0 – 313.0 RQD=50%
313.0 – 345.0 RQD=89%

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-28

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		299.7-304.0 FINER GRAINED, HOMOG, SH. AT ROUGHLY 50°, 1/2 20% LT. GREENISH GREY AUGITE; 0.5% HLFFS QTZ ANK	299.7	301.7	2.0	9847	.004
		304.0 60% LT. PUMPKIN ORANGE, STR FELD, V. HARD INTERVALS 2-3", UP TO 6" ACROSS, W 3 STRS/FOOT CREAMY WHITE QTZ ANK, CA'S ~30° (80%), X-CUT EARLIER QC STRS, ROUGHLY 35° // TO LOWER CONTACTS ALT. STRS GEN 1/8", UP TO 1/16" WIDE, SLIGHTLY SHATTERED & HEALED W 5% INT. CHL,	301.7	304.0	2.3	9848	.009
		304.0-307.0 QTZ CARB STRS, ROUGHLY 35° // TO LOWER CONTACTS ALT.	304.0	307.0	3.0	9849	.003
		307.0-309.3 QTZ-CARB BX AT ~75°	307.0	309.3	2.3	9850	.002
		309.3-309.7 BRECCIATED W 10% INT. CHL, FRACTURE AT 309.7' AT 35°. FAULT? STR FELD (LT. ORANGE) 15% QTZ CARB FRAGS	309.3	311.9	2.6	9951	.002
		309.7-311.9 BX, DARK BROWNISH-RED, 20% INT. CHL, 310.4 1/4" QTZ ANK CA 55° 311.5-311.9 BROKEN UP					
		311.9 WHLY. FELD, 20% PATCHES FELD. <1/8", VCG, MSV, HOMOG	311.9	312.9	1.0	9952	.032
		315.0 1/4" WHITE/ORANGE, CA 45°	314.5	315.5	1.0	9953	.004
		320.1-321.9 10% V.HARD, fg-APH, STR FELD., DK. BRDWNISH RED, Tr QTZ ANK. Tr PY	320.1	321.9	1.8	9954	.002
		321.9-322.1 60% PATCHY PINK QTZ CARB, ~1/2" WIDE, CA ~22°					
		324.9-325.7 5% GLASSY/PINKISH/WHITE Q.C. STRS, CA'S ROUGHLY 50° W 2% BLEBS ANH PY W 0.5% CPY. Tr PY IN W.R.	321.9	322.9	1.0	9955	.001
			324.9	325.9	1.0	9956	.002
		345.0 E.O.H					

OCT 1 '98

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31B

RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT OFFICE

Footage From	Footage To	Description	From	To	Total	Sample No.	Ors.
0	61.0	O/B					
		61.0 - 61.0 VAR. LITH - O.B.					
61.0	514.2	F. PORPHYRY (STR CARB)					
		MSV. DK RED, F.-M.G. MATRIX W 20% PHENOS RED. WHITE FLDS ≤3mm Ø 10% YELLOWISH FLECKS (CARB) 0-5% ANG. FRAGS					
		UP TO ~1/2cm ACROSS VAR COMP. GEN. STR - NIL. TR fg PISS. PY. GEN. 0-1 QTZ ANK STR / 5' CORE					
		TWO SETS HLEFS QTZ ANK, 1ST ROUGHLY 15-30° X-CUT BY 2ND SET 45-55°. BROKEN W					
		<1/16" CHL. SLIPS ~4-6 PER FOOT. VAR. CAs GEN FROM 22-62°, OCCAS 10 & 80°.					
		104.9 1" WHITE BARREN QC, CA ~90° WAVY CONTACTS.					
		104.5 - 105.5 RQD=0	104.5	105.6		9903	.001
		106.5 - 107.0 HEAVILY 10CM FRAG'S (BX)	105.6	107.3		04	.001
		120.5 1/4" WHITE/ORANGE QC STR. BARREN, CA 75°					
		128.0 - 133.0 MED BROWNISH RED SL. BL 20% FLECKS YELLOWISH CARB, 15% PHENOS ≤1/2mm Ø, TRACE					
		130.0 - 133.0 15% YELLOWISH/WHITE-ORANGE QTZ ANK/QTZ CARB STRS, 1/4-2" WIDE,	130.0	133.0	3.0'	9501	.001
		CAs 33-75°, ALL BARREN					
		→ 130.0 1/4 WHITE QC, CA 45°, X-CUT BY HLEF CHLORITE 40°.					
		130.5 1/2" YELLOWISH QTZ-ANK, CA 33°, X-CUT & DISCONT. BY 3/4" QC. CA 55°					
		131.0 2" QC, CA ~75°					
		132.0 1/4-1/2" WHITE QC, CA 60°					
		132.9 1/4" WHITE QC, CA 44°					
		147.0 - 147.5 RQD=0, HLEF CHL N 10° TCA.					
		147.5 - OCCASNR FRAGS UP TO ~3cm ACROSS.					
		162.2 - 162.6 PEBBLE SIZED, BROKEN UP RQD=0					
		165.8 1/4" YELLOWISH/ORANGE QTZ-ANK, CA 42°, BARREN					
		171.1 - 171.5 INKY BL, STR CARB PATCH, CORE BROKEN AT 171.3, W 1/16" CHL AT 37°					
		183.7 - 184.4 1/4" QC, CA 0-15° // TO 1/16" CHL - FAULT					

Diabase 31 B-41, 42 — throughout

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		177.0–207.0 ABUNDANCE QTZ ANK ffs < 1/16" WIDE GEN 25-35°, W STRANDS CHL, W SL. BL. ALT HALOES, APPROX 5-10 ffs PER FOOT.					
		167.0 - 169.0 FIVE 1/2" WHITE QTZ(CARB) STRS X-CUT ffs AT ~ 35-45°.	165.1	166.3	1.2'	9852	.002
	209.1	FRACTURE, CA 26°, 1/16" CHL.					
	213.4 - 213.7	BROKEN UP; hiffs CHL, CAs ROUGHLY 45°					
	214.0 - 214.2	" "					
	215.0 - 217.2	*FAULT* BROKEN UP, RQD=0, CHL ALONG BREAKS ROUGHLY 10-30°, PEBBLES					
	221.0	FRACTURED; 1/16" CHL CA ~10°	230.4	231.9		9900	.002
	225.0–235.0	CORE FRAC. RQD ~ 20%.					
	231.0 – 232.5	BROKEN UP, MINOR CHL, RQD=0; BLD ZONE; AT LEAST 1/4" CHL-PK CARB FLT@82°; GOOD SLICKS					
	242.0 - 272.0	RQD ~ 35; FRACs ROUGHLY 0-45°; OCCAS 80°.					
	272.0 - 277.0	RQD = 0; FRACs GEN 0-26°					
	296.6 – 288.0	BX HEALED W CHLORITE/QTZ-CARB- DK. RED, 15% QTZ-ANK PATCHES, 10% CHL., FRACs AT ~ 30 & 35°	286.6	288.0	1.4'	9502	.001
	300.0 – 302.5	TWO 1/4" EP STR, CA 30° & 52°					
	306.0 – 307.0	RQD=0 MINOR CHL/EP ALONG FRACS (NO STRS)					
	311.0 – 313.0	" " (0-Tr hiff QC) MINOR CHL/EP ALONG FRACS. (NO STRS)					
	328.3	1/8" EP STR, CA 44°					
	329.7 – 330.7	MATRIX FINER-GRAINED, PHENOS ALMOST OBLIT; TWO 1/4 & 2" QC-EP STRS AT 330.2 & 330.3, CAs 70°, 1% vfg PY DISS IN STRS.	329.7	330.7	1.0'	9503	.001
	337.3 – 338.3	10% PATCHES QC, Trvfg PY.	337.3	338.3	1.0'	9504	.001
	347.4	2" QTZ EP STR, CA 43°, 0.5% vfg PY 349.2 1/8" EP, CA 42°	347.0	348.0	1.0'	9505	.001
	351.7 – 352.1	FINER GRAINED, CAs SHARP AT 55°, 2% PHENOS FELD. < 3mm Ø. 1/4" EP STR // L.C.					
	354.1	TWO 1/8" EP-QC STRS, CAs 37°					
	358.3	1/8" CHL-QC STR W SINGLE BLEB CPY/PY < 2mm Ø, CA 46°	358.0	359.0	1.0'	9506	.001
	361.3	1" QTZ-EP STR, CA 52°, 0.5% vfg SPECKS PY	361.0	362.0	1.0'	9507	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs	
		380.6 - 382.6 DEEP KETCHUP-RED, MATRIX FINER GRAINED, PORPHURIES ALMOST GRUT.						
		381.35 1.5" QTZ-CARB-EP/CHL STR, CA 5°	381.0	382.0	1.0'	9508	.001	
		381.6 1" QC-EP/ STR CA 50°						
		381.7 1/2" EP STR						
		409.9 1/2" GREYISH-WHITE/ORANGE QC STR, CA 75°	409.5	411.5	1.0	9509	.001	
		413.5 - 414.5 BROKEN UP ROD=0						
		426.2-427.0 4 CHL(EP) STRS - 1/4" WIDE, CA's 46-50°, X-CUT BY 1 1/4" GREY QTZ-CHL, CA 62°	426.2	427.7	1.5'	9510	.001	
		428.2-430.6 SERIES DISCONT. WISPY EP. HLEF'S/STRS < 1/16" WIDE, CA's ~10-25°. 1% vfg SPECKS PY IN WR	427.7	428.7	1.0'	9511	.001	
		→ 428.6 1/8-1/3" GLASSY QTZ-CARB-CHL STR, X-CUTSEP STRS.	428.7	430.6	2.0'	9512	.000	
		430.8 1/4" GREYISH QC. CA 80°, W 2% vfg PY						
		432.0-432.8 1/8" GREEN EP STRS CA's 16°						
		432.8, 433.1 TWO BLUISH CHL STRS, CA's 54° (OPP. EP) 441.5 1/16" CHL F.G ALONG FRAC AT CA=12°						
		441.4-442.9 LDN & IRREG CHL SLIP, 1/8" FG. CA ROUGHLY 7°.	441.4	442.9	1.5'	9513	.000	
		442.9 1/2" GREY QTZ-CARB-CHL-EP STR, CA 42°						
		442.9-464.5 DK REDDISH-BROWN MATRIX W 40% WHITE FELD. PHENOS GEN 2-3mm Ø & 2% SUB-ANG. TO SUB-ROUND. FRAGS DISS. Tr-0.5% vfg-fg CUBIC PY DISS, Tr EP-QTZ STR.	451.8	452.8		9899	.001	
		STR						
		459.7 1/8" EP-QTZ STR. BARREN, CA 55°,	459.5	460.5	1.0'	9601	.002	
		452.3 2" MILKY WT-GY QVN/15 EPI + S & ACTIN. IN 2' HEMD BRICK RED FOR. C/68° IND. FOLL. BY 1/8" CHL MET.						
		464.5 - 467.0 BND. APPEAR DE 70% FINER GRAINED, DK GREY, LESS PHENOS (~2%)	464.5	467.0	2.5'	9602	0.301	0.312-0.290
		30% RED PORP (40% PHENOS). Tr PY, SIDP?						
		467.0 - 472.0 RED PORP W 41% PHENOS, Tr PY.						

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	Sample From	Sample To	Total	Sample No.	Ozs.
		472.0 – 509.0 ROUGHLY 30% FINE GRAINED MATRIX, FEWER PHENOS (<5%) DARK GREY MATRIX WITHIN					
		RED BRN. INTERVALS GEN 4" UP TO ~3' WIDTHS, FINELY GRAINED DK GREY W/ 1-2%					
		PHENOS. DISS. TR-0.5% vfg-fg PY DISS.					
		472.0-474.6 DK. FG AS MENTIONED ABOVE. STR FD. SERICITE UP TO 2" W/ 30% PHENOS,	472.0	474.6	2.6'	9603	.005
		OTHERWISE 2%					
		474.6-476.3 MATRIX DK RED VF, HARD, STR FLD. 5% PHENOCRYSTS FELDSPAR. 5%	474.6	476.3	1.7'	9604	.001
		LOW ANGLE, IRREG. EPIDOTE (+/- QTZ) STRS AT ~ 10° TO C.A. 1% QTZ CARB.					
		PATCHES, 474.7 TWO 1/8" QTZ CARB STRS AT 50° & 40°, 0.5% CLUSTERS/CLOTS					
		fg PY DISS IN WR.					
		476.3-478.3 AS ABOVE NO EPIDOTE. 1% PY, CUBIC, UP TO 5MM ACROSS	476.3	478.3	2.0'	9605	.001
		2% 1/8" QTZ-CHLORITE STRS, CA's 45-55°.					
		480.6 1/8" QTZ-CALCITE STR, DISCONT, CA 25° W/ 1% FUCHSITE SLIP. BARREN	478.3	481.0	2.7'	9606	.006
		1/8" " CA 60°, DISCONT. W/ 1% SLIP (BARREN)					
		478.3-485.5 DK GREY, vfg, 1% FELDSPAR, 1% PATCHES QTZ CARB <= 2cm ACROSS, +/-	481.0	484.0	3.0'	9607	.001
		DK RED SYENITE 1% FLECKS YELLOWISH SERDISS 0.5-1% fg-mg PY DISS, OCCAS UP TO 0.5cm.	484.0	485.5	1.5'	9608	.005
		485.5-486.5 STR FELDSPATHIZED, DK RED STR. ALBITIZED 1/8-1/4" GLOSSY GREY QTZ	485.5	486.5	1.0	9609	.004
		STR, CA 40°, BARREN, ALONG BREAR IN CORE, 2% CLOT PY DISS ≤ 5mm ACROSS					
		486.1 WISPY EPIDOTE/QTZ, 1/8", CA ~80° 486.5-486.6 CORE BROKEN UP					
		488.1- 1/8" WHITE BARREN QUARTZ CARB, CA 58°	486.5	488.5	2.0'	9610	.001
			488.5	490.2	1.7'	9611	.001
		490.2-491.2 DK RED MATRIX, 40% REDDISH FELD. PHENOS 1-3mm Ø 1% CUBIC PY DISS, UP TO 4MM ACROSS					
		490.6-491.1 80% EPIDOTE, 19% IRREG. PATCH WHITE BARREN QTZ CARB.	490.2	491.2	1.0'	9612	.001
		1% BLUISH CHLORITE, UP TO CA IRREG ~60°, LC ~ 42°					
		490.2-490.6 FOUR 1/8" QTZ EP CHL STRS CA's ROUGHLY 60° & PURE BLUISH CHL					
		491.6 1/2" IRREG. QTZ EP CHL STR, CA ~60°, 1% CUBIC PY DISS IN W.R.	491.2	492.2	1.0'	9613	.001
		492.6-495.6 WR REDDISH-BROWN K.F.					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		492.6 - 498.0					
		SERIES 1/8" QTZ/CHL STRS, CAS ROUGHLY 58-70°, APPROX 6-10 STKS PER FOOT	492.6	495.6	3.0'	9614	.001
			495.6	498.6	3.0	9615	.001
		499.0 1/8" WHITE BLAT QTZ CARB STR, CA 50°, W 5% & EU PY < 1MM ACROSS. 1% PY DISS IN W.R.	498.6	499.6	1.0'	9616	.001
		499.6 - 502.6 HLEE'S UP TO 1/8" EP STKS <1% CA'S GEN 45-45° 2% & IN W.R. IN W.R., WR GRN	499.6	502.6	3.0'	9617	.001
		502.6 - 507.2 WR REDDISH-BROWN STR ALB 30% REDDISH PHENOS, 0.5% CLOTS ANH. PY.					
		504.0 CPY IN HLEE'S EPIDOTE. 1% HLEE'S - 1/8" EPIDOTE, APPROX U.C.					
		504.2 - 504.5 CORE BROKEN UP, CHLORITIC	502.6	504.6	2.0'	9618	.001
		506.0 - 507.2 20% WISPS EPIDOTE	504.6	506.2	1.6'	9619	.001
		506.3 1/3" - 1/8" IRREG. QTZ-CARB. CHL STR, CA ROUGHLY 50° W 5% CLOTS CPY					
		506.2 - 507.2 25% PND EPIDOTE, CA'S APPROX 45°, UP TO 1/4" WIDE	506.2	507.2	1.0'	9620	.002
		FRAGS IN WR LT GREEN, STR EP.					
		507.2 -					
		5% OF HLEE'S, CA'S GEN 50-55° V-CUT BY 5% HLEE'S EP/[illegible] IS - EQUIP TO 1.0	507.2	512.2	3'	9621	
		BOTH SETS WITH EU CLOTS AND PY, UP TO 5% OF EF. ALSO 1-2% MD CLUSTS PY UP TO					
		8mm ACROSS DISS IN W.R.					
		509.8 1/16" CHL SLIP, 11 STRS AT 25°					
514.2	517.0	DIKE (FINT. INTRUSIVE)	512.2	512.2	2'	9622	.001
		514.2 - 517.0 DISTINCTIVE, BUT V. IRREG. U.C. AT ROUGHLY 0 TO 45°, LOWER CONTACT ROUGHLY 35°	512.2	514.2	2'	9623	.001
		5% & CUBIC PY ALONG UPPER 1" CONTACT. SLIGHTLY SHATTERED W HLEE'S QTZ-CHL, APPROX 10/FOOT, CA'S 35-50°. 1% V.FG					
		PY DISS. V. HARD, REDDISH BROWN, VFG-APH (NOT GLASSY) STR HEM (ALB?) & WKLY FD.					
517.0	888.8	GABBRO - 517.0 - 522.0 CHILL MARG MED GREEN, APH, HOMOG, STR CHL, MOD EPID., 2% PATCHES UP TO 1/2" OF VFG PY					
		DIKE ★ "LOST 4 FEET" TAG FROM 518.0 - 522.0. CORE GROUND/BROKEN UP. 2% PATCHES/CLOTS ANH. PY	514.2	517.0	2.8'	9624	.001
		MINOR CHL FAULT GOUGE/RED CARB ON FRAC SURFACES. ★	517.0	522.0	1.0'	9625	.001
		529.2 - 529.5 BX QTZ CARB STR; 40% WR FRAGS, TR PY, CA'S 33 & 30°					
		522.0 - 526.7 10% BLUISH CHL PATCHES & STRS, CA'S ~45°, UP TO 1/2" WIDE	522.0	525.0	3.0'	9626	.001
			525.0	529.0	4.0'	9627	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		522.0-886.1	529.0	530.0	1.0	9628	.001
		MED GREEN, MSV, HD MOG, fg OVER ~5', THEN (528.0) CG, CLOTTED, NON-MAG, STR CHL, 015% fg PY DISS.					
		1/8"-1/3" EP±EPIDOTE/BLUE CHLORITE STRS, 2-3 PER FOOT, CA'S GEN 45-60°.					
		523.7-524.1 CORE BROKEN UP, GROUND, GRAVEL SIZED.					
		526.8-527.0 30% EP STRS ≤ 1/3", CA'S ~60°, 5% PATCHES RED CARB.					
		527.3-527.5 CORE PEBBLE-SIZED PIECES					
		527.7 1/8" GREY QTZ CARB STR, CA 46° 528.0 APPEARANCE 30% "CUTS" CARB					
		529.1-529.4 BX CALCITE/EP STR, 40% WR FRACS, UC 33, LC 30°					
		545.1-545.3 PINKISH VEIN CALCITE CA'S SHARP 42°					
		587.0-600.0 1-3 FRAC/CHL SLIPS PER FOOT, CA'S GEN 35-60°. OCCAS. EP "STR, GEN 1/4" WIDE, OCCAS. UP TO 2" WIDE, OCCURENCE 0 TO 2 STRS PER FOOT. CA'S GEN 45-50°/SUB PARALLEL TO CHL SLIPS. TR VFG PY DISS. RARE CALCITE STR 1/8-1/4" WIDE, 1 PER 5 FEET, CA'S PARALLEL EP. STRS.					
		600.1 1/16" CHL SLIP CA 65°, 1/2 BX CALCITE-CHLORITE STR W 2% BLEB & ANH PY. CA 50-65° // SLIP	600.0	601.0	1.0'	9629	.001
		600.2 HL SLIP CA 30°					
		600.0-698.0 TWO SETS FRACTURES 15-70 DEG X-CUT BY 35-50 DEG., OCCURENCE 3-5 FRACS PER FOOT					
		623.0-623.2 BROKEN UP, FRAC 40°					
		623.5 CHL SLIP ~20°, ±1/4" CHL GOUGE					
		624.0 CHL SLIP CA 40°					
		638.6-640.0 FRAC 10°, X-CUT BY FRACS 45-60°, ALL WITH CHL ALONG FRAC. SURF.					
		698.0-737.0 ROD ~20%, LOW ANGLE FRACS ~10°, X-CUT BY FRACS GEN 40-60°.					
		698.3-1/2" BLUISH CHL STR, CA 55°, 2% VFG PY ALONG CONTACTS.					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		708.2 1/4" CHL SEAM, CA 50°					
		708.9 1" BX CALCITE/CHL GOUGE, CA 60° -FAULT-					
		735.7-737.3 PEBBLE-SIZED CORE, BROKEN GROUND UP					
		737.0-765.0 GEN. 2 FRACS PER FOOT AT ~20 TO 65°					
		740.3 1/8" BND CHL CA 50°					
		748.5-761.0 RQD=0; BREAKS AT 30-60°					
		758.0-757.0 RQD=0; BREAKS 20-60° 743.0-764.0 FRAC 10°					
		764.0 1/4" BX CHL/CALCITE BAND, CA 35°					
		[illegible]-5.5 1/4" BND CHL CA 35°					
		813.2-813.6 PEBBLE-SIZED PIECES IN CHL FAULT GOUGE					
		802.0-896.2 RQD OVERALL ~60%.					
		945.0 1/4" CHL FAULT GOUGE CA 40°					
		850.0 [illegible]/QTZ BX STR, CA 40°					
		854.0 1/8" CHL FAULT GOUGE, CA 30°					
		857.0 1/2" CHL FAULT GOUGE CA 20°					
		877.3 1/2" CHL CA 55°					
		877.4 1/2" CHL CA 45°					
		879.0 1/4" CHL/EP, CA 30°					
		883.6 1/4" CHL CA 30° X-CUT BY 1/8" CHL CA 50°					
		884.5 1/4" CHL/EP FAULT GOUGE CA 25°					
		886.2-888.8 CHILL MARGIN, APH MED GREEN STR CHL, SLIGHTLY SHATTERED & CHLORITE-HEMATITE					
		WITH 2% AS-MG SUBHEDRAL PY DISS & CLUSTERED	887.8	888.8	1.0'	9630	.000
888.8	1007.0	FELSIC DYKE					
		UPPER CONTACT DISTINCT. 25°					
		PORPHYRITIC FELSIC, VUGGY, MATRIX W 20% PHENOS WHITE FELD ≤3MM ∅ 0.5-1% BLEBS	888.8	889.8	1.0'	9631	.000
		≤1/4" ANH PY 1/2 1.5% FG DISS. THROUGHOUT 5% ANH. W/R. INCLUS, RQD 40%	889.8	892.8	3.0'	9632	.

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-31-B

Footage From	Footage To	Description	From	To	Total	Sample NO.	Ozs.
		892.8-895.8. 1-2% ANHED PY DISS., UP TO V4"	892.8	895.8	3.0'	9633	.000
		895.5-895.8 BROKEN UP					
		906.1 CLUSTER fg PY UP TO 1/4" WIDE AROUND WR FRAG					
		910.6 1" CHL BAND, IRREG SMOOTH CONTACTS ROUGHLY 90° TO FAULT					
		911.0-912.5 BROKEN UP RQD=0. FRACTURES AT 55 & 50° WHERE MEASURABLE					
		917.0-918.0 SLIGHTLY SHATTERED & HEAVILY W 0.5% MFG EPIDOTE AT ~ 45°. TWO 1/16" CHL	917.0	918.0	1.0'	9634	.001
		SUBAR. EPIDOTE AT 55 & 40°.					
		0.5% fg DUBLE DV					
		923.7 1/4" EP HAND. CA 50°					
		925.7 1/4" EP/CHL HAND CA 50°					
		930.0-933.0 SLIGHTLY BX W 5% INTERST. CHLORITE, CA'S ROUGHLY 50° WHERE MEAS.	930.0	933.0	3.0'	9635	.000
		954.0 SEAM, CORE FRAC AT 35° W CALCITE AND GOSSAN ON ROUGH SURFACE					
		955.0 UNEVEN GOSSANOUS BREAK AT ~ 25°					
		956.0-956.2 BROKEN UP					
		957.0-957.2 "					
		958.0-958.2 " , 959.0-959.2 "					
		959.2-966.6 SLIGHTLY BX W 5% INTERST. CHL.					
		959.2-959.6 JAGGED. INTERST. MARITE AT N 10°					
		962.5-962.8 BROKEN UP					
		966.0-967.3 PEBBLE SIZED PIECES, BROKEN/GROUND UP.	965.6	966.6	1.0	9636	
*		966.6-968.6 FAULT ~~BRECC~~ 11C BROKEN/GROUND, LC 50° SHARP.	966.6	968.6	2.0'	9637	.005
		LAST 9/10' BRECCIATED: ≤ 1/4" FRAGMENTS (FP) WITHIN 75% CHLORITIC (+EP) MATRIX					
		1' CORE MISSING	968.6	969.6	1.0'	9638	.002

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 88-31-B

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		974.5 1/8-1/4" QTZ ANK STK CA 20° WITH 2% BLEBS CPY.					
		977.5 - 979.5 WKLY SHATTERED W 5% INTERST. CHL, 0.5% VFG PY DISS. WITHIN CHL AND WR.	968.6	971.6	3.0'	9639	.000
		979.1 1/4" CHLORITE CA 40° 982.0 - 1007.0 RQD ~ 60%	979.0	980.0	2.0'	9640	.000
		986.0 - 988.5 0.5% HLEES QTZ ANK, CA's 35° X-CUT & DISCONT. F' DISPLACED BY 2%					
		HLEE'S QTZ ANK CA's 55° AND CHL HLEE'S (0.5%) WITH CA's 70°.					
		991.6 1/16-1/4" ORANGE QTZ-CARB-CHL CA 25° (0.5%)					
		987.0 - 1007.0 (2"1/2") CHL QTZ-ANK CA's 15-30° UP TO 65°, X-CUT BY 2ND SET CA's 35°, 0.5% fg PY DISS.					
		1007.0 E.O.H.					
1007		E.O.H.					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 96-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
0.00	8.0	OB					
8.0	61.0	FELD. PORP.					
		BROWNISH RED, MATRIX W 30% WHITE PHENOS FELD ≤ 3mm Ø. MATRIX W 10% FLECKS SERICITE, STR					
		ALB/CARB. OCCAS. RUSTY, VUGGY BREAK (~1/5'). 1/8-1/2" WHITE-ORANGE QTZ CARB. WAVY, CA'S GEN 40-60°.					
		0.5% vfg PY DISS. THROUGHOUT W/R. 5% ANG. W/R FRAGS. 1-1/8" STR/FOOT ^BARREN WHITE-ORANGE QC, CA'S GEN 30-60°.					
		13.1-13.8 CORE BROKEN UP, AFBLE-SEED, GOSSANOUS, RUSTY, VUGGY BREAKS AT 55-60°					
		14.7-15.9 " " " "; BREAKS 15, 70, 80°					
		22.2-22.4 " " ; BREAKS 40°					
		8.9 1/8" BND SER, CA 30°					
		22.2 1/8" WHITE/ORANGE QC CA 40°, BARREN	21.7	22.7	1.0	9544	.001
		24.6 BREAK, SERICITE ON FRAC, AT 35°	24.5	25.5	1.0	9545	.001
		25.0 PATCHY, IRREG 1/2-1" QC, CA 60°, BARREN					
		25.2-25.5 DISCONT., LOW X, WHITE/ORANGE QC, CA ~ 50°, X CUT & DISCONT. BY 1/16" QC, CA 60°					
		8.0-61.0 RQD = 35%					
		25.5-26.0 HUFF'S CHL AT 55-60°, X-CUT BY VUGGY, GOSSANOUS BREAKS AT 40° & 10°					
		26.3 1/8-1/4" WHITE-ORANGE QC, CA 55°					
		26.7 VUGGY RUSTY BREAK, CA 70°					
		29.3-29.6 BROKEN UP, VUGGY, GOSSANOUS					
		31.3 1/8" VUGGY ORANGE-WHITE QC STR/BREAK, CA 25°					
		33.2 1/4" CHL/EP SEAM, CA 60°, W 2% BLEBS PY. X-CUT & DISCONT. BY HUFF CHL AT 35°					
		33.7 GOSSANOUS, VUGGY BREAK AT 75°	31.0	32.0	1.0	9546	.001
		33.9 GOSS. BREAK, CA 22°					
		36.2, 36.4 GOSS. BREAK, 1/16" QC, CA'S 75°					
		36.8 1/32" QC W 1% BLEBS PY, CA ~ 65°, 0.5% fg BLEBS PY IN W/R, 5% FLECKS SER.	34.0	37.0	3.0	9547	.001

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Page No. 2

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		31.0-50.0 +/- SLIGHT BLEACHING, INCREASE IN SER. & UP TO 5% FLECKS DISS, STR CARB/MB. Tr-0.5% fg BLEBS & vfg SPECKS DISS. THROUGHOUT. 4-5 BREAKS PER FOOT, GEN. SLIGHTLY VUGGY & GOSSANOUS AT 50-70°, 2% WISPY STRS QC < 1/32" WIDE, CA'S GEN 60-80°. 1-2 STRS / 5' 1/8"-1/4", CA'S 40-60°, ALL BARREN.					
		41.4-42.7 LOW & 1/16-1/4" IRREG, DISCONT. ORANGE-WHITE QC					
		42.5 GOSSANOUS BREAK / 1/8" QC, CA 45°	37.0	40.0	3.0'	9548	.001
		43.4 1/4-1/2" ORANGE-WHITE QC, CA WAVY ~ 40°, BARREN, 1% vfg PY DISS. IN W.R.	40.0	43.0	3.0'	9549	.001
		44.0-44.9 - MOD BLEACHED, STR CARB/EP, VUGGY, @ 5% HLEFS PINKISH QC.	43.0	44.0	1.0'	9550	.001
		44.1-44.5 BREAK CA 18°					
		44.4 1/4" VUGGY QC, CA 70°	44.0	47.0	2.5'	9641	
		44.6-44.9 CORE BROKEN UP, 0.5' CORE MISSING					
		44.9-47.0 5% IRREG, WAVY, PATCHY, WHITE-ORANGE STRS, CA'S ROUGHLY 50-60°, BARREN 0.5% vfg-fg BLEBS PY DISS.					
		48.1 1/3" QC-CHL STR, W BLEACHED REDDISH ALT HALO, CA 70°	48.0	49.0	1.0	9642	.000
		49.2 TWO 1/8" CHL/QC CA'S 35 & 40°					
		49.7 1/2" PINKISH QC, CA 30°					
		50.0-54.0 LESS BLEACHED, MORE COMPETENT NO QC STRS; REDDISH BROWN FP, Tr PY					
		54.0-61.0 SLIGHT BLEACHING, ~1 WHITE-ORANGE QC / 1 FOOT CORE, ± 1/8" WIDE, CA'S 55-70°					
		55.5-56.7 VUGGY 1/2" GOSSANOUS BREAKS, CA'S ROUGHLY 40-70°					
		58.5-58.7 SLIGHTLY GOSSAN / VUGGY	55.5	58.7	3.2'	9643	[illegible] 0.010
			58.7	61.0	2.3'	9644	.000

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
			61.0	63.5	2.5	9645	.002
61.0	228.0	B.S. UC SHARP 55°					
		61.0-147.0 MED GREY TO REDDISH-GREY, MSV TO WKLY FOL AT ~45°, cg					
		61.0-80.0 RQD ~40%					
			63.5	64.8	1.3	9646	.002
		63.4 BREAK, CA 30°, 1/2" CHL ALONG BREAK					
		63.5 1/2-3/4" QTZ-CARB-CHL, LC 35° // BREAK, LC 45°, // FOL OF 45°, X-CUTS & DISCONT. TWO 1/8" STRS CA'S 45-65° W Tr vfg BLEBS PY; 1" BULL QV FREE OF 1/2" CHL-ANK FLT					
		64.6-65.8 1' CORE MISSING, 5" SAND SAND SEAM					
		64.8 BREAK 50°/SMOOTH-CHL ALONG BREAK.					
		65.8 BREAK ~90°/ROUGH SURFACE					
		65.8-66.2 4-1/8" STRS, CA'S ROUGHLY 60°					
		66.4-66.6 BX QTZ CARB, CA'S FRAGS ROUGHLY 45-50°					
		66.8-67.0 BROWNISH RED BX QC STR, CA 50°; 1/4" CHL-ANK FLT @ 67°	65.8	67.0	1.2'	9647	.004
		68.4-69.1 PATCHY LOW & GLASSY/CREAMY WHITE QC STR ~0-5° W Tr vfg SPECKS PY FOL 65°.	67.0	68.4	1.4'	9648	.002
			68.4	69.6	1.2'	9649	.001
		69.1-69.6 IRREG, DISCONT. WHITE QTZ ANK, CA ~20°. CHL-SER-ANK SHR; 1/8" BULL QV					
		70.7-71.1 BLEACHED, GOSSANOUS, BROKEN, BREAKS AT 60° // FOL // 1/8" BX QC IN CHL	69.6	71.2	1.6'	9650	.001
		71.1- ULFOL 65° DK. GREY, 1-2 1/16-1/4" QC STRS PER 5', CA'S 40-55°					
		75.5 3/4" QC STK, CA 40°	71.2	74.2	3.0'	9701	.000
		75.8 1/4" CHL/SER CA 30°	74.2	75.6	1.4'	9702	.007
		78.0 1/8" WHITE/ORANGE QC, CA 45°	75.6	78.6	3.0'	9703	.001
		79.3-79.5 VUGGY GOSSANOUS BREAK ~30°/3/4" QC; 1/4" BULL QV IN LIMONITE @ 45	78.6	81.6	3.0'	9704	.002
		80.0-117.0, RQD ~60%					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		80.0-81.6 FOL 60°,					
		80.1 1/16" CHL/SER, CA 60° // FOL					
		80.3 1/16" WAVY QC/CHL STR X-CUTS FOL AT 35°					
		80.6 VUGGY, RUSTY BREAK, CA 30°					
		81.2-81.4 VUGGY, RUSTY BREAK, CA 30°, BROKEN UP					
		81.8 FOL 60, 1/8" STR CA SUBPAR AT 55°; ANA X-CUTS AT 30°					
		82.3-82.6 CORE BROKEN, CA 30°, RUSTY					
		82.6-97.5 1-2 WISPY QTZ ANK STR PER 5', CA'S 25-60°, BARREN.					
		4-5 RUSTY, VUGGY BREAKS PER 5' CORE, CA'S 30-60°	90.7	93.2	2.5	9705	.001
		FOL 60°, TR VFg PY					
		95.6 BREAK, RUSTY, CA 60°					
		95.8 " " CA 35°					
		96.0 WISPY, DISCONT 1/16-1/8" QC STR, CA 25°					
		97.3 1/6" QTZ ANK // BREAK AT 25°					
		97.5- OCCAS BRIGHT ORANGE FELSIC RIBS, BARREN, 0-1 PER 5' CORE, CA'S 35-45°	97.0	98.0	1.0'	9706	.001
		97.5 2" FELSIC RIB, CA 35°					
		99.2 WAVY BRIGHT RED 1/3" F.R., CA ~45°	99.0	100.0	1.0'	9707	.001
		100.0 PATCHY, DISCONT. RED F.R. ≤1/3", SUBPAR. FOL.					
		101.8 1/4" " " CA ~60° // FOL.					
		100.0-100.5 RUSTY BREAK, CA 10°, X-CUT BY OTHER BREAKS, CA'S 50 & 70°	100.0	102.0	2.0'	9708	.000
		102.7-103.0 WAVY WHITE/ORANGE QC, 1/6", CA 20°	102.0	104.3	2.3'	9709	.000
		104.4-104.8 2" WHITE QC VEINLET W/ 2" FELSIC RIB. UC, BX W/ INT. CHL ALONG	104.3	105.3	1.0'	9710	.003
		BREAK AT L.C., CA 30° THEN 5" AT HIGH (RED) L.C.					
		107.5-108.0 WAVY, IRREG, 1/8" WHITE-ORANGE QC, CA ~50°	105.3	108.3	3.0'	9711	.002
		108.6, 1/8" WHITE QTZ ANK, CA ~65°	108.3	111.3	3.0'	9712	.001

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 96-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs
		109.4 - 117.2 5% HLFFS QTZ ANK, IRREG, DISCONT.					
		10% PATCHY FELSIC RIBS ~S-15°					
		117.0-157.0 RQD = 85% 117.6 - 129.5 Tr-0.5% vfg PY DISS IN W.R.					
		117.6 FOL 70° X-CUT BY 1/4" QTZ CARB, CA 65°	117.5	120.5	3.0	9713	.001
		119.0 1/8" QTZ ANK STR, CA IRREG, ROUGHLY 70°					
		120.0 DISCONT. 1/8" WHITE-ORANGE QC, X-CUTS FOL AT 35°					
		121.6-121.9 BX IRREG QTZ ANK 1/4", CA ROUGHLY 55°	120.5	121.9	1.4	9714	.002
		122.8 1/8" QTZ ANK CA 70°	121.9	124.9	3.0	9715	.000
		124.2 1/32-1/8" QTZ ANK-CHL, CA 30, X-CUT & DISCONT. BY 1/4" CHL SLIP, CA 60°	124.9	125.9	1.0	9716	.085
		124.9 3/4" GREY/CREAMY WHITE QTZ ANK, CA 40°, Tr vfg SPECKS PY.					
		126.3 DISCONT. IRREG QTZ ANK, CA ~45°, UP TO 1/4" WIDE, BX					
		128.3 1/4" WHITE-ORANGE QA, CA 50°//CHL FRAC					
		128.6 CHL FRAC // 1/32-1/4" WHITE-ORANGE QA, CA 45°					
		129.0 DISCONT. 1/16" QA, CA ~20°, X-CUT BY ABOVE					
		129.5-130.2 MISSING CORE SAND SEAM	125.9	129.5	3.6'	9717	.012
		130.3 1/6" QTZ ANK, CA N20	130.2	133.2	3.0'	9718	.003
		133.0 - 135.0 WAVY 1/8" QTZ ANK, CA 0-10°, X-CUT & DISPLACED BY 1/4" BY 1/16" GREYISH QC STR, CA 50° AT 133.5. 0.5% vfg SPECKS PY DISS. IN W.R.					
		134.6 - 135.0 BX PATCHY CALCITE/QC STR, LOW S	133.2	135.3	2.1'	9719	.002
		135.3 - 135.6 1/4" QTZ ANK CA 0-5°	135.3	136.5	1.2'	9720	.053
		136.0 - 136.4 BX QZ VEIN, SHARP CONTACTS UC 40/ LC 50, LC ACCOMPANIED BY BREAK 50° 2% vfg SPECKS PY IN VEIN. VEIN 10% WHITE QC, 85% FELSIC RIB, 3% CHL.					
		136.4-139.4 0.5% HLFFS QTZ ANK, IRREG FFS, 0.5% BLEBS fg ANH PY. IN 5% HLFF'S CHL.	136.5	139.5	3.0'	9721	.011

LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 94-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Oz/t
		172.0-193.0 RQD=90%					
		147.0-194.0 GRADUALLY BECOMES FINE GRAINED, GEN. DK GREY. OCCAS PATCH (GEN 1-2") FELSIC RIBS, OCCUR. 1-2 PER 5' CORE. Tr-0.5% vfg PY DISS IN WR. 1 BREAK (VUGGY, RUSTY) PER 5' CORE, CA'S 35, 40 & 60°. RARE STR QTZ ANK < 1 PER 10' CORE, CA'S GEN 40-50°					
		149.5 VUGGY, GOSS. BREAK, CA 35°					
		149.8 " " 40°					
		151.0-151.5 1/16 IRREG QTZ ANK, CA 30°					
		153.4 1/32" QTZ ANK, CA 45°					
		156.1 1/2" VUGGY, GOSSANOUS (QTZ CALCITE) BAND, CA 60°	156.0	157.0	1.0'	9722	.001
		157.0-194.0 RQD=90%					
		184.0-185.6 LOW 5% FELSIC RIB/WAVY 5% IRREG QTZ ANK < 1/16" WIDE. Tr PY	184.0	185.6	1.5'	9723	.001
		194-204.0 RQD=70%					
		194.0-210.0 COARSE GRAINED, GEN. DK GREY WITH OCCAS INTERVAL (6"-1' WIDE) BROWNISH-RED FELDSPATHIZED INTERVAL; 1 INTERVAL/10' CORE. OCCAS. QTZ CARB STR, 1/4-1" WIDE, CA'S 50-60°, ONE PER 5' CORE. 2% WISPY IRREG THIN QTZ ANK.					
		194.0-194.6 REDDISH BROWN ALT SURROUNDING 1" WHITE/GREYISH QTZ VEIN QC, CA 50° AT 194.3	194.0	195.0	1.0'	9724	.003
		206.3, 206.6 TWO 1/4" QC, CA'S 60° QCANK					
		206.6-208.7 REDDISH-BROWN ALT. Tr vfg PY SPECKS	206.6	208.7	2.1'	9725	.002
		207.7 BREAK, RUSTY, CA 35°					
		208.7 LOWER CONTACT REDDISH ALT, CG AT 35°					
		208.7-210.6 DK GREY, fg, MSV B.S.					
		208.6 TWO 1/8-1/4" QTZ ANK CA'S 35°) DISC. & X-CUT BY 1/32" CHL CA 25°					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 92-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		210.0 - 227.6 DK GRY V. FG WK FOL AT 70°, 3-4 WHITE-ORANGE QC STRS/5' CORE, 1/8-1/4" WIDE CA'S GEN 50-60° X CUT FOL.					
		226.8 BX IRREG QTZ ANK, ALONG HL FRAC, CA 50°, FROM HL-WIDTH TO 1/4" W 1" BROWNISH-RED ALT. HALO					
		227.3 1/8-1/4" QTZ ANK CA 35°, 1" ALT HALO					
		223.0 1/16" QTZ ANK CA 40°, X-CUT & DISCON BY 1/16-1/8" GLASSY QTZ STR/U FRAC AT 20° 3" BL ALT HALO	2228	223.8	1.0	9726	.001
		223.6 1/16" QTZ ANK, CA 60°					
		227.6 - 228.0 SEV. BLEACHED, TAN COLOURED, CG					
		227.6 RUSTY BREAK 55°. UC ALT ENDS AT BRITTLE DIFFUSE CONTACT AT 20°					
		TWO 1/8 & 1/4" STRS, CA'S 40 & 35° WHITE QC. 10% VFG PY DISS IN W.R.					
		2ND STR ALONG LOWER CONTACT 1" CHL BAND (BX). FAULT ALONG LC.					
		(ALL AT 3°)	226.4	228.0	1.6	9727	.001
		228.0 - 231.5 RQD = 95%					
228.0	240.5	GREYWACKE UC 2" CHL FAULT ZONE, CA 35°, RUSTY BREAK					
		SEV. BLEACHED, REDDISH TAN TO TAN, FG, MOD HOMOG W 1% VFG SPECKS PY DISS., STR SILIC., MOD EP/SER, STR CARB					
		228.1 PATCHY QTZ ANK STR CA 35°, WITHIN 1" FAULT GOUGE, CHLORITIC CA 35°.					
		228.5 - 228.9 1/2" PATCHY, IRREG, WHITE QC STR, CA ~60°, SINGLE 2mm BLEB ANH PY, X-CUTS EARLIER 1/8" QTZ ANK STR, CA 45°.					
		228.9 - 229.4 BRIGHT YELLOWISH GREEN FELSIC DIKELET, APHANITIC, MOD V. HARD, STR EP/SER MATRIX W 5% GLASSY QTZ EYES ≤ 2mm Ø, 2% VFG BLEBS PY DISS, SLIGHTLY SHATTERED W 1% GLASSY QC HALOED & 1% CREAMY WHITE QTZ ANK. UC 45, LC V. SHARP 60°	228.0	229.4	1.4	9728	1.376

1.303 × 1.449

0.7/3.4

OR 0.42/1.4

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Oz/t.
		229.5 1/4" GLASSY WHITE QC STR, 1% BLEBS AND/fg PY, CA 40° - 3% VFG SPECKS PY IN WR.	229.4	230.4	1.0	9729	0.108
		230.0 1/4" " " CA 40° -					
		230.4 1/4" QC-CHL STR @ 70°	230.4	231.4	1.0	9730	0.484 0.501 & 0.466
		230.4-231.4 THREE 1/16" GLASSY QTZ(CARB) ffs' IRREG SLIGHTLY BX CA's ~25-30°, W					
		0.5% fg BLEBS PY, 3% fg SPECKS/BLEBS PY IN WR					
		231.4-248.5 TAN W OCCAS REDDISH-BROWN ALT INTERVAL, 4" TO 3', 10% IRREG WISPY QTZ ANK HLETS, 1/2% VFG PY					
		231.6-232.0 BROWNISH-RED ALT, UC DIFFUSE LC ENDS AT 1/8" SER FAULTGNIZE, CA 40°.	231.4	234.4	3.0	9731	0.060
		> NO QC STRS	234.4	236.4	2.0	9732	.011
			240.0	241.0	1.0	9733	.003
		233.0-238.0 MAG, STR CARB, MSV, HOMOG, REDDISH TAN COLOUR,	247.5	248.5	1.0	9734	.002
		236.0-236.0 20% CREAMY WHITE QTZ ANK, 1% QTZ CARB 'PATCHY					
		240.8 1/2" CHL SEAM, CA 70°, AX W 25% QC FRAGS					
		246.5-247.2 RQD=85%	248.5	249.5	1.0	9735	.001
248.5	287.2	B.S. DK GRN, fg, N/ QTZ-ANK STR/5' CORE, CA 45-70°, 2% HLETS WISPY QTZ ANK, TR-0.5%					
		fg PY diss.					
			253.9	254.9	1.0	9736	.002
		253.9-254.9 SLIGHTLY BX REDDISH BROWN ALT, 20% QTZ ANK AS BX STRS CA					
		ROUGHLY 45-55°					
		254.2 RUSTY BREAK, CA 30°					
		255.3 BREAK, RUSTY					
		255.6 1/4" QTZ ANK CA 45°					
		259.0 1/8-1/4" QTZ ANK CA 40°					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description	From	To	Total	Sample No.	Ozs.
		267.0 - 269.0					
		267.0 1/3" REDDISH BARREN QC ALONG HFF CHL SLIP, CA ROUGHLY 50°					
		268.1 1/16" PINKISH QC, CA 40°; X-CUTS EARLIER WISPY QTZ ANK					
		269.7, 270.0 1/16-1/8" QC STRS CA'S 45 & 50°					
		272.9 1/4" WISPY CHL STR. CA 65-70°					
		273.4 BREAK CHL ALONG FRAC, CA 35°					
		280.4 1/8" CHL BAND. CA 25°					
		286.5 - 287.0 LT. PURPLISH TAN/OLIVE GREEN 0.5% vfg SPECKS FM	286.2	287.2	1.0'	9737	.001
		287.0-287.2 SEV EP, LT. OLIVE GREEN 2% vfg SPECKS FM					
287.2	310.0	284.6 1/3" CREAMY WHITE QTZ ANK, CA 60°; 284.9 Bx 1/4" QTZ ANK CA 55°					
	GW	RBD 287.2 - 310.0 75%					
		291.0 HFF CHL, CA 50°					
		291.0 - 295.3 CLASTS UP TO 1/4" 5%, VAR. LITH, SUB-ROUND TO SUB-ANG., STR FOL 60°, FINER GRAINED (TOPS) DOWNHOLE	287.2	289.2	1.0'	9738	.000
		297.9 1/8" DISCONT. QTZ ANK, CA 55°, SUB// FOL. OF 60°					
		302.0 2 ~~BREAKS~~ FRACT. AT 50 & 55°, WITH RUST ALONG BREAK.					
		302.1 LIC W BLEACHING; REDDISH-TAN STR CARB/ALB, BROKEN RUSTY AT 15° 50°					
		302.8 - 303.0 JAGGED ~~BREAK~~ FRACT, BLEACHED, 1/4" QTZ ANK CA 10-25°					
		303.3 RUSTY BREAK, CA 60°					
		304.0 - 304.4 PATCHY QTZ ANK, CA ~5°					
		304.7 - 305.0 QTZ ANK ~1" WIDE (10% QTZ) CA ~30°					
		311.4 RUSTY BREAK CA 35°					
		311.6 HFF QTZ ANK CA 30°					
		311.7 RUSTY BREAK / 1/4" QTZ ANK CA 45°					
		312.4 - 312.7 ANK STR CA ~40° (5% QTZ)					
		319.0 1/8" QANK STR, ~// FOL AT 50°					
		320.0 E.O.H.					

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LAC MINERALS LTD./MACASSA DIV.
DIAMOND DRILL LOG

Hole No. 98-33

Footage From	Footage To	Description		From	To	Total	Sample No.	Ozs.
		287.3 - 291.0 CG GRADES TO fg MSV GWKE, FRAGMENTS OVER FIRST 3', UP TO 1/4" ACROSS, SUB-ROUND TO SUB-ANG. VARIOUS LITH. Tr py. <1% QTZ ANK STR EP/CARB						
		288.8 RUSTY BREAK AT 50°, 1/2" EITHER SIDE RUSTY, SLGHTLY BX W 5% INTERST. QTZ		288.2	289.2	1.0	9739	.000
		291.0 - 295.4 VCG GW, FINER OVER LAST 1/2', MED BROWN/GREENISH, FRAGS NEAR 291.0 UP TO 1/3". STR CHL/CARB/MOD EP TO STR EP, FOL 60°						
		295.4 - 296.6 FINER GRAINED, OLIVE YELLOW GW, AS FROM 287.3 - 291.0						
		296.6 SHARP CONTACT BETWEEN fg GW & VCG GW W 1/8" WAVY QTZ ANK ALONG CONTACT AT 25°.						
		296.6 - 298.3 BROWNISH-GREEN CG GW.						
		298.3 - 302.1 GRAD. CONTACT - LT OLIVE GREEN fg GW FOL 60°, GRAD TO BROWNISH RED fg GW						
		302.1 - 303.0 SLGHTLY BX REDDISH GW	✓	302.0	303.0	1.0	9740	
		303.0 - 305.7 OLIVE YELLOW, +/- BLEACHED/± REDDISH/ORANGE FELD. ALT	✓	304.0	305.0	1.0	9741	.000
		305.7 - 306.7 PATCHY INT. OLIVE GREEN/REDDISH ALT. fg GW						
		306.7 - 314.0 OLIVE GREEN fg GW	✓	312.0	313.0	1.0	9742	.000
		314.0 - 320.0 CG, REDDISH BROWN/OLIVE YELLOWISH GW, FOL 65°. 5% FRAGS FELSIC RIBS, UP TO 1" ACROSS						
		THE END -						

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W9980.00186
Assessment Files Research Imaging

42A01NE2022 2.19317 TECK 900

section 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, ssment work and correspond with the mining land holder. Questions about this ern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury,

LARDER LAKE MINING DIVISION

[redacted] 4/99
2:00 PM
MJC

Instructions: - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

Recorded holder(s) (Attach a list if necessary)

Name: KINROSS GOLD	Client Number: 130666
Address: KIRKLAND LAKE OPERATION - MACASSA MINE P.O. BOX 550, K.L., ONT, P2N 3J7	Telephone Number: 705 567-5208 (568-3154) Fax Number: 705 568-3136
Name:	Client Number:
Address:	Telephone Number: Fax Number:

Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, surveys, assays and work under section 18 (regs) | Physical: drilling stripping, trenching and associated assays | Rehabilitation

Work Type: DIAMOND DRILLING ✓	Office Use
	Commodity
	Total $ Value of Work Claimed: 107,886.
Dates Work Performed: From Day 01 Month 06 Year 98 To Day 01 Month 11 Year 98	NTS Reference
Global Positioning System Data (if available)	Township/Area: TECK TWP.
	M or G-Plan Number
	Mining Division: Larder Lake
	Resident Geologist District: Kirkland Lake

Please remember to:
- obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

Person or companies who prepared the technical report (Attach a list if necessary)

Name: MICHAEL SUTTON	Telephone Number: 705-568-3154
Address: P.O. BOX 550, KIRKLAND LAKE, ONT., P2N 3J7	Fax Number: 705-568-3136
Name:	Telephone Number:
Address:	Fax Number:
Name:	Telephone Number:
Address:	Fax Number:

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MAR - 8 1999
9:47 03
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Certification by Recorded Holder or Agent

I, MICHAEL SUTTON (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: Michael Sutton		Date: 04/03/99
Agent's Address: P.O. BOX 550, K.L., ONT. P2N 3J7	Telephone Number: 705-568-3154	Fax Number: 568-3136

(03/97)

Deemed on June 6/99

AMENDMENT

recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mini land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this for

W9180.00186

	Mining Claim Number, or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units, For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
98	TB 7827	16 ha	$28,825	NIA	$24,000	$2,825
99	1234587	12	0	$24,000	0	0
100	1234588	2	$ 4,992	$ 4,000	0	$4,992
1	12357 (8000860)		[illegible]		#23,850	#17,658 MS
2	1835 (8000857)		6,200		#6,200	
3	26455 (8000868)		14,990		#14,990	
4	11116 (8000859)		7,608		#7,608	
5	28330 (8000860)		7,600		#7,600	
6						
7	1205774	4		[illegible]		
8	1217451	4		[illegible]		
9	1214374	2	0	1600		
10	1214372	2	0	1600		
11	1214373	4		[illegible]		
12	1217759	4	0	[illegible] MS		
13	1214371	2	0	4800		
14	1221679	1	0	$400 MS		
15	[illegible]			1600 MS		
	Column Totals		[illegible]	[illegible]	[illegible]	

I, MICHAEL BUTTON (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
Michael Button	04/03/99

6. **Instruction for cutting back credits that are not approved.**

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☑ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe)

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Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

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9:47
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2.19317

For Office Use Only
Received Stamp
Deemed Approved Date
Date Notification Sent
Date Approved
Total Value of Credit Approve
Approved for Recording by Mining Recorder (Signature)
0241 (03/97)
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MAR - 9 1999
9:47
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Ontario Ministry of Northern Development and Mines

Schedule for Declaration of Assessment Work on Mining Land

Transaction Number (office use) W9980.00186

Amendment.

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
1219981	6	0	14,400		
1219980	1	0	2400		
1217455	1	0	2400		
1217452	1	0	2400		
1217448	2	0	4800		
1213918	1	0	~~[illegible]~~ 2000 MS		
1217479	4	0	9600		
1217450	4	0	3200		
1214368	2	0	~~[illegible]~~ 1600		
1222104	2	0	2000 MS ~~[illegible]~~		
1217446	1	0	2000 MS		
1217447	3	0	4800 MS		
Column Totals		~~60,248~~ 107,886 MS	60,248	60,248	47,638 MS

RECEIVED MAR -3 1999 GEOSCIENCE ASSESSMENT OFFICE

RECEIVED MAR 12 1999 GEOSCIENCE ASSESSMENT OFFICE

RECEIVED LARDER LAKE MINING DIVISION [illegible] 4/99 2:00 pm MR

** TOTAL PAGE.03 **

MAR 12 '99 09:47 705 568 3136 PAGE.03

Column Totals		60,248	60,248	60,248	

0290 (02/96)

RECEIVED LARDER LAKE MINING DIVISION [illegible] 4/99 2:00 pm MR

Ontario Northern Development and Mines

for Assessment Credit

W9980.00186.

...sonal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation Area. Under section 8 of the ...ng Act, this information is a public record. This information will be used to review this assessment work and correspond with the mining land holder. ...estions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake ... d, Sudbury, Ontario, P3E 6B5.

Amendment

Work Type	Units of work. Depending on the type of work, list the number of hours/day worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of Work	Total Cost
DIAMOND DRILLING		$10.35/FT.	$107,886.80 MS
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
Food and Lodging Costs			
		Total Value of Assessment Work	107,886 MS

culations of Filing Discounts:

Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total $ value of worked claimed

e:

Work older than 5 years is not eligible for credit.

A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a requ... fication and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may ... art of the assessment work submitted.

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MAR 12 ...
GEOSCIENCE ASSESSMENT OFFICE

tification verifying costs:

MICHAEL SUTTON (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

claration of Work form as EXPL. GEOLOGIST (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

RECEIVED
LARDER LAKE
MINING DIVISION
[redacted] 4/99
2:00pm
MJC

Signature	Date
M Sutt	04/03/99

2.19317

MAR 12 '99 09:49 705 568 3136 PAGE.06

MICHAEL SUTTON (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying claration of Work form as EXPL. GEOLOGIST (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

2 (03/97)

RECEIVED
LARDER LAKE
MINING DIVISION
[redacted] 4/99
2:00pm
MJC

RECEIVED
MAR ...
2.19317
GEOSCIENCE ASSESSMENT OFFICE

Signature	Date
M Sutt	04/03/99

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

June 4, 1999

KINROSS GOLD CORPORATION
KIRKLAND LAKE OPERATION - MACASSA MINE
P.O. BOX 550
KIRKLAND LAKE, ON
P2N 3S7 CAN

Dear Sir or Madam:

Submission Number: 2.19317

Status

Subject: Transaction Number(s): W9980.00186 Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 13850

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.19317

Date Correspondence Sent: June 04, 1999 **Assessor:** Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9980.00186	8000857	TECK	Approval	June 03, 1999

Section:
16 Drilling PDRILL

Correspondence to:

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Christine M. Saari
SCHUMACHER, ON, CAN

KINROSS GOLD CORPORATION
KIRKLAND LAKE, ON

Ministry of Natural Resources
Ontario

Ministry of Northern Development and Mines

INDEX TO LAND DISPOSITION

PLAN
G-3719
TOWNSHIP
TECK

M.N.R. ADMINISTRATIVE DISTRICT
KIRKLAND LAKE
MINING DIVISION
LARDER LAKE
LAND TITLES/REGISTRY DIVISION
TIMISKAMING

Scale 1:20 000

Metres 1000 0 1000 2000 Metres

Feet 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

	Description	Order No.	Date	Disposition	File
(R1)	SEC 35 WITHDRAWAL	W-L-9/97 NER	APRIL 22/97	SRO	
(R2)	SEC 35	W-L-31/98	11/08/98	MRO	

SYMBOLS

Boundary
- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way; road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

DISPOSITION OF CROWN LANDS

Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

- Licence of Occupation
- Order-in-Council — OC
- Cancelled
- Reservation
- Sand & Gravel

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

JUN 08 1999

ARCHIVED D:
ARCHIVED AT: 96.
CIRCULATED SEPT 23/93

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

TECK TWP.

G-3719

42A01NE2022 2.19317 TECK
SMD 3719

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2.19317

Bernhardt Twp.

Grenfell twp.

Leigel Twp.

Otto Twp.

3M

6M

4M

3M

1M

ASSIGNED

DRILLING

2973090 Canada Inc.

KINROSS

Marron

Carreau

Previl

Villeneuve

Armer Lake

Kamiskwaskwi

Moore

Lois Lake

Condie

McIvor Mines

Perron Lake

Dyment

Kostov

Jubrasovich

Franco Nevada

Mullen

Connelly

RVR Resources

Kirkland Lake

Golden Trust

Crown

Equinox

Queenston

SWASTIKA

CHAPUT HUGHES

Murdock Creek

Premier

D-Strike

Tallings

Dam

Trench Anomaly

Property Ownership

- Patent, Surface & Mining Rights
- Patent, Surface Rights only
- Patent, Mining Rights only
- Lease, Surface & Mining Rights
- Lease, Surface Rights only
- Lease, Mining Rights only
- Licence of Occupation
- Kinross Gold Corporation

Note:
All Relevant Data Required to Produce
This Drawing Supplied by Kinross Gold Corp.

KINROSS Gold Corporation
Hoyle 2000 Timmins, Ontario

TECK Township

Disposition of Crown Lands

Base: OBM-Digital data	Date:	Project: Kirkland Lake-Macassa	
Additions: S.Young	Date: Mar.13, 1998	File: CLMTECK.dwg	MNR Map No.: G-3719
Supervised:	Date:	Scale 1:20 000	
Updated: CADCO	Date: May 5/98	0 250 500 750 1000m	

ASTRONOMIC

GRID DERIVED WITH NORTH (AZIMUTH = 360° 00')

42A01NE2022 2.19317 TECK

210

'A' 'B' 'C' 'D' 'E' 'F' 'G' 'H' 'I' 'J' 'K' 'L' 'M'

R5 R7 R8 R9 R10 R11 R12 R13

TAILING'S PUMP LINE ROAD

PROPOSED ROAD

1238 1239

#12830 #16116 #21645

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GEOSCIENCE ASSESSMENT OFFICE

1500 N RL 1000 N RL 500 N RL 0 N RL 500 S RL 1000 S RL 1500 S RL 2000 S RL

6500 E 7000 E 7500 E 8000 E 8500 E 9000 E 9500 E 10000 E 10500 E 11000 E 11500 E 12000 E 12500 E 13000 E 13500 E 14000 E 14500 E

70 W SECT 65 W SECT 60 W SECT 55 W SECT 50 W SECT 45 W SECT 40 W SECT 35 W SECT 30 W SECT 25 W SECT 20 W SECT 15 W SECT 10 W SECT

14500 N 14000 N 13500 N 13000 N 12500 N 12000 N 11500 N 11000 N 10500 N 10000 N 9500 N 9000 N 8500 N

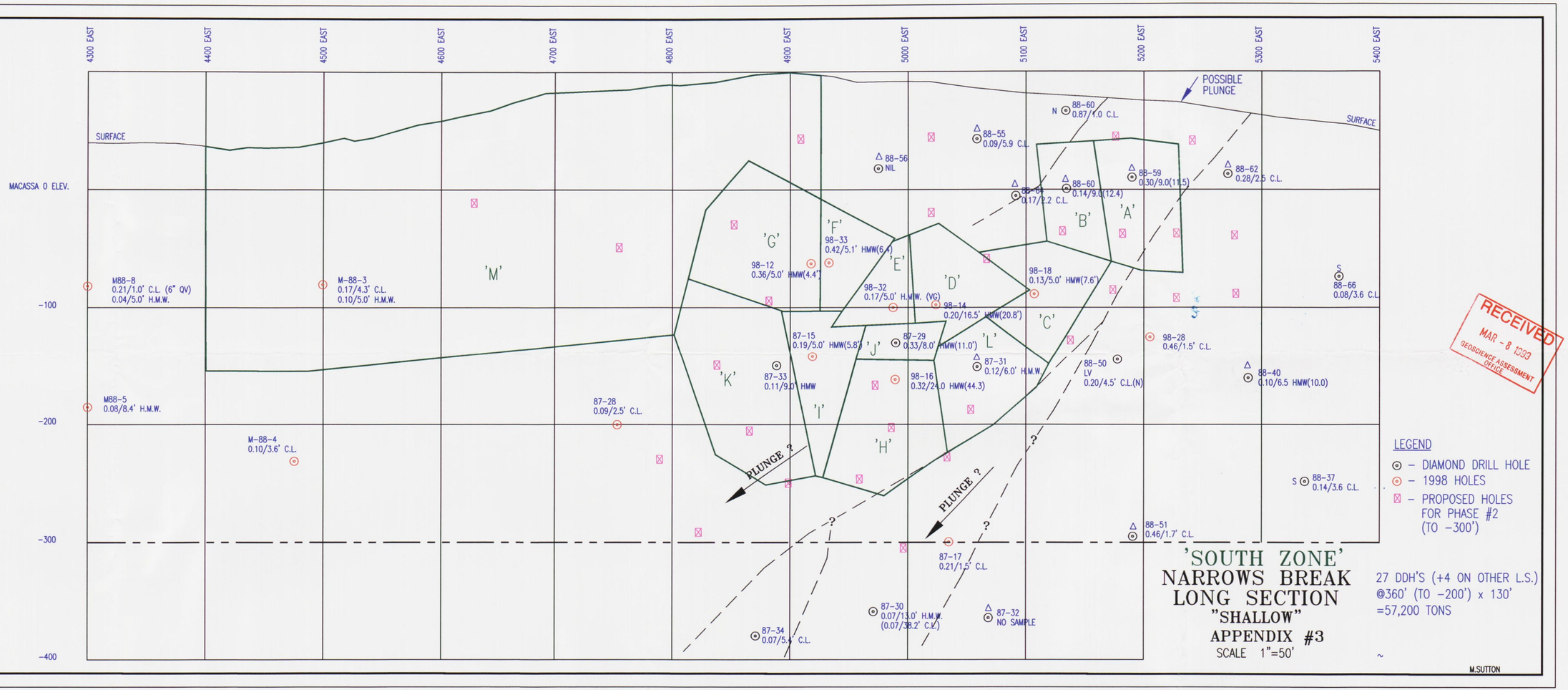
ISSUED:
TO:

KINROSS
Gold Corporation
Kirkland Lake Operation
Macassa Mine

TITLE: Narrows Drilling
DRAWN BY: SCALE:
APPROVE: NUMBER:
DATE: FILE:

220
42A01NE2022 2.19317 TRCK

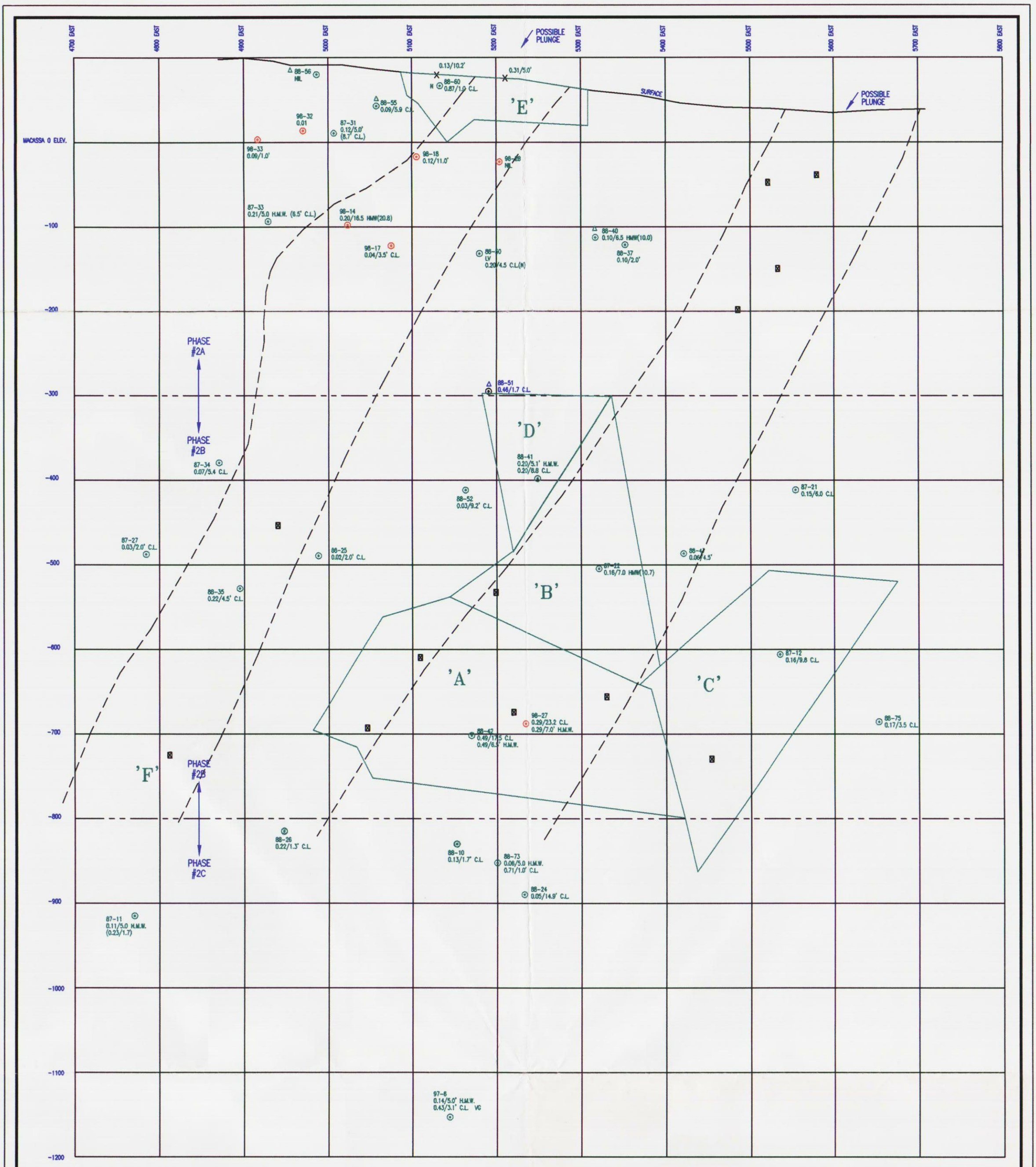
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2.19317



'NORTH ZONE'
NARROWS BREAK
LONG SECTION

APPENDIX #4

SCALE 1"=100'

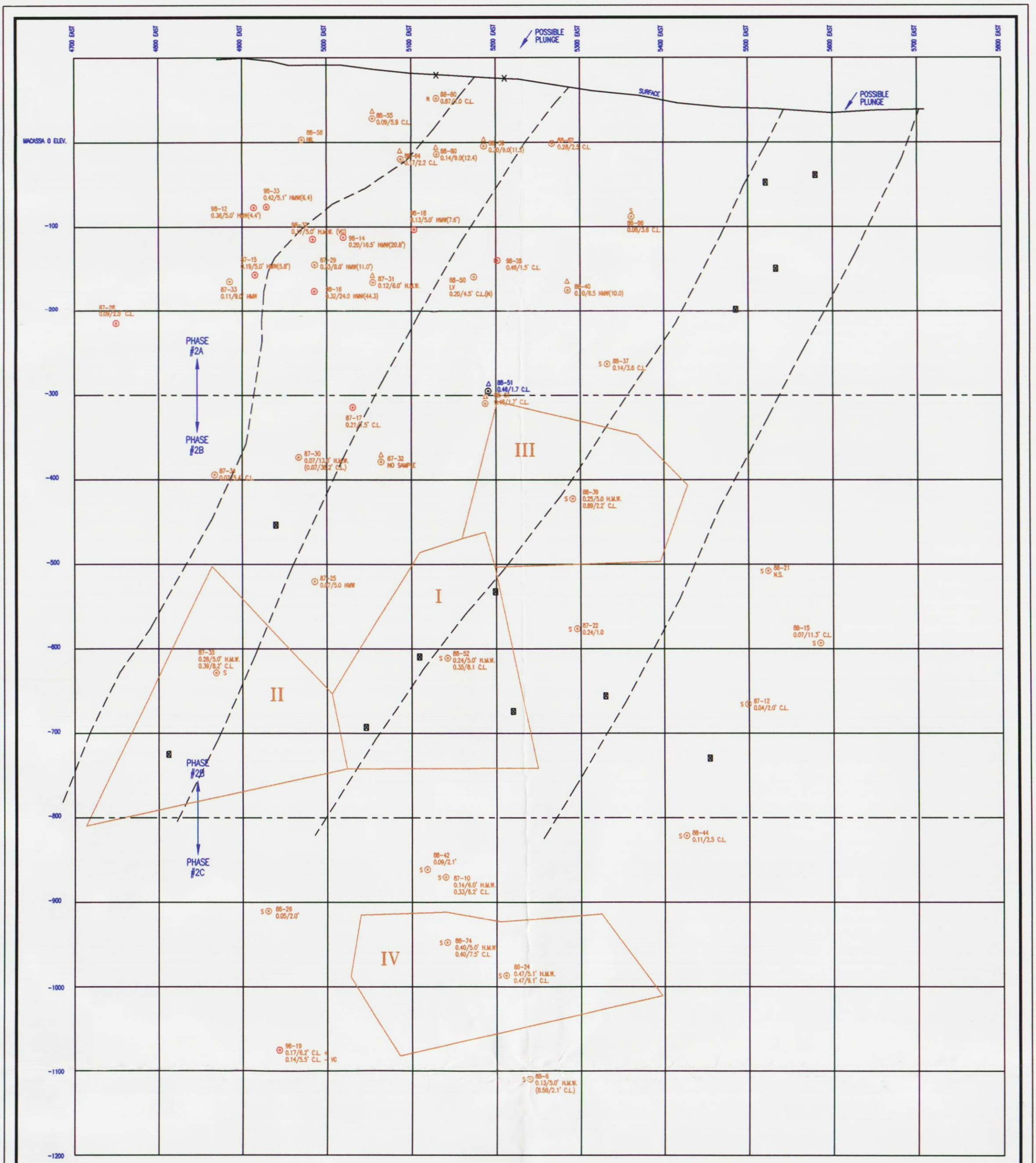
LEGEND
- ⊙ – DIAMOND DRILL HOLE
- ⊙ – 1998 DRILLING
- ⊠ – PROPOSED HOLES

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240

2.19317

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'SOUTH ZONE – DEEP'

NARROWS BREAK
LONG SECTION

APPENDIX #5

SCALE 1"=100'

LEGEND
- ⊙ – DIAMOND DRILL HOLE
- ⊙ – 1998 DRILLING
- ⊠ – PROPOSED HOLES

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4700SECT 4800SECT 4900SECT 5000SECT 5100SECT 5200SECT 5300SECT 5400SECT 5500SECT 5600SECT

1400N 1300N 1200N 1100N 1000N 900N 800N

GEOLOGY LEGEND

- FELSIC SYENITE
- CONGLOMERATE
- MAFIC SYENITE
- GREYWACKE
- PORPHYRY
- TRACHYTE
- TUFF

KINROSS GOLD CORP.

KIRKLAND LAKE OPERATION

ELEVATION 1

DATE	DRAWN		SCALE
4 MAR 99	DATAMINE		1:40

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MAR 8 '99
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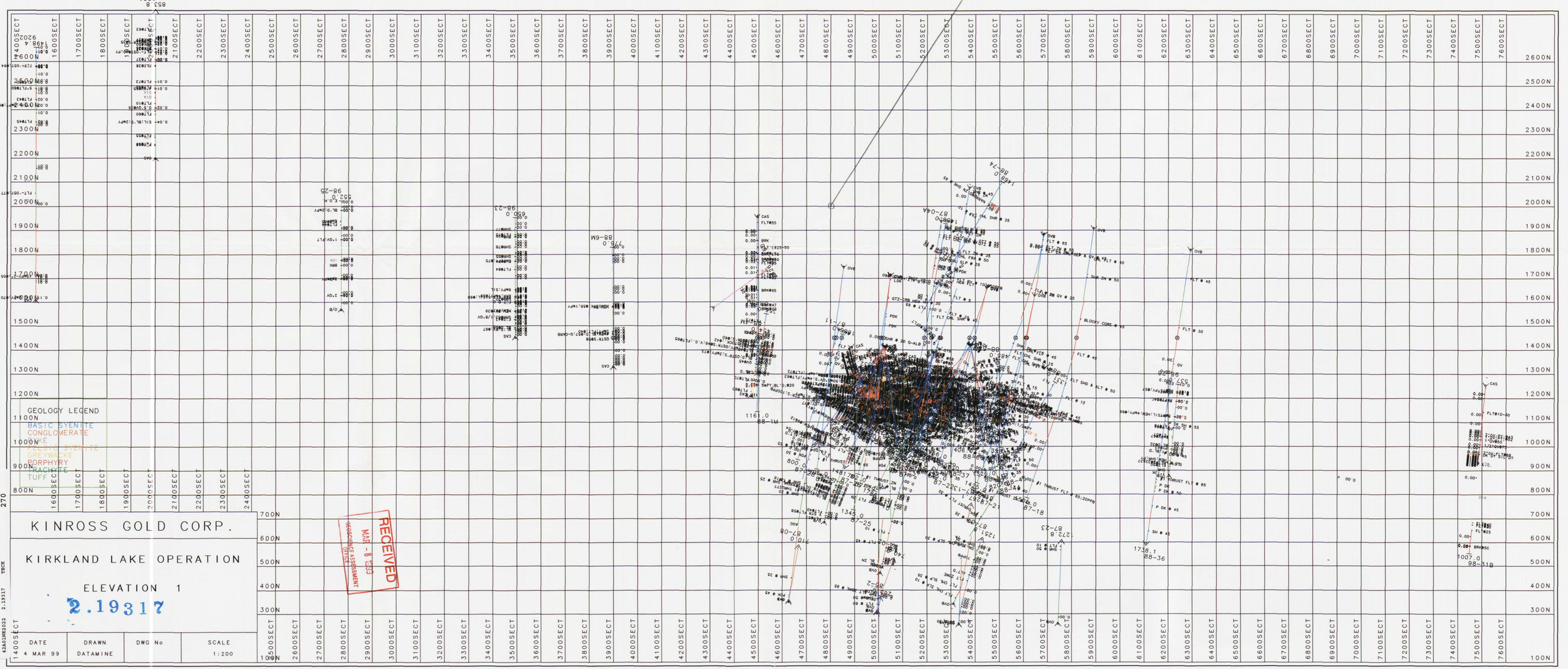
2.19317

PLAN VIEW (COMPILATION -> SURFACE TO -1200)
MACASSA GRID (327½°)

42A01NE2022 2.19317 TECK 260

PLAN VIEW

⇒ MACASSA GRID (327½°)



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KINROSS GOLD CORP.

KIRKLAND LAKE OPERATION

ELEVATION 1

2.19317

DATE	DRAWN	DWG No	SCALE
4 MAR 99	DATAMINE		1:200

42A03NW2022 2.19317 TECK

4900SECT
5000SECT
5100SECT
5200SECT
5300SECT
5400SECT
5500SECT
5600SECT
1300N
1200N
1100N
1000N
900N
800N
700N
SOUTH VEIN
NORTH VEIN
NADCAMA GRID (327½°)
RECEIVED
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OFFICE

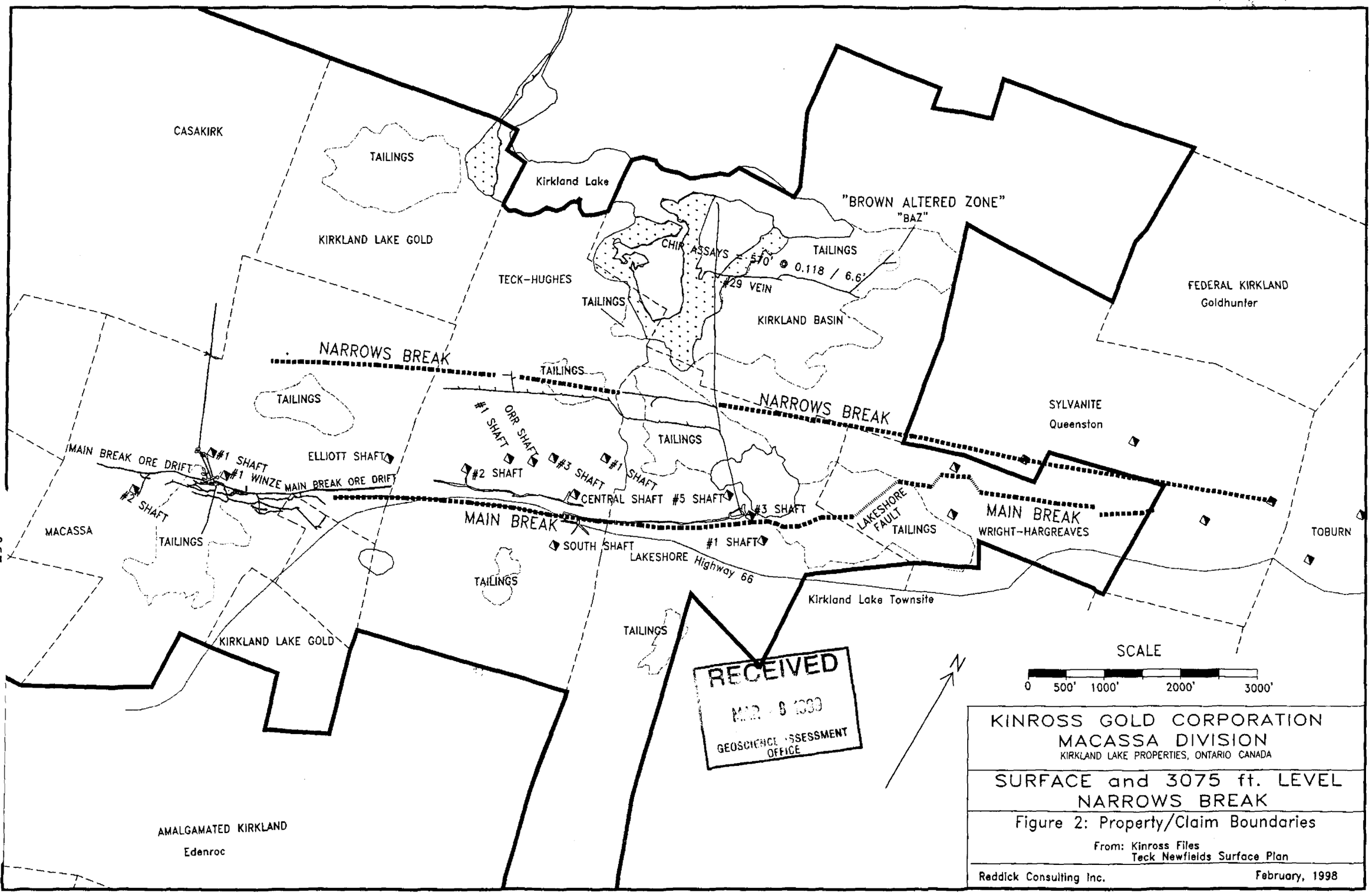
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF

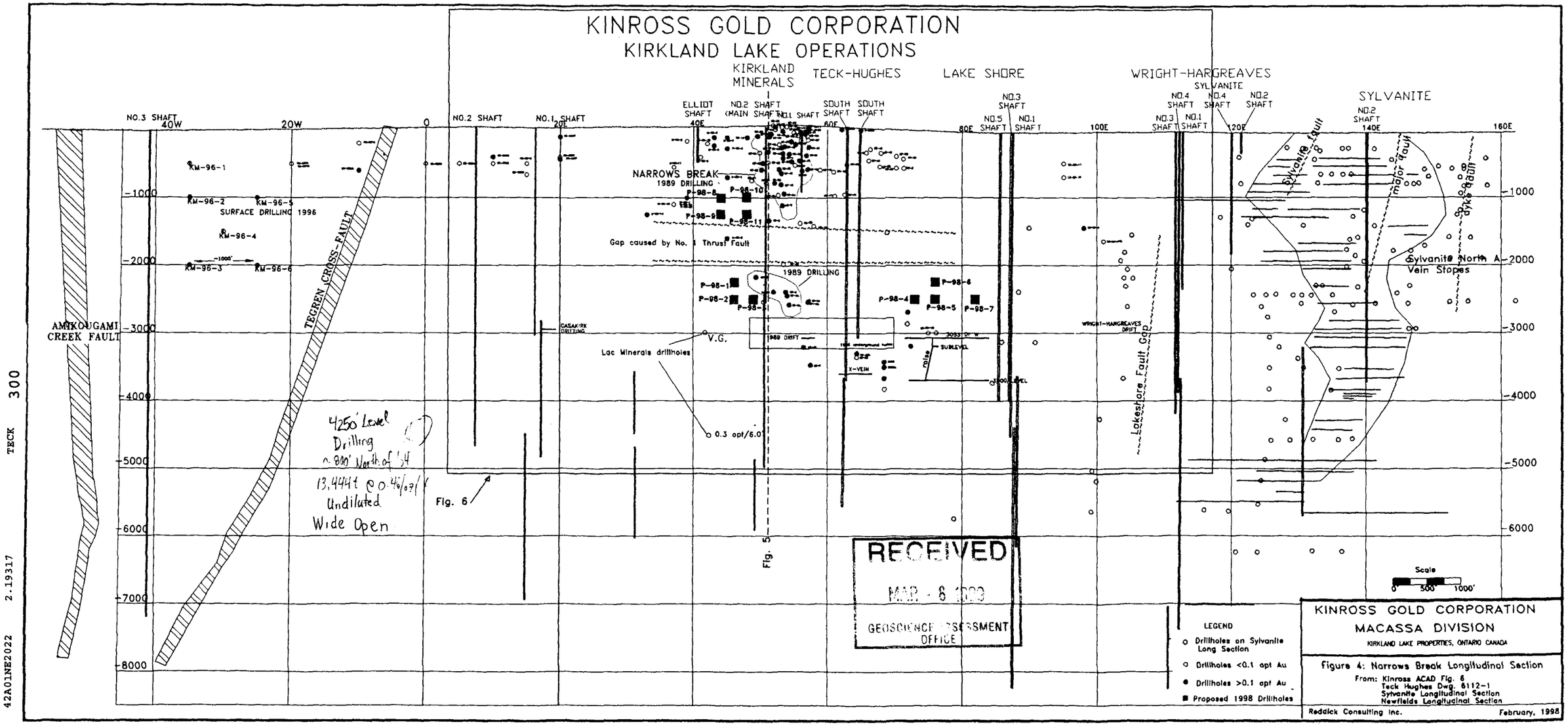
2.19317

KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
ELEVATION 800

DATE	DRAWN	DWG No	SCALE
4 MAR 99	DATAMINE		1:20

42A01NE2022 2.19317 TECK 280


CASAKIRK
TAILINGS
Kirkland Lake
"BROWN ALTERED ZONE"
"BAZ"
KIRKLAND LAKE GOLD
CHIR ASSAYS - 570' @ 0.118 / 6.6'
#29 VEIN
TECK-HUGHES
TAILINGS
TAILINGS
KIRKLAND BASIN
FEDERAL KIRKLAND
Goldhunter
NARROWS BREAK
TAILINGS
TAILINGS
#1 SHAFT
ORR SHAFT
#3 SHAFT
#1 SHAFT
NARROWS BREAK
TAILINGS
SYLVANITE
Queenston
MAIN BREAK ORE DRIFT
#1 SHAFT
ELLIOTT SHAFT
#1 WINZE MAIN BREAK ORE DRIFT
#2 SHAFT
#2 SHAFT
CENTRAL SHAFT #5 SHAFT
#3 SHAFT
LAKESHORE FAULT
MAIN BREAK
WRIGHT-HARGREAVES
TOBURN
MACASSA
TAILINGS
MAIN BREAK
SOUTH SHAFT
#1 SHAFT
LAKESHORE Highway 66
TAILINGS
Kirkland Lake Townsite
TAILINGS
KIRKLAND LAKE GOLD
AMALGAMATED KIRKLAND
Edenroc
290
TECK
2.19317
42A01NE2022
RECEIVED
MAR - 6 1998
GEOSCIENCE ASSESSMENT OFFICE
SCALE
0 500' 1000' 2000' 3000'
KINROSS GOLD CORPORATION
MACASSA DIVISION
KIRKLAND LAKE PROPERTIES, ONTARIO CANADA
SURFACE and 3075 ft. LEVEL
NARROWS BREAK
Figure 2: Property/Claim Boundaries
From: Kinross Files
Teck Newfields Surface Plan
Reddick Consulting Inc.
February, 1998

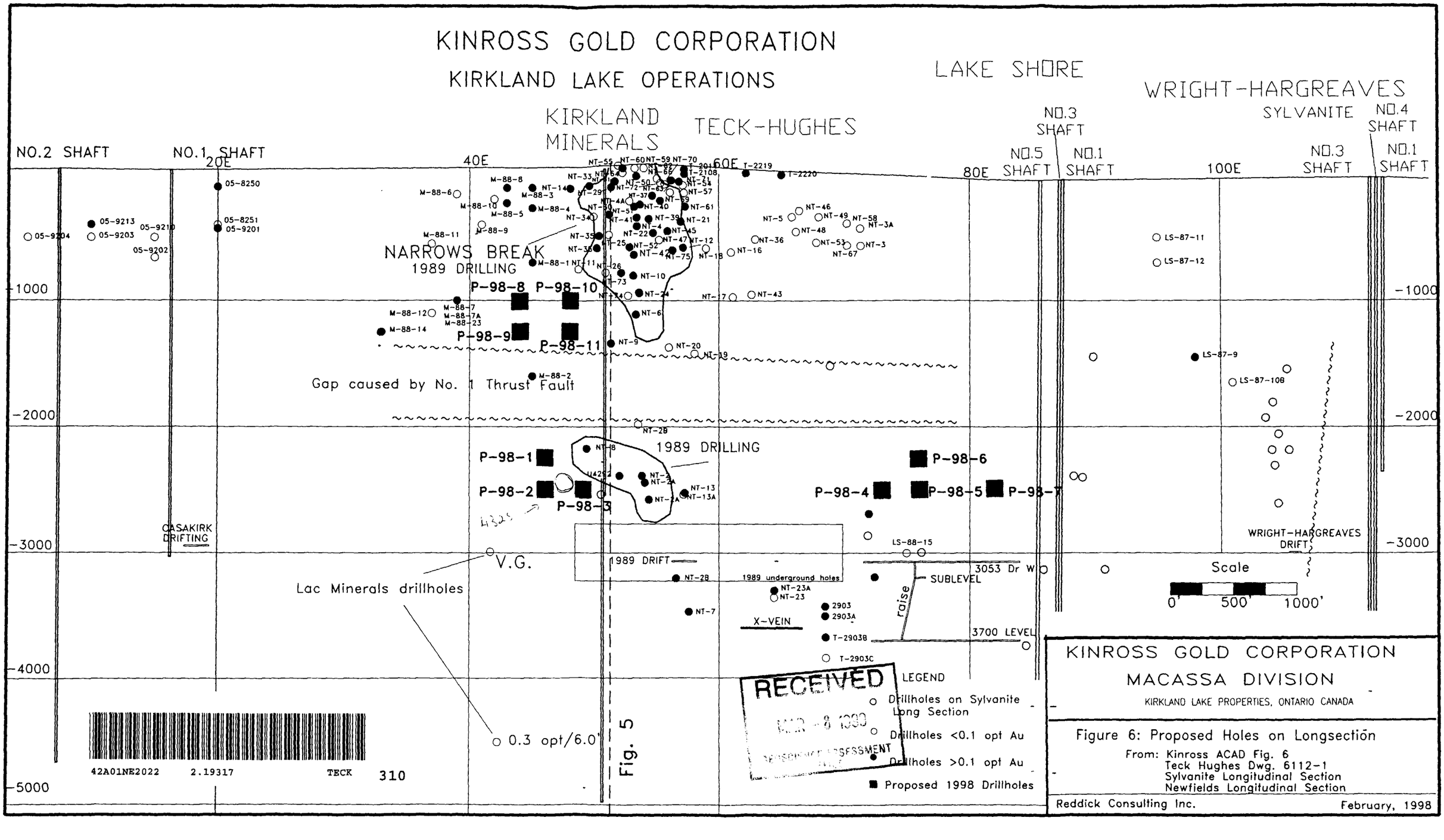


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MAR - 6 1998
GEOSCIENCE ASSESSMENT OFFICE

TECK 300
42A01NE2022 2.19317

KINROSS GOLD CORPORATION

KIRKLAND LAKE OPERATIONS



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RESOURCE ASSESSMENT

42A01NE2022 2.19317 TECK 310

Fig. 5

KINROSS GOLD CORPORATION

MACASSA DIVISION

KIRKLAND LAKE PROPERTIES, ONTARIO CANADA

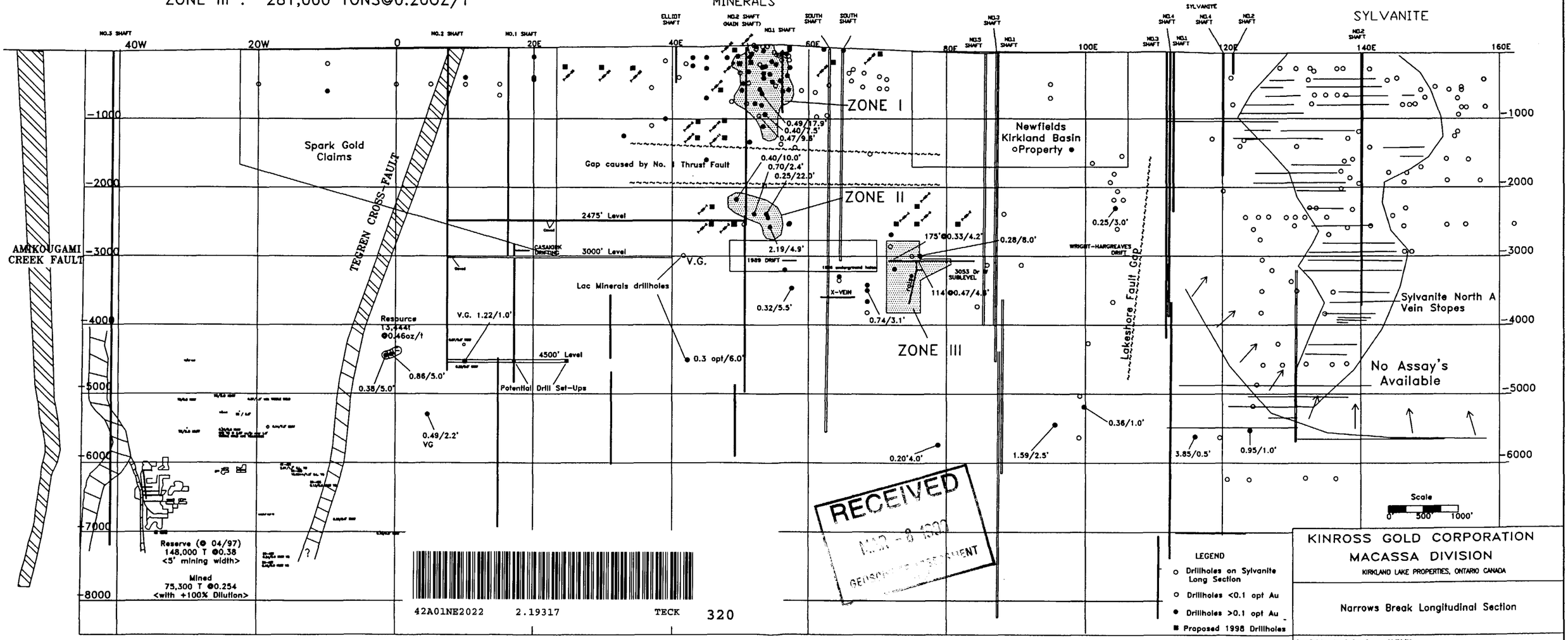
Figure 6: Proposed Holes on Longsection

From: Kinross ACAD Fig. 6
Teck Hughes Dwg. 6112-1
Sylvanite Longitudinal Section
Newfields Longitudinal Section

Reddick Consulting Inc. February, 1998

KINROSS GOLD CORPORATION
KIRKLAND LAKE OPERATIONS

ZONE I : 275,000 TONS@0.18OZ/T
ZONE II : 100,000 TONS@0.25OZ/T
ZONE III : 281,000 TONS@0.20OZ/T



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MAR - 9 1998
GEOSCIENCE ASSESSMENT

42A01NE2022 2.19317 TECK 320

LEGEND
- o Drillholes on Sylvanite Long Section
- o Drillholes <0.1 opt Au
- • Drillholes >0.1 opt Au
- ■ Proposed 1998 Drillholes

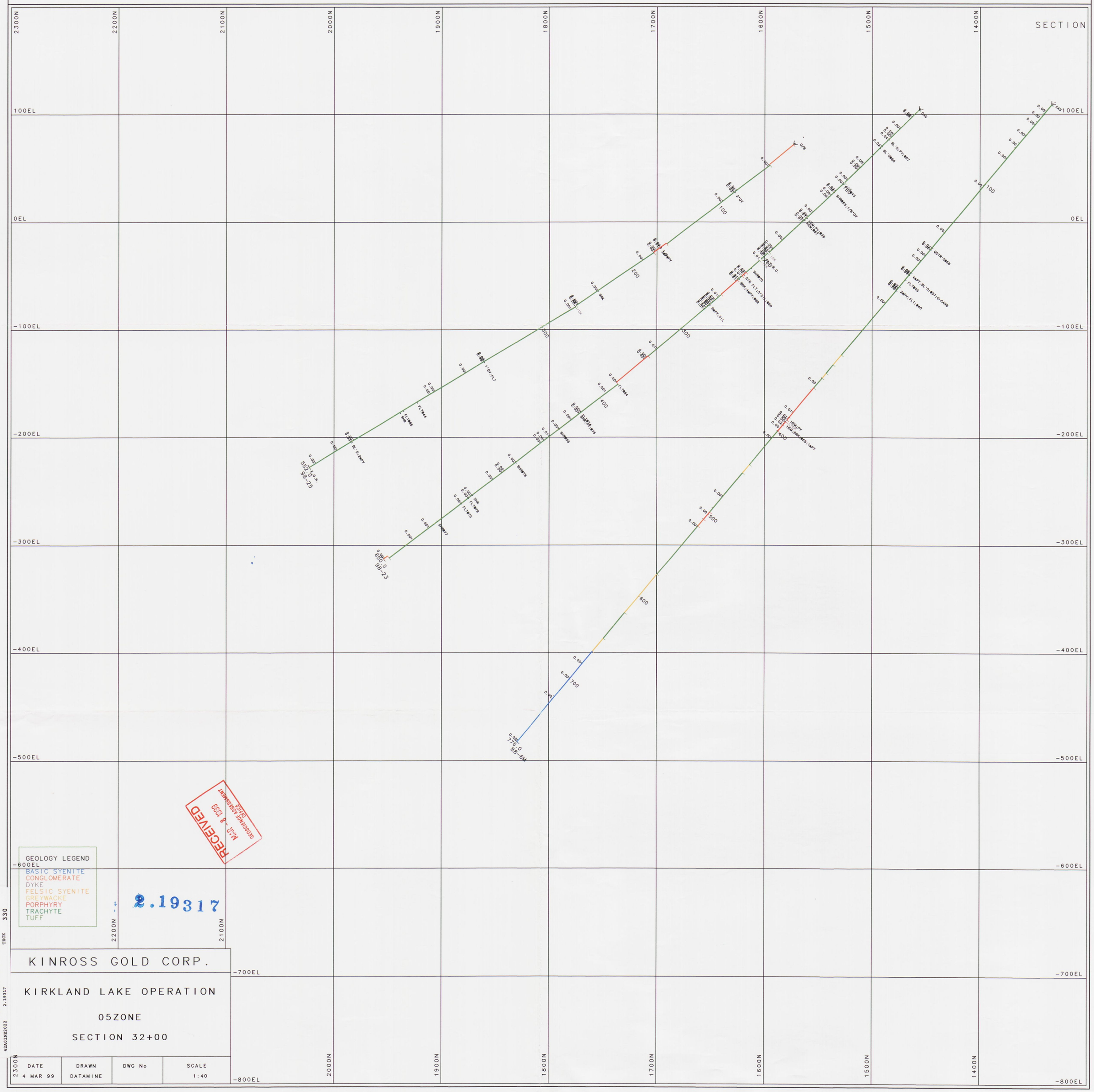
KINROSS GOLD CORPORATION
MACASSA DIVISION
KIRKLAND LAKE PROPERTIES, ONTARIO CANADA

Narrows Break Longitudinal Section

Compiled by : Ian C. Russell 26/06/98

PLAN

SECTION



GEOLOGY LEGEND

- BASIC SYENITE
- CONGLOMERATE
- DYKE
- FELSIC SYENITE
- GREYWACKE
- PORPHYRY
- TRACHYTE
- TUFF

RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT
OFFICE

2.19317

KINROSS GOLD CORP.

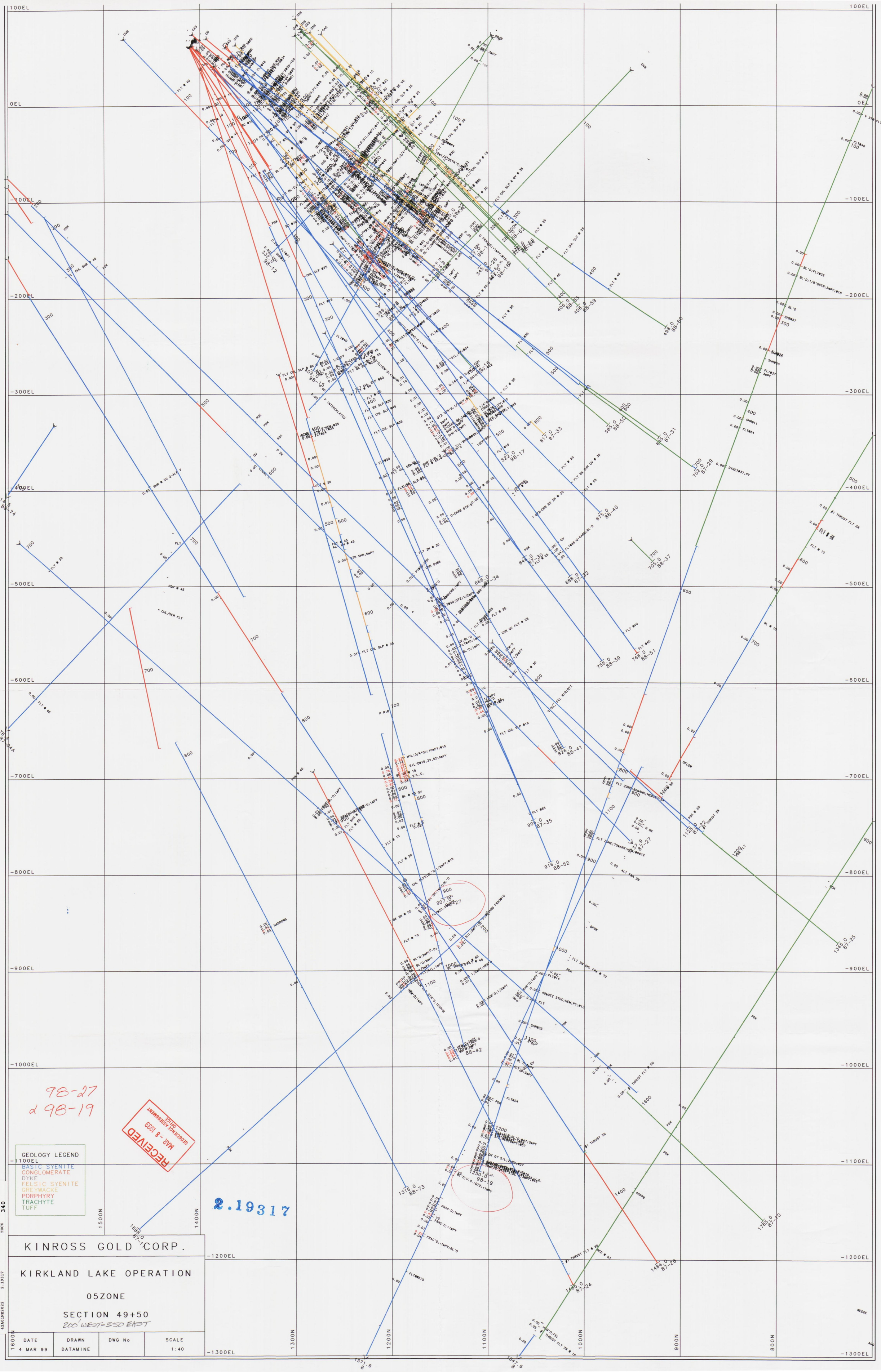
KIRKLAND LAKE OPERATION

05ZONE

SECTION 32+00

DATE	DRAWN	DWG No	SCALE
4 MAR 99	DATAMINE		1:40

TECK 330
42A01NE2022 2.19317


100EL
0EL
-100EL
-200EL
-300EL
-400EL
-500EL
-600EL
-700EL
-800EL
-900EL
-1000EL
-1100EL
-1200EL
-1300EL
1500N
1400N
1600N
1300N
1200N
1100N
1000N
900N
800N
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 49+50
200' WEST-350 EAST
DATE
4 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:40
98-27
& 98-19
RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT
OFFICE
2.19317
42A01NE2022 2.19317 TBCK 340

PLAN

SECTION

GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF

RECEIVED
MAR - 8 1999
GEOSCIENCE ASSESSMENT
OFFICE

2.19317

KINROSS GOLD CORP.

KIRKLAND LAKE OPERATION

05ZONE

SECTION 62+00

DATE	DRAWN	DWG No	SCALE
4 MAR 99	DATAMINE		1:40

TECK 350
42A01NE2022 2.19317

4875

4850

87-28

87-33

87-34

1500

1400

1300

1200

1100

PLAN

1500N

1400N

1300N

1200N

1100N

SECTION

100EL

100EL

0VB

462.4
87-28

0EL

0EL

-100EL

-100EL

-200EL

-200EL

400

462.1
87-33

-300EL

-300EL

GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF

RECEIVED
MAR 8 1999
GEOSCIENCE ASSESSMENT
OFFICE

2.19317

KINROSS GOLD CORP.

KIRKLAND LAKE OPERATION

05ZONE

SECTION 48+50

DATE	DRAWN	DWG No	SCALE
3 MAR 99	DATAMINE		1:20

-400EL

1400N

1300N

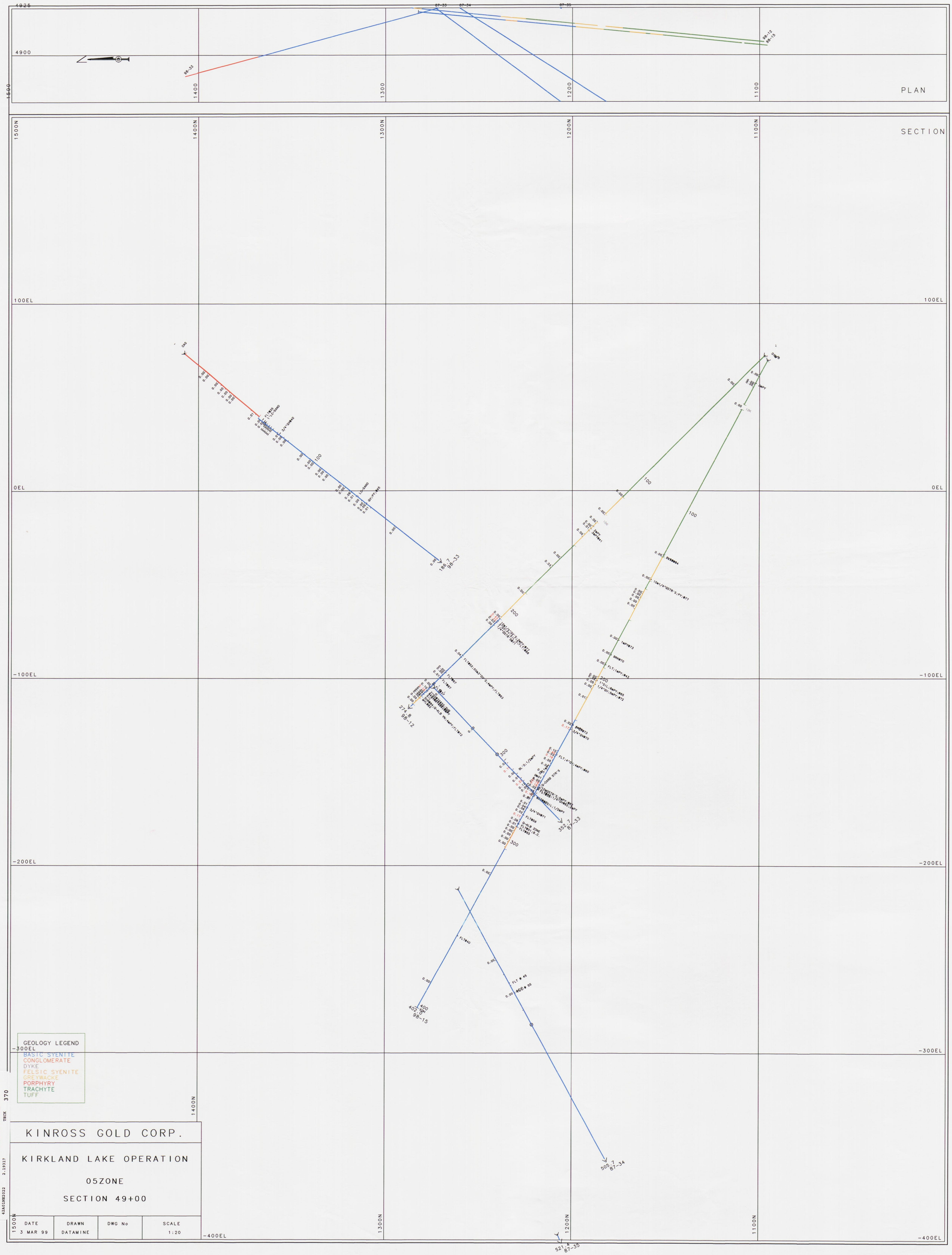
1200N

1100N

0.00
0.06 SHR' D.BL.' D
0.10 FLT @ 45;D-CARB STR'S
0.00
0.00

557.6
87-34

TECK 360
42A01NE2022 2.19317


4925
4900
98-33
87-33
87-34
87-35
98-12
98-15
PLAN
1500
1400
1300
1200
1100
1500N
1400N
1300N
1200N
1100N
SECTION
100EL
0EL
-100EL
-200EL
-300EL
-400EL
CAS
1;LC-SAND
3/4"QV@40
LC-SAND
QV;PY;@45
186.7
98-33
100
200
300
400
FLT@67
FLT@83
FLT@72
274.8
98-12
FLT@68
FLT@65
FLT@40
FLT @ 45
402.5
98-15
505.7
87-34
521.4
87-35
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 49+00
DATE
3 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:20
370
TECK
2.19317
42A01NE2022

PLAN

SECTION

1500N 1400N 1300N 1200N 1100N

100EL 0EL -100EL -200EL -300EL -400EL

4975 4950 1500

87-387-34 87-35 88-56 87-30 87-29 98-32 98-12 98-30

GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF

KINROSS GOLD CORP.

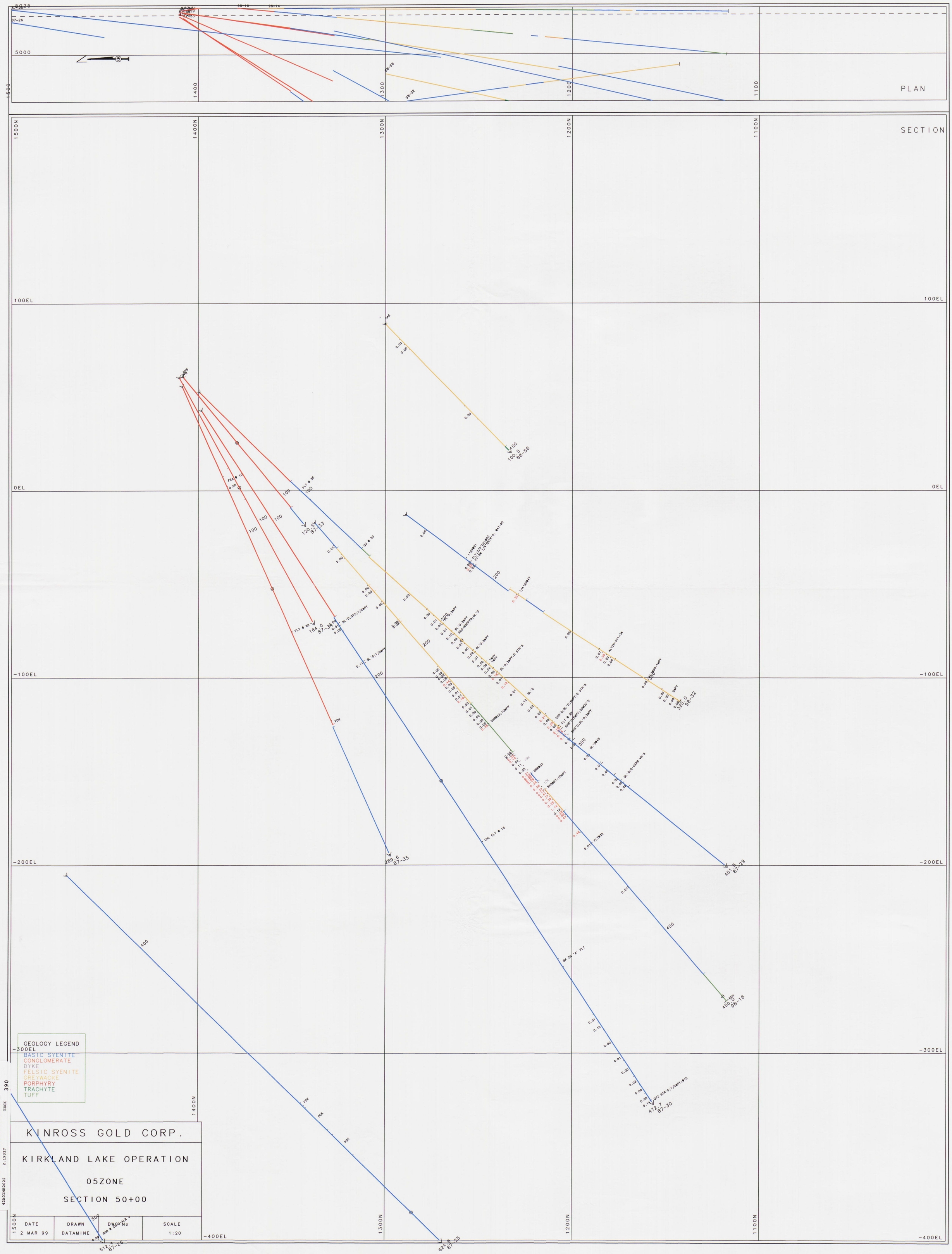
KIRKLAND LAKE OPERATION

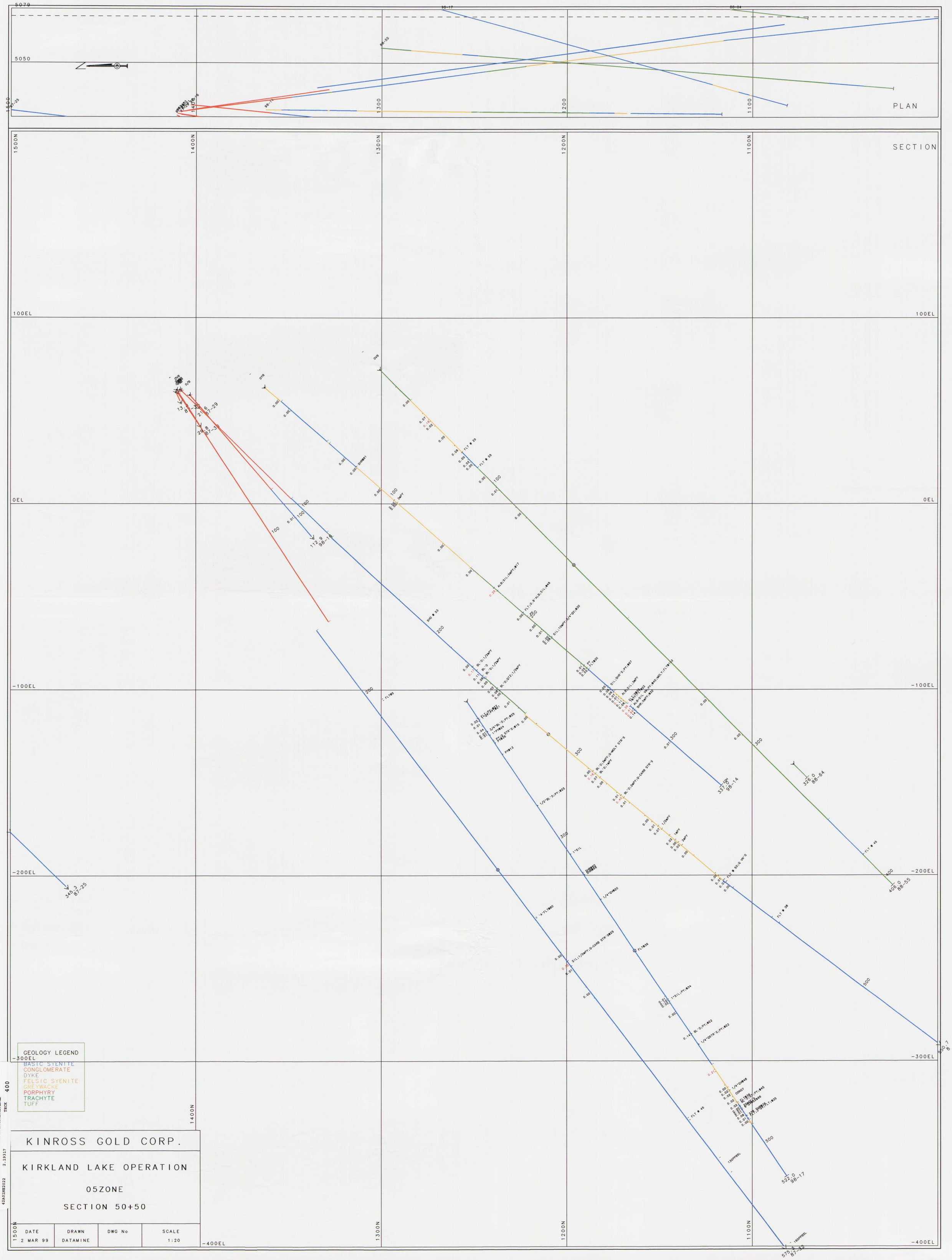
05ZONE

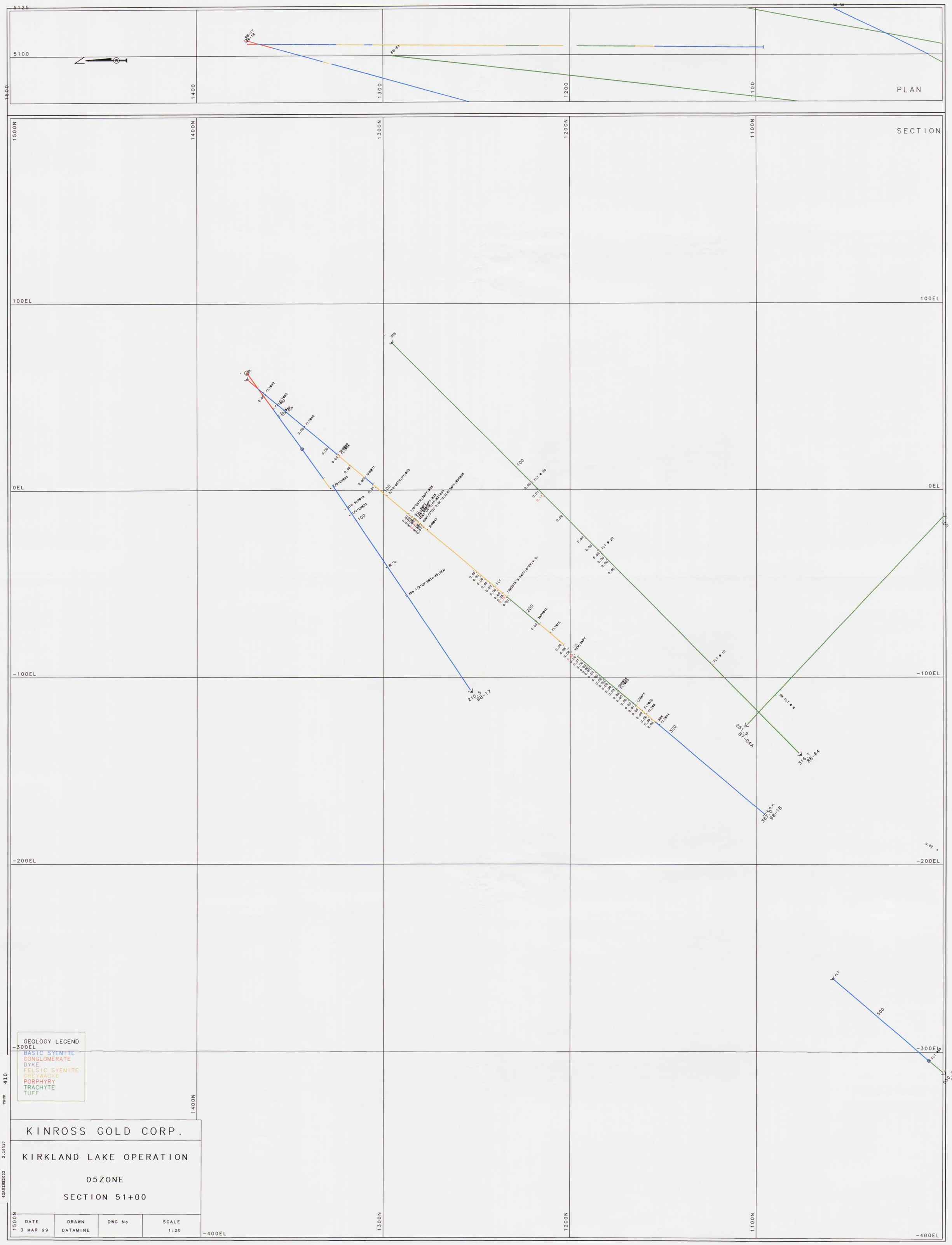
SECTION 49+50

DATE	DRAWN	DWG No	SCALE
3 MAR 99	DATAMINE		1:20

TECK 380 42A01NE2022 2.19317


PLAN
SECTION
1500
1400
1300
1200
1100
5025
5000
87-26
98-10
98-14
86-36
98-32
1500N
1400N
1300N
1200N
1100N
100EL
0EL
-100EL
-200EL
-300EL
-400EL
100.0
88-56
120.5
87-33
164.0
87-34
289.6
87-35
401.8
87-29
320.0
98-32
450.0
98-16
472.7
87-30
512.4
87-26
624.8
87-25
FLT • 35
FLT • 60
FLT • 15
DYK • 50
FRM • 10
PDK
BX ZN 'A' FLT
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 50+00
DATE
2 MAR 99
DRAWN
DATAMINE
SCALE
1:20
TECK
42A01NE2022 2.19317 390


PLAN
SECTION
5070
5050
1500N
1400N
1300N
1200N
1100N
100EL
0EL
-100EL
-200EL
-300EL
-400EL
98-17
88-04
88-55
98-14
98-16
87-29
87-25
87-32
88-64
88-35
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 50+50
DATE
2 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:20
42A01NE2022 2.19317 TERCK 400


5125
5100
1500
1400
1300
1200
1100
PLAN
SECTION
1500N
1400N
1300N
1200N
1100N
100EL
0EL
-100EL
-200EL
-300EL
-400EL
88-56
88-17
88-18
88-64
87-04A
98-17
98-18
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 51+00
DATE
3 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:20
TECK
410
42A01NE2022
2.19317

PLAN

SECTION

5175

5150

1500

1400

1300

1200

1100

1500N

1400N

1300N

1200N

1100N

100EL

0EL

-100EL

-200EL

-300EL

-400EL

GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF

KINROSS GOLD CORP.

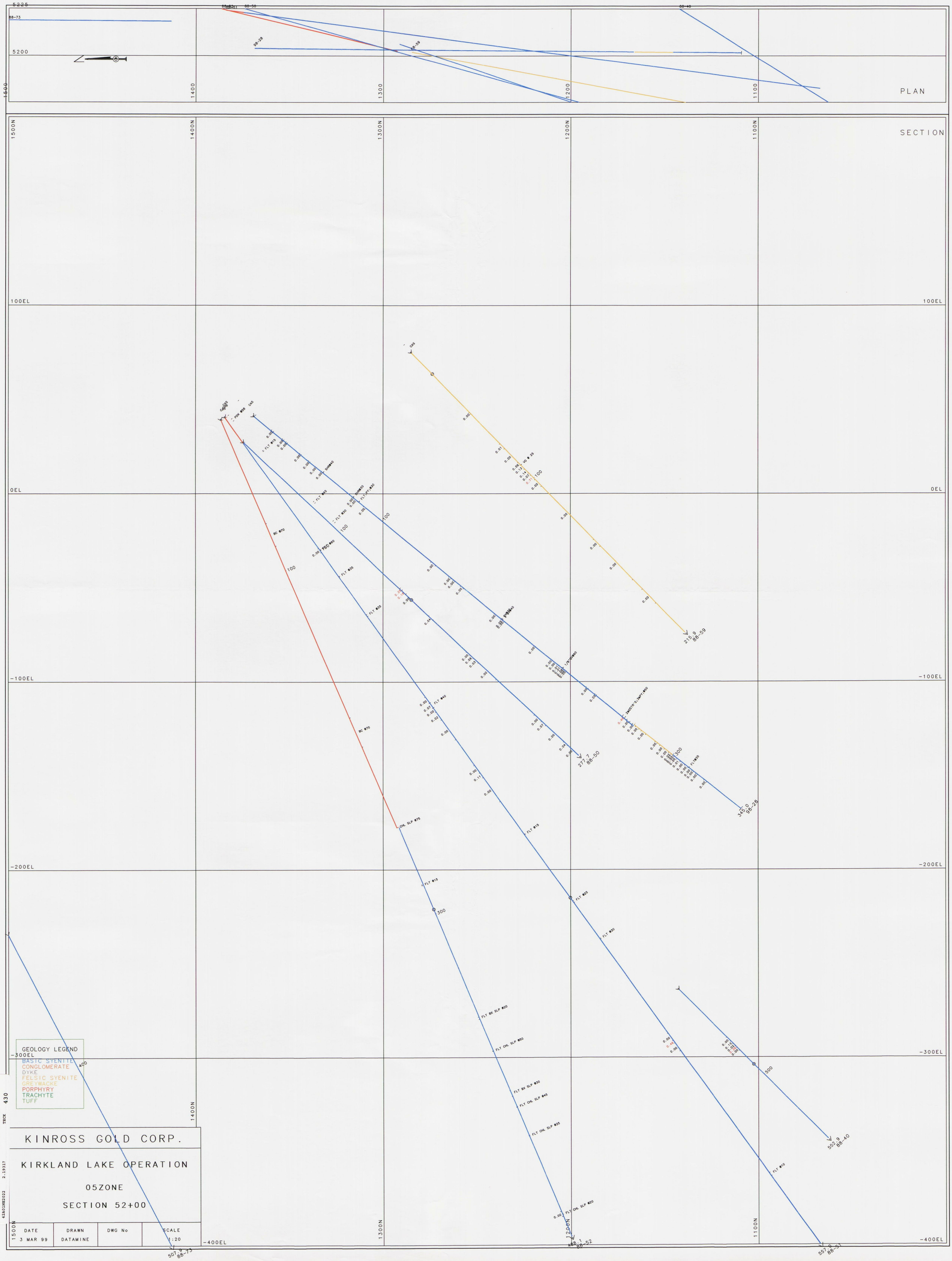
KIRKLAND LAKE OPERATION

05ZONE

SECTION 51+50

DATE	DRAWN	DWG No	SCALE
3 MAR 99	DATAMINE		1:20

420 TECK 2.19317 42A01NE2022


5225
88-73
5200
98-28
88-59
88-50
88-40
1500
1400
1300
1200
1100
PLAN
1500N
1400N
1300N
1200N
1100N
SECTION
100EL
0EL
-100EL
-200EL
-300EL
-400EL
CAS
FDK #50
FLT #15
FLT #45
FLT #30
FLT #35
FLT #40
FLT #25
FLT #10
FLT BX SLP #20
FLT CHL SLP #50
FLT BX SLP #30
FLT CHL SLP #45
FLT CHL SLP #35
FLT CHL SLP #20
BC #70
CHL SLP #75
FBD #60
VG #25
SWM #10
SWM #40
SWM #20
SWM #30
FLT #35
2NDSTR'S;3RPY;#50
507.9
88-73
345.0
98-28
277.7
88-50
215.9
88-59
557.9
88-51
557.9
88-40
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 52+00
DATE
3 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:20
TRCK 430
2.19317
42A01NE2022


5275
5250
88-42
88-62
88-43
88-27
88-50
1500
1400
1300
1200
1100
PLAN
1500N
1400N
1300N
1200N
1100N
SECTION
100EL
0EL
-100EL
-200EL
-300EL
-400EL
CAS
0.02
0.00
0.27
FLT @35
FLT @30
100
FLT @15
FLT @40
265.0
88-62
28.6
88-50
0.00
0.00
0.00
100
400
FLT @ 30
429.9
88-40
FLT:S*HEM:@25
STR FLT@35
FLT@24
FLT @ 20
0.00
0.00
0.00
461.1
88-42
465.3
98-27
0.04
0.27
0.32
0.00
500
506.2
88-41
GEOLOGY LEGEND
BASIC SYENITE
CONGLOMERATE
DYKE
FELSIC SYENITE
GREYWACKE
PORPHYRY
TRACHYTE
TUFF
KINROSS GOLD CORP.
KIRKLAND LAKE OPERATION
05ZONE
SECTION 52+50
DATE
3 MAR 99
DRAWN
DATAMINE
DWG No
SCALE
1:20
440
TECK
2.19317
42A01NE2022