REPORT

ON

NEWFIELDS MINERALS INC.

TECK TOWNSHIP

KIRKLAND LAKE, ONTARIO

REFERENCE: N.T.S. 42A/SE

BY: L. J. Cunningham, B.Sc., P. Eng.
Mining Engineer

Dated at KIRKLAND LAKE, Ontario

September 25 1985

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Newfields
September 1985

I N D E X

FIGURES:

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SUMMARY

The property is a gold prospect lying within the Town of Kirkland Lake and North of the highly productive Kirkland Lake Main Break. The potential of the property lies in finding viable gold deposits in structures lying north of and probably parallel to the Main Break.

The property consists of 11 patented or leased claims totalling 220 acres which are contiguous on the south to three former producers, - Sylvanite, Wright-Hargreaves, Teck Hughes, and to one present producer, the Lake Shore Mine. These 4 mines have produced 18.7 million ounces of gold.

At Kirkland, the favourable rocks are interbedded Temiskaming Group sediments and tuffs intruded by syenitic stocks. The stocks are not the source of the gold but were emplaced immediately prior to the gold-bearing hydrothermal activity with the result that fracturing in and adjacent to the intrusives was the preferred site for gold deposition.

Two principal stocks exist: - the Kirkland Lake and the Vindicator. The Kirkland Lake stock is tadpole shaped, 2,000 feet wide in the east and tapering to 400 feet in the west. 23,000,000 ounces of gold have been produced from fracturing within or near the margins of the stock. Ore was mined to a depth of 8,100 feet. The stock and the gold mineralization plunge to the west.

The Vindicator stock, which is less well understood because of limited investigation, has a similar strike and the width at the east end is the same but it apparently splits and tapers on the Newfields property. On surface gold mineralization associated with the Vindicator stock has been tested by mine development on the Federal property. On the 3075 level, in a crosscut driven across the Newfields property by Lake Shore Mines in the period 1936 - 40, gold mineralization (0.118 oz. gold per ton over 6.6 ft) was developed, for a length of 570 feet, within part of the Vindicator stock. An additional 9 veins, all of which show strong alteration and scattered low values, have been identified in the crosscut. The most northerly vein is a quartz stockwork, 60 ft in width showing similarities to the green carbonate ore (17,000,000 tons grading 0.27 oz. gold per ton) of Kerr Addison Mine.

Services (air, water, electricity) are not available on the 3075 level - hence drilling is not possible from underground and will not be possible for 2 - 3 years.

Surface drilling since 1930 - (4 holes by Westwind and 11 holes by Newfields for a total of 10,000 feet) - reveals a major change in rock types between surface and the 3075 foot level. Recent mapping of this level has revealed that the crosscut passed below an extensive debris flow exposed at surface and encountered only narrow

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mafic syenite dikes below the massive mafic syenite located on surface.

The numerous strong veins with pronounced alteration on the 3075 level, which have a potential strike length across the property of 4,000 feet and which are spread out over a distance of 1,600 feet (from north to south), warrant a major program of surface drilling and deep holes are required to probe the lower portion of the Vindicator stock and below the debris flow.

It is proposed to drill a series of holes, 2,000 feet in length or longer, to test the known vein systems at 400 foot intervals across the property. At least 2 holes will be required in each section.

The estimated cost of the proposed program is $1,000,000.00.

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INTRODUCTION - FIGURE 1

The property is a gold prospect lying within the Town of Kirkland Lake and north of the highly productive Kirkland Lake Main Break. The potential of the property lies in finding viable gold deposits in structures lying north of and probably parallel to the Main Break.

The property was originally known as Kirkland Basin Mines Limited. It has been investigated by trenching, surface and underground drilling and by a crosscut from the Lake Shore Mine. Significant gold mineralization was found but no production resulted. Remapping of the crosscut in 1985 identified numerous attractive drill targets.

This report recommends a major program of deep drilling to test the known structures.

The writer has lived and worked in Kirkland Lake for over 25 years and can claim extensive experience and knowledge of the type of gold mineralization being sought by Newfields Minerals Inc.

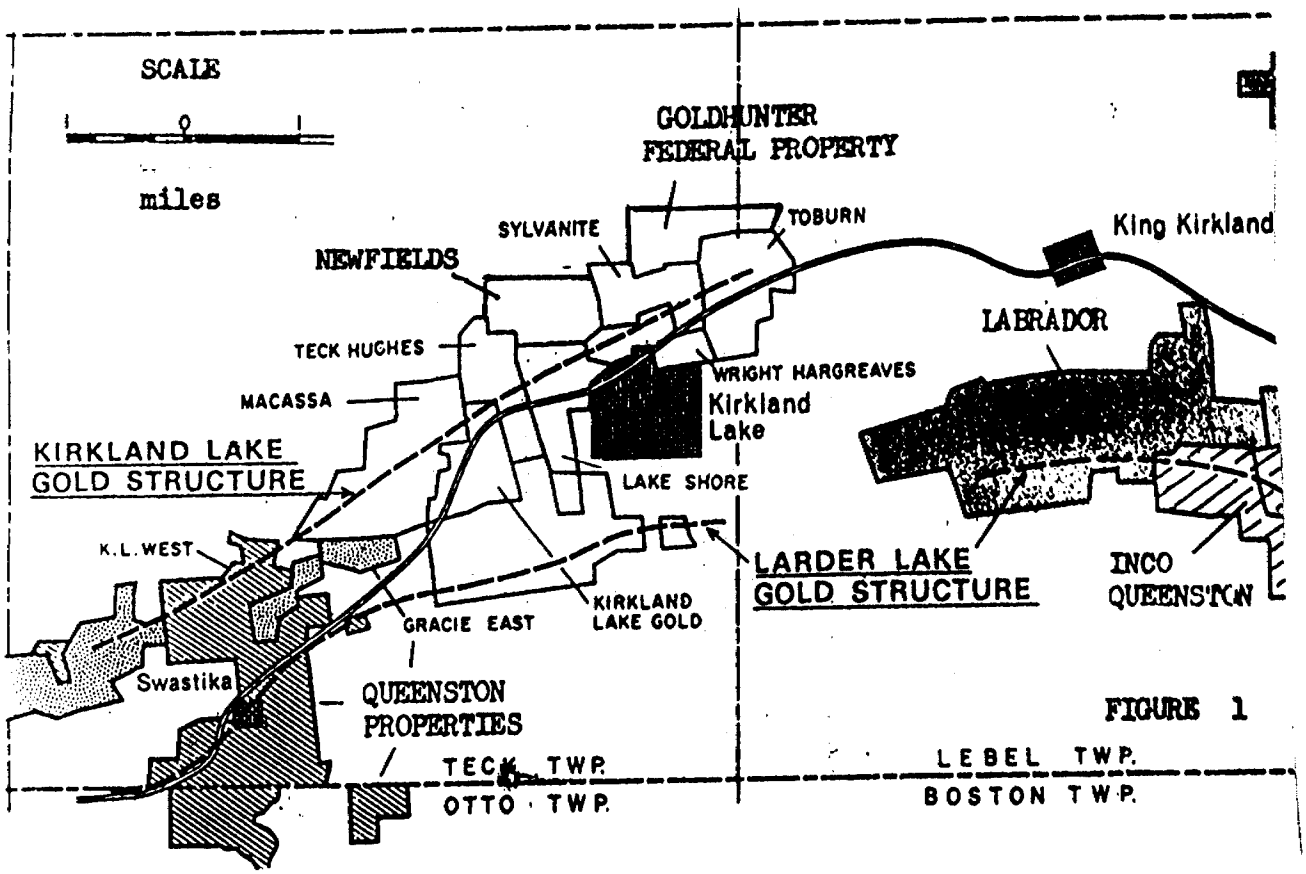

FIGURE 1

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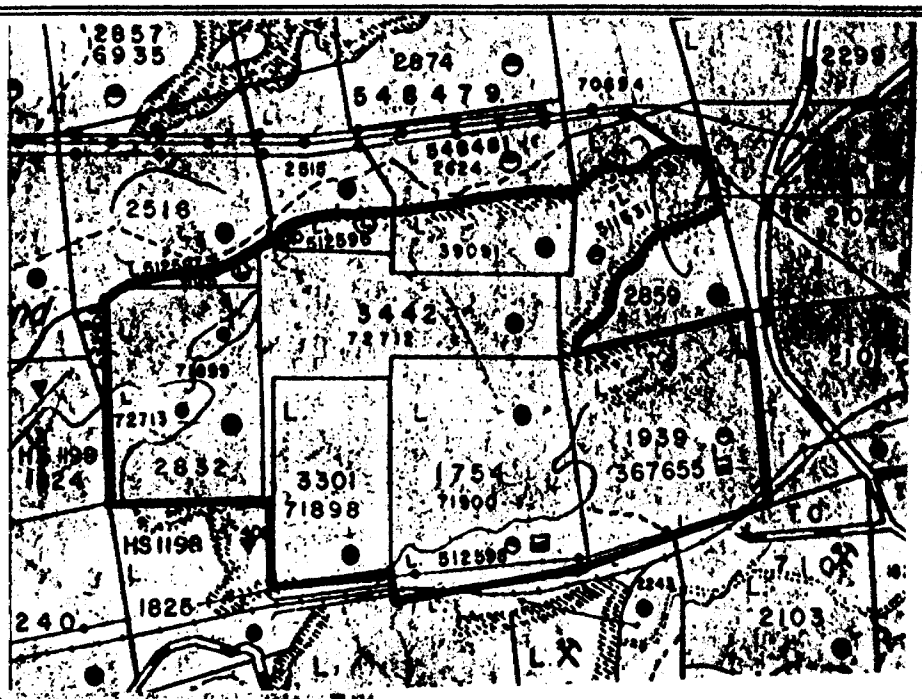
LOCATION & DESCRIPTION - FIGURE 2

The property lies in the northeast quarter of Teck Township, within the Town of Kirkland Lake, one mile north of Highway 66. Access is excellent. A paved road, known as the Goodfish Road, parallels the east boundary of the property. From this road 4 secondary gravel roads extend westerly into the property. The central part of the property is covered by tailings and water. West of the lake, the land portion of the property is accessible by secondary gravel roads which cross the Teck Hughes property. The Ontario Northland Railway extends along the south boundary of the property. Ontario Hydro power lines traverse the north and south parts of the property.

The property, located in the Township of Teck, contains some 221.87 acres in 11 contiguous mining claims as follows: -

PATENTED CLAIMS:	(6)	L71998	- 35.70	acres	
		L71899)			
		)	- 36.50	"	
		L72713)			
		L71900	- 31.00	"	
		L72712	- 32.40	"	
		L39091	- 15.00	"	140.60
LEASED CLAIMS:	(4)	L367655	- 40.03	acres	
		L512596	- 7.31	"	
		L512597	- 4.68	"	
		L512598	- 12.19	"	64.21
UNPATENTED CLAIMS:	(1)	L511631	- 17.06	acres	17.06
Lease pending					
TOTAL ACRES					221.87

All claims are held under option from Messrs. D. L. McKinnon and R. V. Rinaldi, both of Toronto. Surface rights are held by Eastmaque Gold Mines Ltd., of Toronto who are interested in the mill tailings that fill the lakebed. It is understood that all current pertinent taxes have been paid to date by Eastmaque but this has not been verified by the writer.



DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 20 CHAINS

DISPOSITION OF CROWN LANDS

PATENT, SURFACE AND MINING RIGHTS
" , SURFACE RIGHTS ONLY
" , MINING RIGHTS ONLY
LEASE, SURFACE AND MINING RIGHTS
" , SURFACE RIGHTS ONLY
" , MINING RIGHTS ONLY
LICENCE OF OCCUPATION

ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES
CANCELLED

CLAIM MAP

NEWFIELDS MINERALS INC.

TECK TWP.

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25 Sept. 1985

From:
Ontario M.N.R. Plan M.392

FIGURE 2

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LOCATION & DESCRIPTION

Titles to 10 of the 11 claims are registered in the name of the Guaranty Trust Company of Bay Street, Toronto who hold them in escrow for the Eastmaque Company and will perform a similar function for Newfields. Under the terms of the Eastmaque option agreement with McKinnon and Rinaldi, surface access to the tailings area is guaranteed within certain workable limits.

Claim L512598 is registered in the name of R. V. Rinaldi. It is not covered by the Eastmaque option agreement as no tailings occur on this parcel; the surface rights are held by a third party. Mr. Rinaldi has advised the writer that all current taxes have been paid.

The claims, all in the Township of Teck, are in the Larder Lake Mining Division. The Patented and Leased claims are registered with the Local Master of Titles in Haileybury, Ontario whereas the unpatented is still registered at the Office of the Mining Recorder in Kirkland Lake.

HISTORY

"Kirkland Basin Gold Mines Ltd., was incorporated in 1931, and was controlled by Kirkland Lake Gold Mining Co. Ltd. Part of the property was acquired from Pawnee-Kirkland Gold Mines Ltd. Considerable surface diamond-drilling was done before the property was optioned to Lake Shore Mines Ltd. in 1938. The agreement called for Lake Shore to drive a crosscut north through the property from the 3,075-foot level of the Lake Shore Mine.

The Annual Report of Lake Shore Mines Ltd.for the year ending 30 June 1940 listed 2,402 feet of crosscutting, 712 feet of drifting, and 12,049 feet of diamond-drilling performed on the Kirkland Basin property. A summary of the results stated that a number of gold-bearing fractures were exposed. Because the values encountered were erratic, no ore was developed." (Savage)

NOTE: Kirkland Basin Gold Mines owned only 4 of the present claim group.

The two easterly claims, 511631 and 367655, were originally (1928) known as the Vindicator property. Todd reports that a hole was drilled to test under the northeast arm of the lake. Brecciated porphyry and quartz were encountered but "gold values were unimportant". There is much evidence of old trenching on the Vindicator claims.

In 1960 Westwind Explorations Limited drilled 4 surface holes totalling 3,517 feet.

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Locations are known for all holes but logs are available for only holes 1 and 2. Brief comments are available for holes 3 and 4.

During 1984-5 Newfields Minerals Inc. mapped the surface outcrop, drilled 11 surface holes (5,355 feet) and remapped the mine workings on the 3075 level.

GENERAL GEOLOGY - FIGURES 3 and 4

All bedrocks in the immediate area are Archean. The oldest recognized are mafic volcanics of the Kinojevis Group. Mafic intrusive rocks (gabbro and diorite) form a minor part of the unit.

Overlying the Kinojevis Group with great unconformity is the Temiskaming Group. It is about 3,000 metres in thickness and consists of alkalic volcanic rocks interlayered with fluvatile sedimentary rocks.

The Temiskaming Group occupies a long linear synclinal trough extending for 150 miles from Val D'Or, Quebec to Matachewan, Ontario. It is thought to represent a rift system which was the depositional site for the sediments and the locus for trachytic volcanism which resulted in interbedded horizons of tuff and sediments with numerous syenitic stocks and dikes.

SURFACE GEOLOGY - FIGURES 5, 6 and 7

The property lies near the north contact of the syncline hosting the Temiskaming Group rocks which are usually an interlayered sequence of sediments and trachytic tuffs (with steep southerly dips and tops to the south) intruded by large, east-west striking approximately conformable bodies of mafic syenite and quartz-feldspar porphyry.

However, on the Newfieldsground extensive intrusive activity and the presence of a previously, unrecognized debris flow have altered the usual Temiskaming sequence.

Pillowed mafic volcanics, (north facing) of the Kinojevis Group, form the basement rocks. 400 feet of steeply dipping, often highly sheared, conglomerate overlie the volcanics. The contact is not exposed but is faulted and near vertical. A massive debris flow overlies the conglomerate and occupies the central part of the property. It is intruded by a 500 foot wide felsic dike (bi-modal quartz-feldspar-porphyry) in the east and by a 700 foot wide mafic syenite dike in the west. A massive mafic syenite unit which attains a thickness of 800 feet separates the debris flow from massive to thin bedded, fine grained trachytic tuffs. The tuffs which are 500 feet in thickness, steeply dipping, south facing,are overlain by conglomerate along the south boundary of the property. Two cross faults occur near the east boundary of the property. Faulting and shearing are intense in the conglomerates near the volcanic contact.

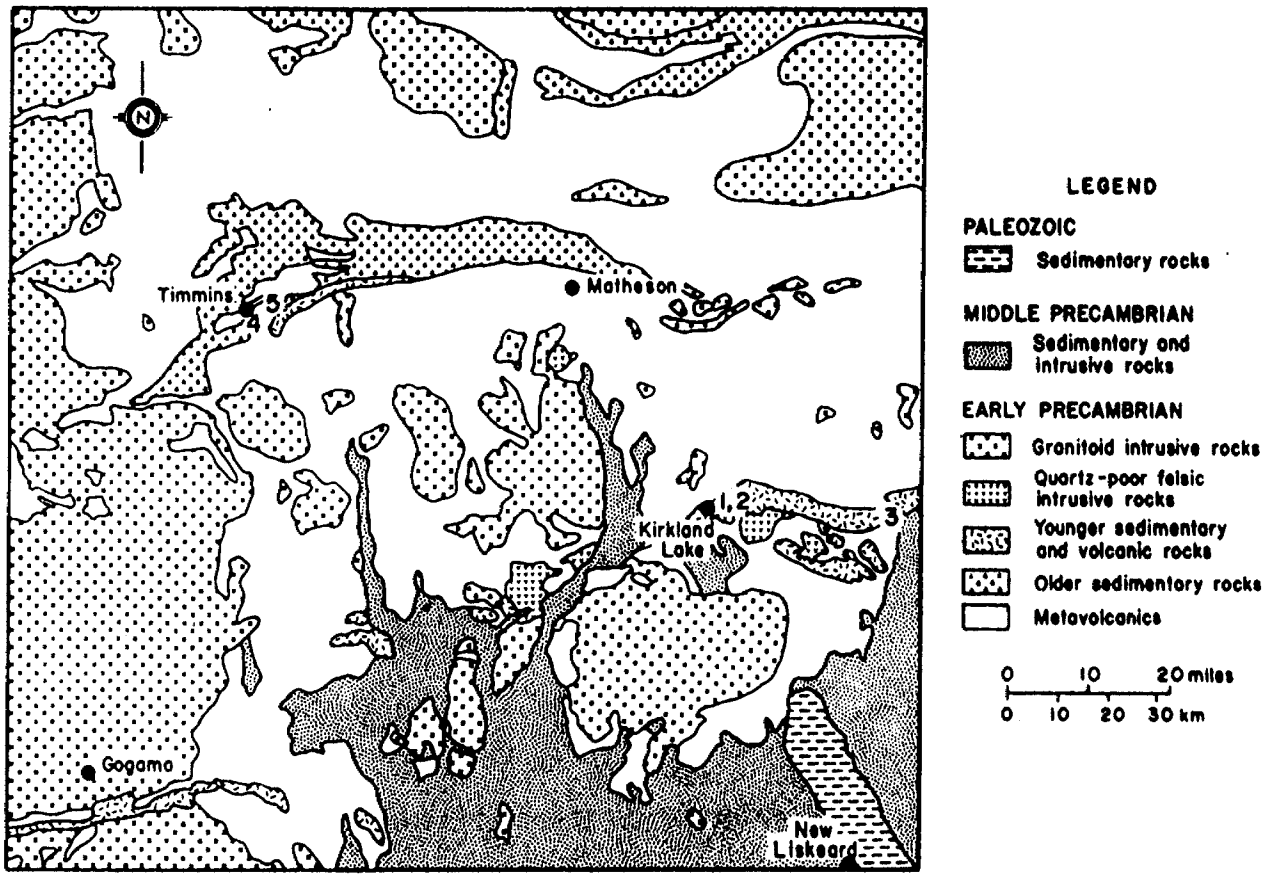

Figure 1. Generalized geology of the Abitibi greenstone belt.

Source - O.G.S. M.P. 116 1983

FIGURE 3

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1	Kirkland Lake "Break"	23 million oz. Gold (7 mines)
2	Upper Canada Mine	1.5 million oz. Gold
3	Kerr Addison-Chesterville	10 million oz. Gold
4	McGarry Gold Partnership	
5	McIvor-Tegren	
△	NEWFIELDS MINERALS INC.	

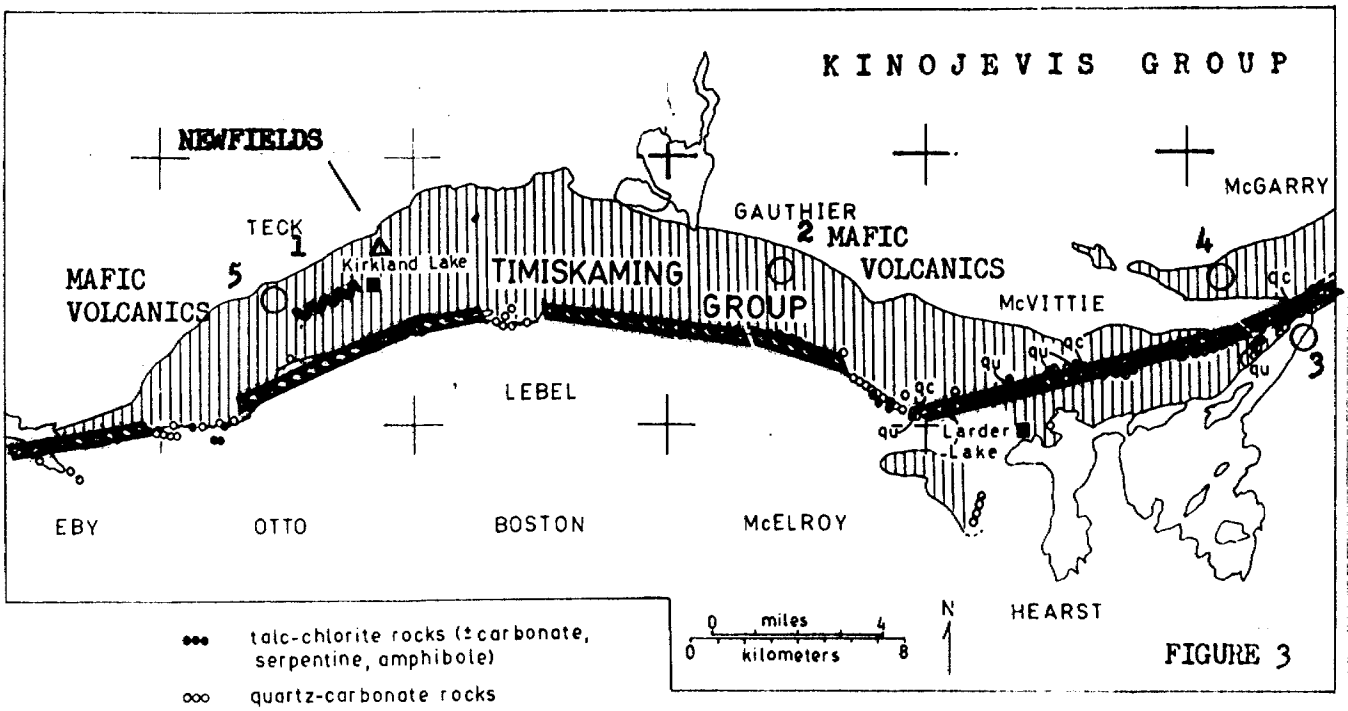


FIGURE 3

SOURCE: L. A. Tihor and J. H. Crocket, Report of Activities, Part A, Geological Survey of Canada Paper 77-1A (1977) Page 365 with modifications by L. J. Cunningham, B.Sc., P. Eng., Sept. '85

TEMISKAMING GROUP
KIRKLAND-LARDER AREA
ONTARIO

FIGURE 4

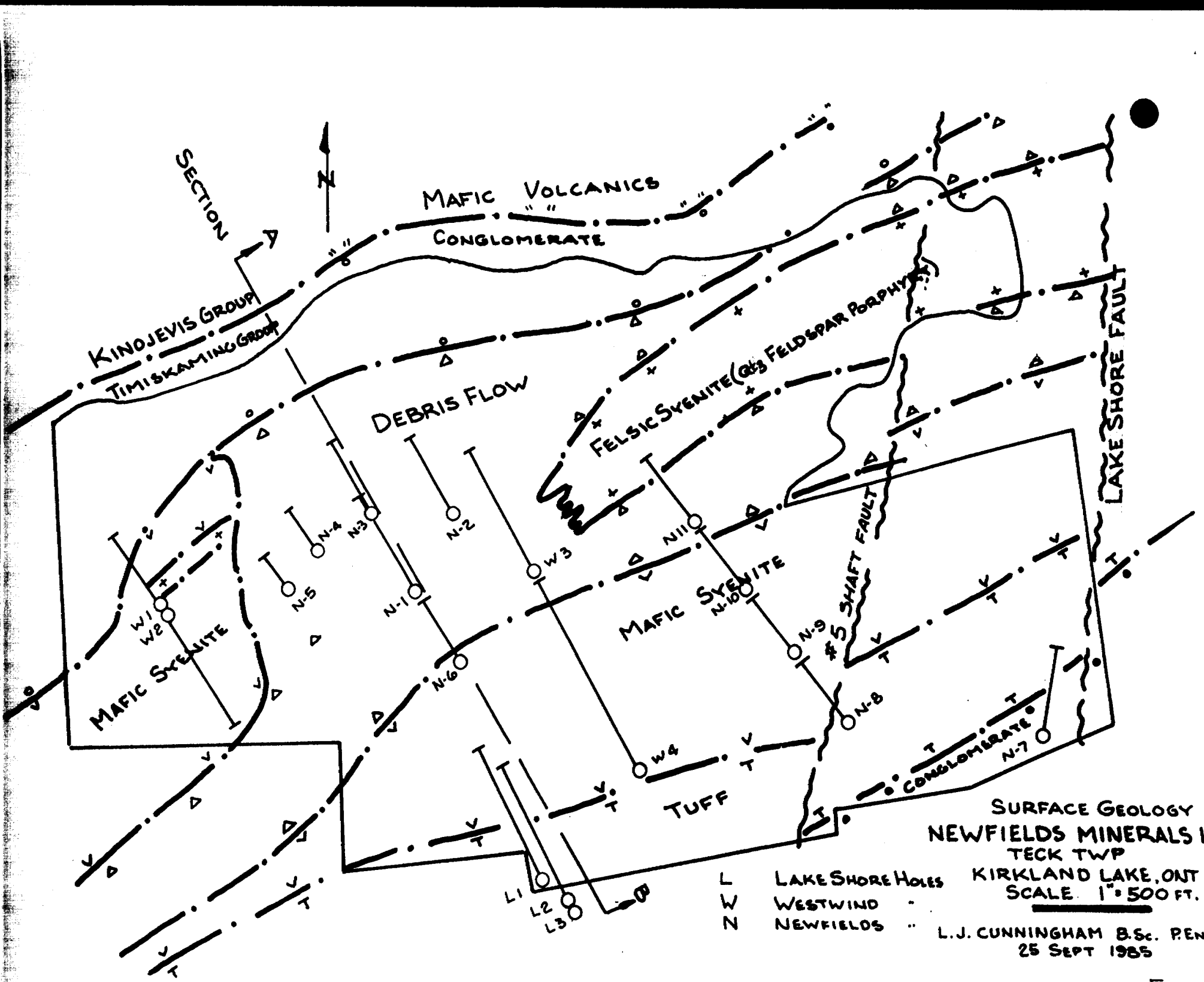
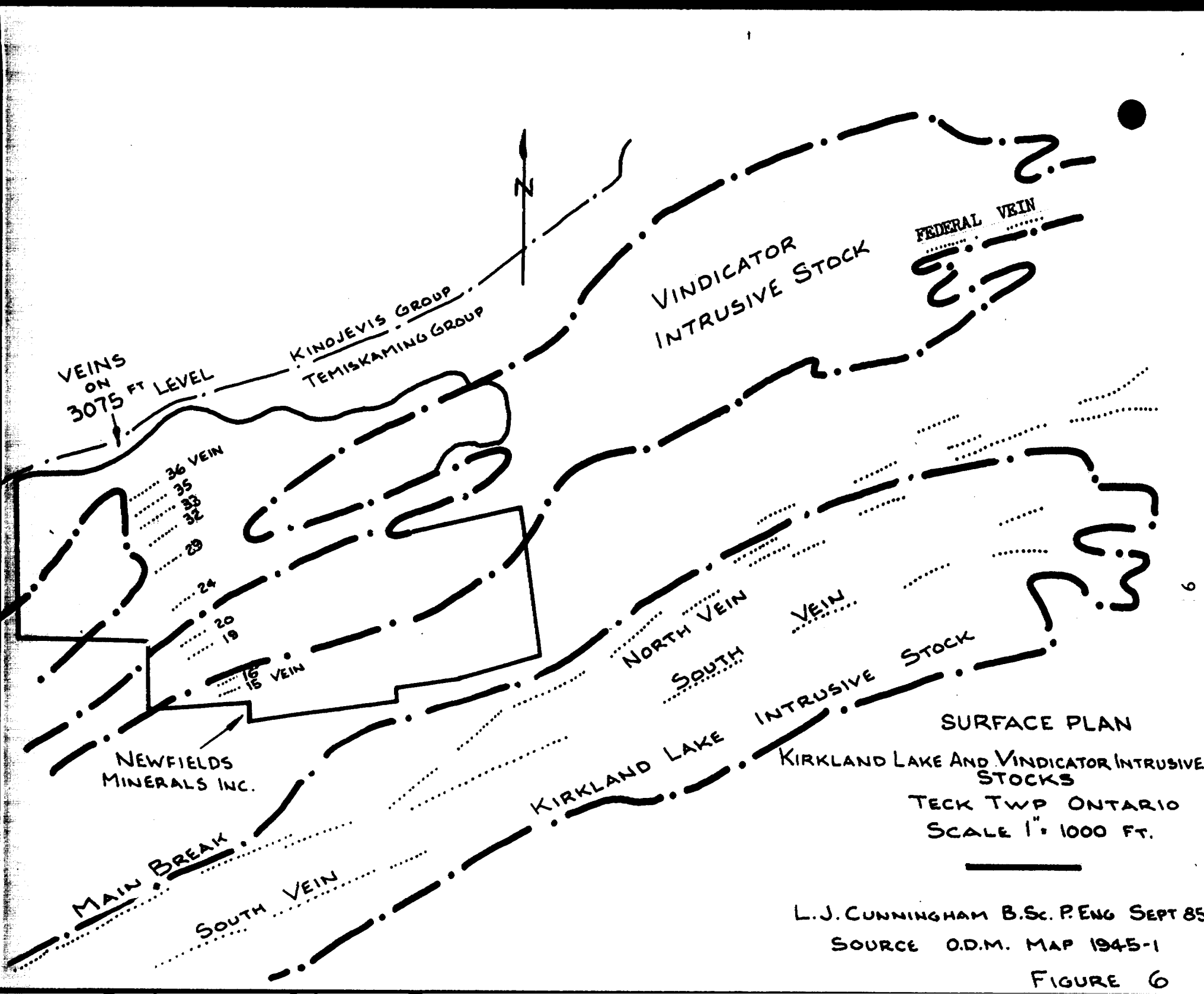

SECTION
N
MAFIC VOLCANICS
" "
CONGLOMERATE
KINOJEVIS GROUP
TIMISKAMING GROUP
DEBRIS FLOW
FELSIC SYENITE (Qtz FELDSPAR PORPHYRY)
LAKE SHORE FAULT
#5 SHAFT FAULT
MAFIC SYENITE
MAFIC SYENITE
TUFF
CONGLOMERATE
W1
W2
W3
W4
N-1
N-2
N-3
N-4
N-5
N-6
N11
N-10
N-9
N-8
N-7
L1
L2
L3
L LAKE SHORE HOLES
W WESTWIND "
N NEWFIELDS "
SURFACE GEOLOGY
NEWFIELDS MINERALS INC.
TECK TWP
KIRKLAND LAKE, ONT.
SCALE 1" = 500 FT.
L.J. CUNNINGHAM B.Sc. P.ENG
25 SEPT 1985

FIGURE 5



SURFACE PLAN

KIRKLAND LAKE AND VINDICATOR INTRUSIVE STOCKS

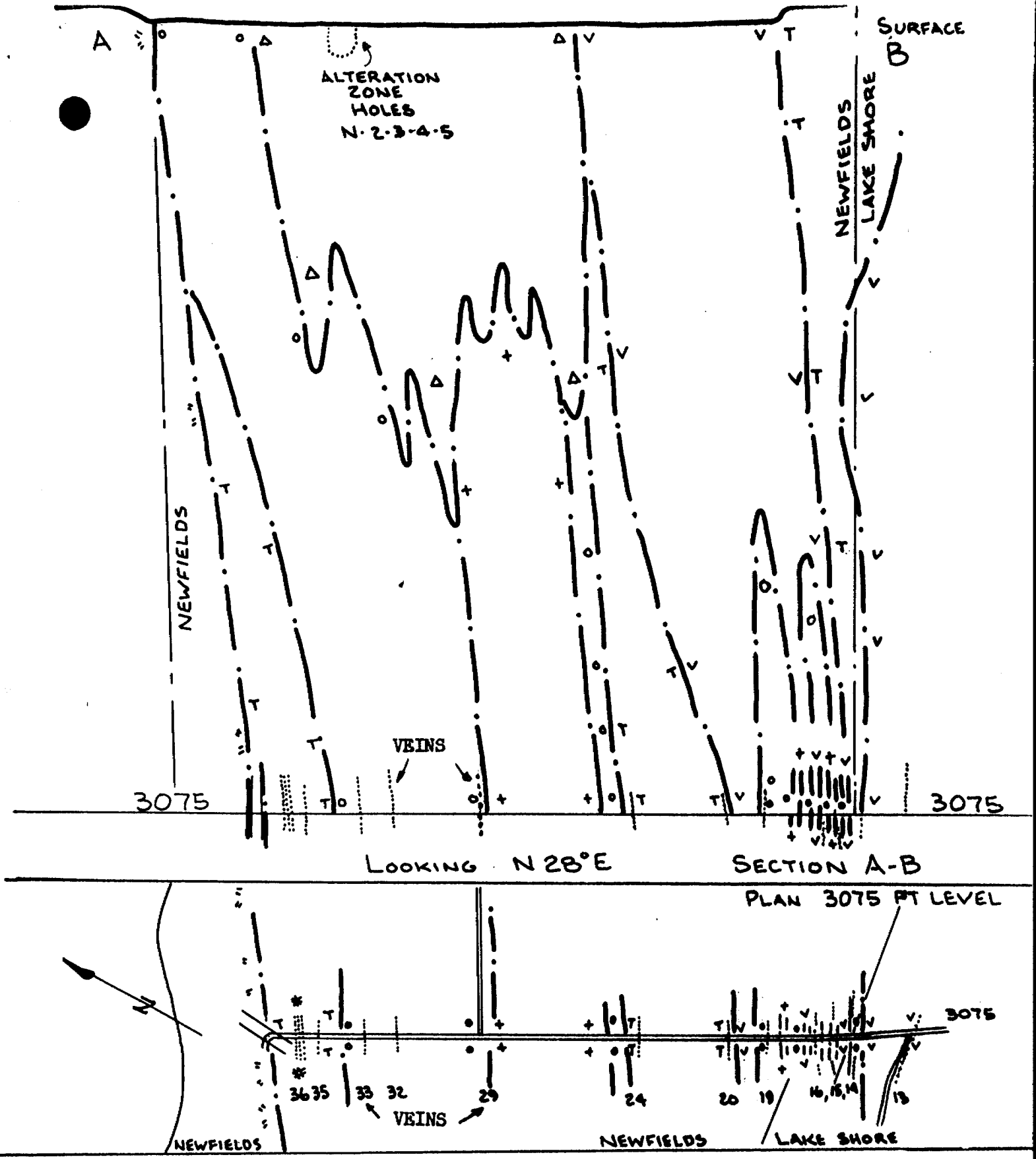
TECK TWP ONTARIO

SCALE 1" = 1000 FT.

L. J. CUNNINGHAM B.Sc. P.ENG SEPT 85

SOURCE O.D.M. MAP 1945-1

FIGURE 6



QUARTZ FELDSPAR PORPHYRY — + QFP

DIABASE

TUFF

MAFIC SYENITE

CONGLOMERATE

MAFIC VOLCANICS

PLAN & SECTION
NEWFIELDS MINERALS INC.
TECK TWP.
KIRKLAND LAKE ONT.
SCALE 1" = 500 FT.

L.J. CUNNINGHAM B.Sc. P.ENG.

FIGURE 7

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ember 1985

OGY OF THE 3075 FOOT LEVEL CROSSCUT - FIGURE 7

Two tuff horizons were intersected. The north tuff horizon is sub-vertical, feet wide and separated from the mafic volcanics by a 50 foot wide, fractured, steep, dipping diabase dike. The tuffs vary from a fine, massive, black ash tuff to hytic agglomerate with rounded and flattened clasts to 6" in size in a dark mafic ix.

It is overlain by 600 feet of massive conglomerate which contains horizons of tened pebbles and sections showing intense carbonate alteration.

A 500 foot dike of felsic syenite - a bi-modal quartz-feldspar dike - has intruded conglomerate isolating a narrow 50 foot layer of conglomerate on the south contact. dike is sub-vertical and is assumed to have steep southerly dip. Surface drilling aled that it does not extend to surface over the crosscut.

A south tuff horizon, 400 feet thick, overlies the conglomerate. It is massive ell bedded, sub-vertical and very fine grained.

A 50 foot wide mafic dike has intruded the south contact of the tuff separating rom conglomerate. This conglomerate unit extends to the south boundary of the erty and within this distance of 450 feet it is cut by two narrow mafic and two ow felsic syenite dikes. The north contact of the Kirkland Lake stock lies 200 south of the Newfields/Lake Shore boundary.

The south tuff horizon and the overlying conglomerates are probably correlative to similar units exposed on surface near the south boundary. The north tuff horizon rently wedged out at an unknown elevation against the mafic volcanics.

The wide north conglomerate unit is largely replaced by the debris flow at surface. elevation at which they intermingle is not known.

OMIC GEOLOGY

Charlewood describes the Main Ore Zone as follows:

"The mines of Kirkland Lake occur in a fault zone that strikes N67^{O}E and dips ply south. The fault and fracture system are principally in a composite syenite usion of which the axis also strikes N65^{O}E and dips steeply south. The syenites ude Timiskaming conglomerate, greywacke, and tuff.

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The sequence of geological events in the vicinity of the mines has been:

1. Folding of the Timiskaming series
2. Intrusion of the syenite stock
3. Thrust faulting
4. Ore deposition
5. Intrusion of diabase dikes
6. Post-ore faulting

The rocks of the Timiskaming series are relatively unsheared and unaltered except along the north and south margins and in the immediate vicinity of faults within the syncline.

The intrusive rocks of the camps, with the exception of diabase dikes, are host rocks for 95% of the ore."

Ore shoots occur over a strike length of 20,000 feet and to a depth of 8100 feet on the Main Break. The gold is associated with (i) simple, narrow quartz veins, (ii) quartz stock works and (iii) wide quartz breccia zones.

Two principal stocks exist, - the Kirkland Lake and the Vindicator stocks. The Kirkland Lake stock is tadpole shaped, 2,000 feet wide in the east and tapering to 400 feet in the west. 23,000,000 ounces of gold have been produced from fracturing within or near the margins of the stock. Ore was mined to a depth of 8,100 feet. The stock and the gold mineralization plunge to the west.

The Vindicator stock crosses the Newfields claims and underlies about 40% of the property. The mafic phase of the stock crosses the south half of the property as a dike averaging 800 feet in width in the central part and tapering to 300 feet in the west. This part of the stock shows a major reduction in size before reaching the 3075' level where it exists as several dikes with a total thickness of about 130 feet. Strong deformation, faulting and veining is evident in the 3075 foot level crosscut (i.e. under the intrusive). In the north half of the block a bi-modal quartz-feldspar-porphyry (QFP) dike, averaging 500 feet in width, is exposed on the east boundary and has been traced by drilling to the centre of the property where it apparently plunges steeply to the west - it was intersected in the 3075 foot level crosscut. Strong veining with persistent gold mineralization was investigated along the north contact of the QFP dike. To the east of Newfields property the QFP dike lies totally within the mafic syenite phase of the Vindicator stock. A separate mafic syenite lies on the west boundary - its relationship to the Vindicator stock is not known.

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ECONOMIC GEOLOGY

Since the revival in gold exploration considerable expenditures have been directed at identifying structures north of the known gold-bearing breaks within the Temiskaming Group of rocks between Kirkland Lake and the Quebec border.

During the last 5 years Lac Minerals Limited have conducted a major and continuing program of exploration on the McIvor claims and the north part of the Tegren property in a search for structures parallel and north of the Main Break. These properties lie 2 miles west of the Newfields property.

20 miles to the east in McGarry Township, McGarry Gold Partnership Ltd. has completed 30,000 feet of drilling and has commenced a further 30,000 foot drilling program to test structures within the Temiskaming Group of rocks near the north contact with Kenojevis volcanics at a site 2 miles north of the Kerr Addison Mine. Results have not been published.

VEIN DESCRIPTIONS

For 6 days in August and September, 1985,the 3075 foot level crosscut on Newfields property was available for mapping, courtesy of Lac Minerals Limited, which company has rehabilitated the Lake Shore No. 5 shaft to the 1800 foot level. Below the 1800 foot level the shaft is usable for inspection purposes only but there are no existing services (air, water, electricity). Mapping of the crosscut was handicapped by the lack of water because the walls and backs of all headings are covered by a film of dust and mud. However, by scaling, sufficient exposures were made to allow re-mapping.

No. 13 Vein (The Narrows Break) lies 200 feet south of the Newfields south boundary within the Lake Shore Mine. It is believed to be related to fracturing associated with the north contact of the Kirkland Lake stock. Lake Shore Mine tested the vein by 1,200 feet of drifting on the 3075 level and by raising for 800 feet from the 4200 level. Extensive areas of gold mineralization were encountered and several sections were tested by limited stoping. The resulting grade ranged from 0.1 to 0.27 oz. gold per ton which was well below the grade of 0.45 oz. gold per ton of the Main Break. No work was done on the Narrows Break after 1945. Drilling information on higher levels of the Lake Shore and Wright-Hargreaves Mines indicates that the Kirkland Lake stock bulges into the Newfields property. This suggests that the vein and possibly gold mineralization may be found on the Newfields' side of the line. At surface, the north contact of the Kirkland Lake stock lies 100 - 200 feet south of the Newfields' south boundary. If the Narrows vein has continuity and remains near the north contact of the Kirkland Lake stock, its position above the 3075 foot level will be close to the common

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Newfields/Lake Shore boundary.

Nos. 14, 15 & 16 Veins are all 2" - 12" wide, showing strong, dark red alteration (hematitization), silicification, brecciation and mylonitization. They are on dike contacts and locally are more promising targets than No. 13 Vein. They dip 50^{o} to 70^{o} north. Nos. 15 & 16 Veins lie within the Newfields ground within 100 feet of the south boundary. Locally they dip northerly but it is the writer's opinion that they are related to the Vindicator stock and should assume vertical to steep southerly attitude between the 3000 level and surface and thus remain within the Newfields ground. No. 14 Vein lies approximately 30 feet south of the Newfields south boundary. The writer believes that this vein will similarly assume a vertical to steep southerly dip and will enter Newfields property to retain its relationship to the Vindicator stock.

Note: Many veins within the Main Break show a tendency to curve and assume northerly dips but the overall trend is steeply south.

No. 19 Vein is located in conglomerate on a major fault structure which is also occupied by a narrow lamprophyre dike. The vein shows brecciated quartz-carbonate filling, strong, brick red alteration and a set of ladder (horizontal) quartz veins. Total width is 2 - 3 feet. 10 feet to the north is a strong, steeply north dipping 2' - 3' shear zone containing pods of quartz-carbonate and syenitic material. To the north of the fault lies an intensely brecciated, hydrothermally altered zone 40' wide with bright red to light colouring due to carbonatization, syenitization and quartz flooding. The irregular veining is both horizontal and vertical. The brecciation diminishes northward toward the mafic syenite intrusive.

No. 20 Vein This structure is located on a tuff/mafic syenite contact. Strong red hematitic alteration and silicification are associated with a prominent steeply north dipping structure 4" - 18" wide. Quartz is plentiful both as vertical and horizontal (ladder) veins.

Nos. 19 & 20 Veins are noted by Burke as being one of the targets in surface hole W-4. Burke refers to a zone of reddish alteration (approximately 600' below surface) as being the projected extension of the vein or veins.

No. 24 Vein This is a steeply dipping structure in tuff, 1' - 2' wide, with intense red alteration and silicification, occupied by irregular quartz and cut by a network of ladder veins. It is hosted by tuff but lies approximately 100 feet south of the south contact of the quartz-feldspar-porphyry dike.

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No. 29 Vein This vein was tested by Lake Shore Mines by 712 feet of drifting. It is a strong structure on the north contact of the quartz-feldspar-porphyry. The structure is also occupied by a 2 - 3 foot mafic syenite dike and a 6" - 12" pale green mafic dike, possibly lamprophyre. It consists of strong, fine fracturing over a width of 6 feet along which alteration has bleached the normally dark grey-green rocks to a pale tan colour. Fine pyritic is erratically distributed along the structure but the total amount is less than 1%. Quartz is not plentiful but occurs in pods and lenses which are a maximum of 6" wide and 10 feet long. The bleaching, which is readily apparent and spectacular, is erratic and wanders from one set of fractures to another. The total observed mineralization is low. In areas where high (1 oz. Au/ton) values are reported, a small amount of telluride was noted. The heading averaged 0.118 oz. gold per ton for a length of 570 feet over a width of 6.6 feet. Two holes are known to have tested the vein above and below the level. Near the east face of the drift where the vein can be observed entering the north wall, the alteration and fracturing remain strong and continuous. In 1960, Westwind drilled one hole, W-3, and in 1985 Newfields drilled 5 holes to seek the near surface continuation of this vein. All holes encountered strong alteration without veining or values. The QFP dike was not intersected. All holes were in debris flow. It is concluded that the veining and gold mineralization are controlled by the QFP which plunges westerly below the drilling. The holes are presumed to have intersected the alteration 'front' beyond the veining and gold mineralization.

No. 32 Vein This is a zone, 3' - 5' wide, of fine, hairy-like quartz-carbonate fractures parallel to the foliation which is steeply north. The host rock is fine grained and altered and may be a greywacke or a tuff. The enclosing rocks, both to the north and south, are conglomerates. Channel sampling by Lake Shore did not yield values but a pilot hole (drilled prior to the crosscut) cut 0.16 oz. gold per ton over 21 inches, and 0.04 oz. gold per ton over 18". A hole, No. 2547, located 200 feet to the east returned 0.14 oz. gold per ton over 26". A hole, located 300 feet to the west, did not report any values.

No. 33 Vein It lies in conglomerate and consists of 6" gouge with brick red alteration plus irregular quartz-carbonate veining. It is described by Lake Shore as a strong break. Values of 0.02 oz. gold per ton are reported.

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No. 35 Vein It lies in mafic tuff approximately 30 feet north of a faulted contact with conglomerate. It consists of 1.5 feet of intense alteration varying from pink to buff to black in colour. The rocks are fine grained, layered and silicified. Lake Shore Mines described the rock as "black cherty strata". The zone contains a swarm of irregular quartz veins and is sericitic. 3% to 5% pyrite is present. A small amount of molybdenite was observed with the sericite. Lake Shore reported channel samples of 0.12 oz. per ton over 3.0 feet. Check samples ran 0.1, 0.14 and 0.04 ozs. gold per ton. Sampling by Newfields Minerals in August, 1985 returned trace values.

No. 36 Zone This is a 60 foot wide (true width) vertical quartz stockwork in tuff. It contains 30% - 60% white quartz in a brown,carbonated matrix containing variable coarse pyrite from 1% to 5%. It is sericitic in part and molybdenite/graphite was observed on slips over a 3 - 5 foot section. A steep, south-dipping fracture within the zone shows a recognizable, finely disseminated, pink, cobalt bloom (erythrite) revealing the presence of cobalt arsenides.

Values obtained by Lake Shore and Newfields were low but anomalous (200 PPB, parts per billion, gold over 15 feet (Newfields).

The zone resembles the green carbonate ores of Kerr Addison Mine located 20 miles to the east where 17 million tons grading 0.27 oz. Au/ton have been mined to date. Tihor describes the Kerr Addison carbonate ore as follows:

"Samples of carbonate-ore consist of highly variable proportions of dolomite, magnesite, and quartz, with less than 3% of emerald-green, chromium-bearing muscovite, and perhaps a small amount of ankerite. Pyrite is surprisingly rare, however, this rock usually contains less than 1% of a nickel sulfarsenide, probably gersdorffite."

In the 36 Zone the green chromium-bearing muscovite is absent but the white micaeous mineral sericite is present and cobalt arsenides are present rather than the nickel arsenides.

Lourie & Wilton in a paper on the Kerr Addison deposit state:

"The orebodies within the green carbonate rocks do not appear to exhibit structural localization effects. It is postulated that the original basic volcanics were silicified, re-fractured and quartz injected by auriferous bearing solutions. The grade of these zones is roughly proportionate to the percentage of quartz veins present.

Newfields
September 1985

The auriferous quartz stringers occur in sets. A flat or gently dipping set of stringers is common as is a set of stringers striking sub-parallel to the green carbonate zone but dipping south across the north dip of the ore. A third set of quartz stringers strikes approximately at right angles to the strike of the carbonate and dips steeply east. All three sets contain erratically distributed free gold. Such a pattern is difficult to explore by drilling in one direction only (e.g., flat holes)."

5 holes from the 3075 foot level tested the zone both east and west of the crosscut. Values of 0.14 oz. gold per ton over 5 feet are reported in one hole.

The relationship of Veins 32, 33, 35 and 36 to intrusives is not evident on the 3075 foot level. The existence at surface of a large mass of mafic syenite with a small component of quartz-feldspar-porphyry, stratigraphically a few hundred feet south of these veins, suggests that such a relationship may exist and that the veining may persist for a considerable distance above the 3075 foot level.

The remaining drilling by Westwind and Newfields was cross-sectional for geological information and hopefully to locate structure. Holes W-4 and N-8, 9, 10 and 11 were to a very large extent within the mafic syenite phase of the Vindicator stock. Hole N-8 encountered quartz veining and fracturing in a narrow porphyry dike with the mafic syenite. No values were encountered but the structure warrants further investigation. Hole N-10 cut a strong quartz vein in debris flow approximately 100 feet north of the mafic syenite contact. No values were encountered but the structure warrants further investigation. Hole N-7 tested a strong structure on the tuff/conglomerate contact which was tested by a rock pit at surface. The hole cut a 4 foot syenite dike with fracturing in the contact area. There was no alteration. It lies within a few hundred feet of the south boundary. No further work is planned for this structure.

Nothing of significance was reported in Holes W-1, 2 and 4.

Prior to development on the 3075 foot level, Lake Shore Mines drilled 3 holes, L.1, L.2 and L.3 from the south boundary of Newfields ground. They collared in tuff but were largely in mafic syenite. No significant values or structures are recorded in the logs.

CONCLUSIONS & RECOMMENDATIONS

All investigators, present or past, stress that gold mineralization on the Kirkland Lake Main Break is structurally controlled and that structures located in or near the intrusive rocks are the preferred site for gold deposition.

Newfields
September 1985

On the Newfields property, 10 veins with alteration typical of the Main Break have been identified in strong structures on the 3075 foot level. Only one was selected for development by Lake Shore Mines. It yielded continuous gold mineralization (0.118 oz. Au/ton over 6.6 feet) for 570 feet, - thus establishing that some and probably all of the veins were accessible to the gold-bearing hydrothermal fluids.

No. 36 zone is a remarkable structure, 60 feet wide, with 1 - 5% pyrite and a small amount of molybdenite. It shows many similarities to the carbonate ores of Kerr Addison Mine.

All veins warrant detailed investigation.

Surface mapping and drilling reveal that many of the conditions favourable for propagation of structures and veins on the 3075 foot level do not exist at surface, for example
i) the quartz-feldspar-porphyry dike plunges south,
ii) the mafic syenite phase of the Vindicator stock becomes massive, rather than a swarm of dikes,
iii) the north tuff band dies out before reaching surface and
iv) the north conglomerate and south tuff horizon terminate against a massive structureless debris flow.

Considering,
a) the highly favourable geological environment on the Newfields ground,
b) the existence of 10 structures with strong alteration,
c) that these structures have a potential strike length of 4,000 feet across the property, and
d) the change in geological conditions between surface and the 3075 foot level, a major program of diamond drilling is warranted and much of the drilling will of necessity be deep, to test the known structures above the 3075 foot horizon and below the debris flow and the mafic syenite.

It is proposed to drill a series of holes, 2,000 feet in length or longer, to test the known vein systems at 400 foot intervals across the property. At least 2 holes will be required in each section.

The estimated cost of the proposed program is $1,000,000.00

L.J. Cunningham, B.Sc., P. Eng., 1 McPhee Ave., Kirkland Lake, Ontario P2N 1M1

Newfields
September 1985

Detailed estimate of costs:

Office & Core House Rentals	$ 7,500.00
Trucks-Rentals & Operation	8,000.00
Surveying	7,500.00
Assaying, analytical analysis	50,000.00
Supervision	
Consultant, 2 geologists, draftsman, typist/clerk, core grabber	140,000.00
Room & Board - 2 men	12,000.00
Report preparation	5,000.00
Allowance for contingencies	10,000.00
Drilling 50,000' @ 15.20/foot	760,000.00
	$1,000,000.00

SIGNED,

L. J. Cunningham, B.Sc., P.Eng.,
Mining Engineer

Dated at
KIRKLAND LAKE, Ontario
September 25 1985

Newfields
September 1985

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Tihor, L. A. and Crocket, J. H.	1977	Gold Distribution in the Kirkland-Larder Area Report of Activities, Part A Geological Survey of Canada Paper 77-1A
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Newfields
September 1985

CERTIFICATE

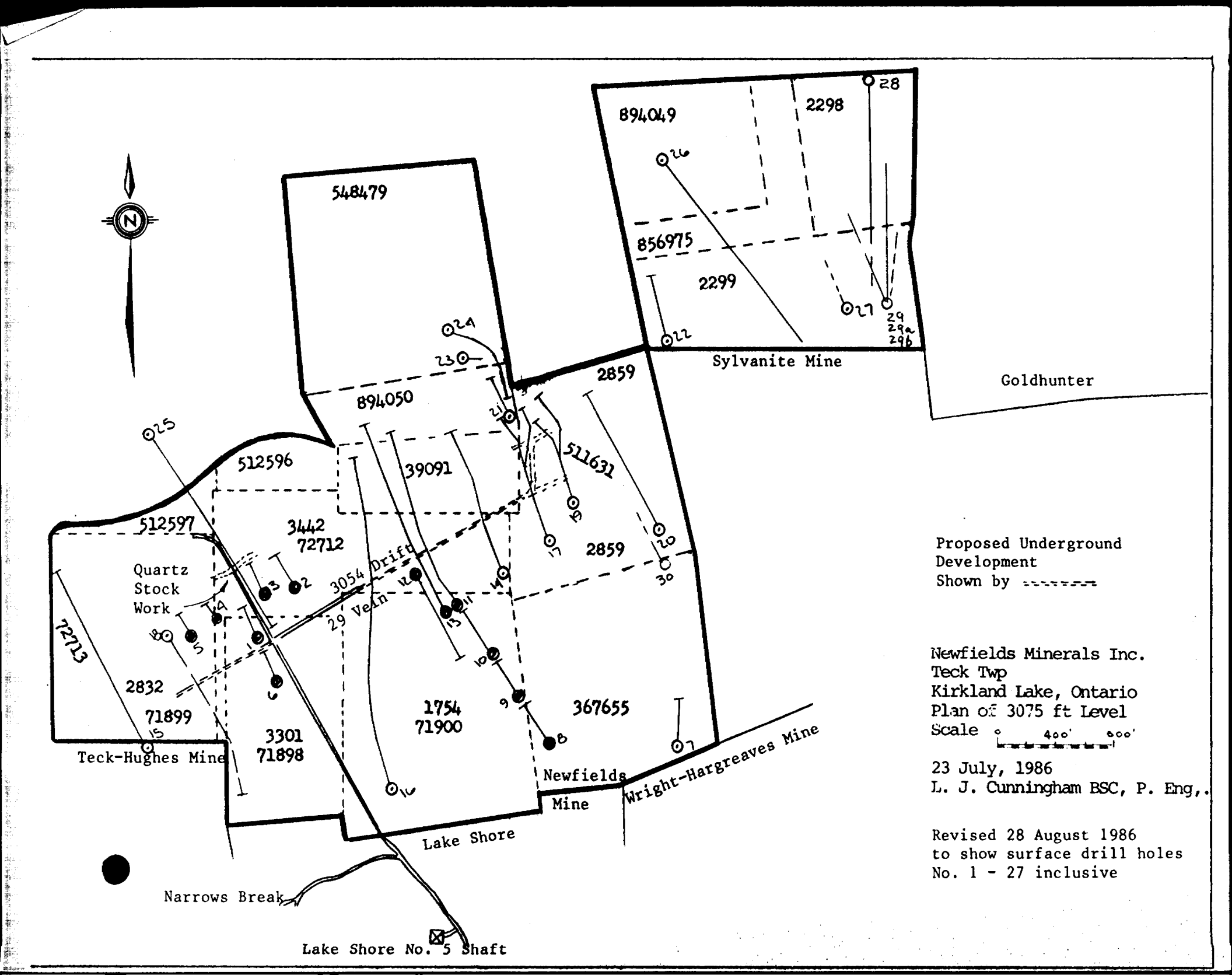
I, Leonard J. Cunningham, of 1 McPhee Avenue, Kirkland Lake, Ontario, do hereby certify that:

1. I am an Ontario registered professional engineer residing at the above address,
2. I am a graduate of Queen's University in Mining Engineering and I have practiced as a mining engineer and geologist since 1945,
3. I have no interest directly or indirectly nor do I expect to have any interest either directly or indirectly in the properties of Newfields Minerals Inc., or the securities of any company which may acquire the ground,
4. My report dated 25 September 1985 is based on:
   a) published government maps and reports
   b) miscellaneous data in the files of the Resident Geologist, Ministry of Natural Resources, Kirkland Lake, Ontario
   c) personal knowledge of the area based on 25 years of experience in the Kirkland Lake Camp
   d) numerous examinations of the property including mapping of the surface outcrops and the underground workings in 1985, the supervision & logging of an eleven hole drill program in 1984-85.
5. Consent is hereby granted to use this report, in its complete form only, in a filing statement, statement of material facts or prospectus of Newfields Minerals Inc.

DATED AT KIRKLAND LAKE, Ontario, this 25th day of September 1985

SIGNED,

L.J. Cunningham, B.Sc., P.Eng.
Mining Engineer


548479
894049
2298
28
26
856975
2299
27
29
29a
29b
22
Sylvanite Mine
Goldhunter
24
23
894050
2859
21
25
512596
39091
511631
512597
3442
72712
Quartz
Stock
Work
3054 Drift
29 Vein
2859
20
30
17
18
7213
2832
71899
15
Teck-Hughes Mine
3301
71898
1754
71900
367655
Newfields
Mine
Wright-Hargreaves Mine
Lake Shore
Narrows Break
Lake Shore No. 5 Shaft
Proposed Underground
Development
Shown by
Newfields Minerals Inc.
Teck Twp
Kirkland Lake, Ontario
Plan of 3075 ft Level
Scale
0
400'
800'
23 July, 1986
L. J. Cunningham BSC, P. Eng,.
Revised 28 August 1986
to show surface drill holes
No. 1 - 27 inclusive

REPORT
ON
DRILLING

NEWFIELDS MINERALS INC.

BASIN PROPERTY
TECK TOWNSHIP
HOLES 85 - 1 - 13 inclusive

In the winter of 1985-86 when ice conditions permitted, 6 short holes, 85 N-1 to 85 N-6, were drilled to test for a near-surface extension of the 3054 vein which was developed on the 3075 foot level mine workings originating from No. 5 shaft of Lake Shore Mine.

700 feet of drifting in 1936-7 on the 3054 vein (located on the north contact of bimodal feldspar porphyry intrusive (400 - 500 feet in width)) yielded gold values (0.112 oz. gold per ton over 6.5 foot width for a length of 530 feet). The porphyry was intrusive into conglomerate (Lake Shore Mine records).

The vein was projected to surface by assuming an 85° south dip. O.D.M. map 1948-1, Township of Teck, indicated that the rocks under the lake were intrusive (syenite, syenite porphyry, augite syenite of the Vindicator Stock).

Holes 85 - 1 to 5, which are approximately on strike of each other, encountered a bimodal feldspar dike being 8 to 70 feet in width and interpreted as being the updip extension of the much larger intrusive at the 3000 foot horizon. Neither values or veins on the north contact of the intrusive could be indicated as representing the 3054 vein. The porphyry was intrusive into a unit designated a debris flow by the writer (this unit is mapped as intrusive porphyry - O.D.M. 1948-1).

Diabase dikes were numerous and two types of possibly different strike directions were identified.

Hole 85-6, on the same section but south of Hole 85-1, was drilled for geological cross sectional information. It was largely in debris flow with a narrow augite syenite dike and a swarm of narrow diabase dikes. The first 8 feet of the hole cut the north contact of a large augite syenite intrusive which occupies a large portion of the south part of the property.

In the summer of 1986 drilling on land and accessible part of the tailings was resumed.

Hole 86-N-7, was designed to test under a surface pit showing highly sheared, sericitized and carbonatized rocks at a conglomerate/trachyte tuff contact. Anomalous gold values (481 PPB/2.3') were encountered in quartz-

Newfields
Drilling
Nov. '86

feldspar fracturing in comglomerate. There were no anomalous values at the contact area.

Holes 85-N-8, 9, 10 and 11 were designed to crosssection the property.

85-N-8 was largely augite syenite with a quartz feldspar porphyry dike approximately 20 feet wide dn its south contact and a 30 foot feldspar porphyry dike intrusive into the augite syenite. The south contact of this latter dike showed silicification with rare pyrite. Anomalous gold values (220 PPB) were encountered.

85-N-9 was initially drilled to 505 in augite syenite and was subsequently deepened to 2935 but was stopped short of reaching the basement volcanics. No significant gold values were encountered.

85-N-10 drilled to a depth of 575 feet, the hole completed a crosssection of the augite syenite, and then entered debris flow for the final 200 feet. A narrow feldspar porphyry dike was cut intruding the mafic syenite. There were no significant values in the hole.

85-N-11 after traversing debris flow and augite syenite entered bimodal porphyry and terminated in the same. There were no significant results.

85-N-12 was designated to crossection at depth the south part of the property to the Lake Shore boundary. It was stopped at a depth of 1047 feet in augite syenite. It traversed predominantly mafic syenite and debris flow except for a narrow section of bimodal porphyry at the collar.

85-N-13 drilled to a depth of 3005, reached the basal grit (2969-3003) characterized by development of scattered corase pyrite in the matrix of a 1/4" to 2" predominantly monomictic fragmental (derived from the tholeiitic basalt basement) with carbonaceous clasts. There were no significant values.

Signed,

L. J. Cunningham, B.Sc., P.Eng.,
Mining Engineer

Date at
Kirkland Lake, Ontario
21st November, 1986

PROPERTY Newfield Minerals

HOLE No. 85 - N - 1

LOCATION: Claim 3301 Teck Twp.
LATITUDE: 500' W & 200' S of
DEPARTURE: No. 1 Post
ELEVATION:

STRIKE: N 30° W Ast
DIP: Collar - 45° @ 200' 43° @ 700' 41°
DATE DRILLED: 27 Mar. - 2 Apr. '85

Size B Q

PURPOSE: To test for vertical extension of gold bearing vein on 3075 level from Lake Shore Mine

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 66	O/B			
66 - 240	DEBRIS FLOW dark bronw-purplish coloured Medium hardness can be scratched with a knife - prominent white to creamy feldspar phenocrysts 1/8"-1/4" - most euhedral although some are rounded (eroded?) - many mafic inclusions - chloritic-soft - generally magnetic variable size 1/4" to 6" & shapes - angular to rounded often exhibit reaction rim and do some feldspar phenocrysts. @ 108 and 144 - 3" and 8" pegmatitic cluster of quartz & feldspar XLS corase grained sharp chloritic contacts - may be clasts or porphoblast? - strongly carbonatized (strong reaction to acid) both as carbonate fractures and pervasive disseminations 114.5 - 116 calcite slips to 1/4" @ 70°/80°/core - weak shearing - no sulphide mineralization	6858		Nil
	124 - 126 alteration and shearing - phenocrysts destroyed - fine grained - reddish colour numerous calcite stringers contains (10%) bands and patches of deep reddish alteration - very hard by strongly carbonatized	6859		Nil
		6860	232-235	Nil
240 - 250	Dark grey-green, dense MASSIVE ROCK at 240 sharp contact at 250 contact uncertain Sections are faintly porphyritic Medium hardness strongly carbonatized non magnetic Believed to be a diabase dike with - Type I conformable strike N 50° - 70° E	6861	235-240	Nil/10
250 - 258	DEBRIS FLOW			
258 - 311	INTRUSIVE as 240-250 DIABASE TYPE I including dikes Type 2 at 259 - 261 2 dikes @ 1' wide parallel to core 283 - 293 " "			
311 - 356	DIABASE DIKES (2) (TYPE 2) dark green, fine grained diabase prominent chilled edges Type 2 diabase are considered to be the north/south set of diabase dikes			
356 - 405	DIABASE TYPE I dark, massive, grey-black with faint purplish-brownish cast - rare layer of rounded to angular phenocrysts to 1/8" size scattered pyrite			

continued

DRILLED BY Heath & Sherwood Drilling

SIGNED
L.J. Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals

HOLE No. 85 - N - 1

LOCATION: Claim 3301 Teck Twp.

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 2

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
405 - 416	ALTERED ZONE non porphyritic redder colour carbonate veinlets			
	411 0.5 feet light grey, foliated rock with distinct red and greenish stretched XLS of feldspar Sharp contacts at 70°/core considered to be a dike	6862 6863	403-405 405-408	Nil Nil
416 - 453	BIMODAL FELDSPAR PORPHYRY bright salmon coloured prominent red to pink to whitish phenocrysts of 2 sizes (1/16 - 1/8") and 1/4" - 3/8")			
453 - 706	GRADATIONAL CHANGE in 1 - 3 feet to DEBRIS FLOW as 66 - 240			
		6864 6865	637-639 639-642	Nil Nil
702	END OF HOLE			

SLUDGE

NIL or 10 PPB

EXCEPT:

86 - 96	20
96 - 106	75
276 - 286	40
366 - 376	30
406 - 416	30
586 - 596	30
626 - 636	20
646 - 656	30
696 - 706	20

DRILLED BY Heath & Sherwood Drilling

SIGNED L.J.Cunningham, B.Sc., P. Eng.

PROPERTY Newfields Minerals

HOLE No. 85 - N - 2

LOCATION: Claim L.3442 Teck Twp.
LATITUDE: 330' W and 125' N of
DEPARTURE: #1 Post Cl. 3301
ELEVATION:

STRIKE: N 30° W
DIP Collar - 45° 150' 40°
400' 40°
DATE DRILLED: 3 - 6th April '85

PAGE No. 1

PURPOSE: same as Hole 85 - N - 1

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 128	O/B			
128 - 250	DEBRIS FLOW dark brown-purplish coloured prominent white to creamy phenocrysts 1/8 - 1/4" Many mafic inclusions - variable sizes - similar to 66-240 of Hole 85 - N - 1 - carbonatized as fractures & pervasively			
250 - 265	SHEARED ALTERED ZONE F. P. is altered to pale green - phenocrysts are highlighted & appear rounded by shearing Strong development of sericite or leucopene as wispy, muddy yellow stringers, hairs & clots Shearing at 60° - 70°/core No sulphide mineralization	6876 6877 6878	256-261 261-264 286 - 289	Nil Nil Nil
265 - 267.5	DIABASE chilled fine grained irregular contacts Type 2			
267.5 - 311	DEBRIS FLOW as 128 - 250 but colour varies from purplish-brown to deep salmon red Includes irregular patches of db at: Type 2 268 6" fine grained contact @ 30°/core 276-276 8" fine grained " 70°/core 299-300 " " " 45° & 60°/core			
311 - 431	DIABASE Type 2 311 - 317 chilled contact dark green 317 increasingly coarse grained			
431	END OF HOLE			

SLUDGE Nil or 10 P P B
EXCEPT:

136 - 146	30
146 - 156	20
166 - 176	20
226 - 236	30
276 - 286	30
296 - 306	30

DRILLED BY Heath & Sherwood Dr

L.J.Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals

HOLE No. 85 - N - 3

LOCATION: Claim L.3442 Teck Twp.
LATITUDE: 650' W and 125' N of
DEPARTURE: No. 1 Post, Cl.3301
ELEVATION:

STRIKE: N 30° W
DIP Collar - 45° @ 150' 44° @ 415' 41°
DATE DRILLED: 7 - 11 April, 1985

PURPOSE: (1) same as 85-N-1 (2) to complete the sections and (3) locate porphyry north contact

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 94	OVERBURDEN			
94 - 148	FELDSPAR PORPHYRY deep brown to purplish unit MASSIVE prominent white to creamy ⅓ feldspar phenocrysts to 1/8" size Similar to 66 - 240 Hole 85 - N - 1 128 - 250 Hole 85 - N - 2			
148 - 197	ALTERED ZONE shearing and alteration is confined to the following sections: 148-150 sheared 45°-70°/core many chloritic slips - altered to pink colour Most phenocrysts destroyed - others stretched, broken and calcite healed - bands of alteration caused by development of pale-green green needles & wisps & seams of muddy yellow alteration Alteration bands suggest crude bedding but IS NOT. No quartz, no sulphide	6866		Nil
	153.5 - 154.5 As 148-150			
	157-159 2" white qtz. and pink calcite centred in a highly altered zone @ 70°/core - chloritic slips - silicified - bright orange-brown mineral developed with whitish-cream streak - it follows distinct veins & fractures Also developed bright apple green, soft mineral in thin seams & wisps - resembles fuchsite but is a little off colour - rare pyrite crystal	6867		Nil
	162-165 Shear Zone - 45°/core prominent fracturing of phenocyrsts - calcite healed phenocrysts altered to bright red, green-white & pink colours	6868		Nil
	180-197 Highly altered zone Lighter in colour light brown - phenocrysts often brightly coloured - red - distinct alteration bands parallelling the quartz veins, veinlets & hairy like fracture	6869	182-185	Nil
	@ 185 2" mafic dike 80°/core 3" qtzl & pale brown silicification	6870	185-187	10
	186 2" quartz filled brecciated zone 80°/core with branching veinlets at varying angles parallel to normal	6871	186-187	Nil
	192 3" qtz and carbonate @ 45°/core fine sparse needles of specularite	6872	189-192	Nil
		6873	192-194	Nil
	197 qtz. carbonate filled fractures at 20°/30°/core	6874	194-197	Nil

continued

DRILLED BY Heath & Sherwood Drilling

SIGNED
L.J.Cunningham, B.Sc., P. Eng.

PROPERTY Newfield Minerals

HOLE No. 85-N-3

LOCATION: Claim L.3442 Teck Twp.

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 2

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
197 - 261	DEBRIS FLOW as 94 - 148 226 4" db dike @ 45°/core chilled Type 2 225-250 variable composition inclusion felsic, deep pale brown, very had rounded to 6" clasts? 257-258 shear zone - altered zone carbonate & qtz. veinlets @ 70-80°/core strong alteration banding	6875		Nil
261 - 264	DIABASE DIKE Type I sharp contacts massive rate pale feldspar phenocrysts			
264 - 269	DEBRIS FLOW			
269 - 272	DIABASE DIKE TYPE I as above			
272 - 279	DEBRIS FLOW			
279 - 281	DIABASE DIKE TYPE I sharp contacts chilled			
281 - 288	DEBRIS FLOW			
288 - 291	DIABASE DIKE TYPE I sharp contact chilled as above			
291 - 308	DEBRIS FLOW			
308 - 318	DIABASE DIKE TYPE I chilled contacts - calcite veining on both contacts a few pink phenocrysts 308 2" brecciated qtz. and calcite 316-318 numerous carbonate veinlets 80° - 90°/core			
318 - 476	DEBRIS FLOW			
476	END OF HOLE			

SLUDGE

96 - 106	Nil	196 - 206	Nil
- 116	Nil	- 216	Nil
-126	10	- 256	"
- 136	Nil	- 276	10
-146	"	-316	Nil
- 156	"	- 336	10
- 166	"	- 366	Nil
- 176	"	- 376	10
- 186	"	- 416	Nil
- 196	40		
	10		

DRILLED BY Heath & Sherwood Drilling

SIGNED L.J.Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals Inc.

HOLE No. 85 - N - 4

LOCATION: Claim 3301

LATITUDE: 710' W and 300' S of

DEPARTURE: No. 1 Post

ELEVATION:

STRIKE: N 30° W

DIP: -45°

DATE DRILLED: 12 - 13 April, 1985

PAGE No.

PURPOSE: To test for alteration zone of Hole 85 - N - 3

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 76	O/B			
76 - 157	ALTERED ZONE			
76 - 88	QUARTZ-FELDSPAR PORPHYRY Closely packed quartz & feldspar phenocrysts 1/16 - 1/8" size white to pale creamy coloured in a pale yellow-green matrix - core colour is yellowish green with subdued whitish phenocrysts and very pale qtz. crystals - sparse, scattered but prominent, angular, red-brown lath to square feldspar phenocrysts to 1/2" size - prominent pale yellow-brown alteration following narrow quartz veinlets as in hole 85-N-3	6879 80 81 82 83 84 85 86 87	76-80 80-84 84-87 87-92 92-96 96-101 101-106 106-111 111-116	Nil Nil 10 Nil 20 Nil " " "
88 - 266	DEBRIS FLOW as in hole 85-N-3 94 - 148 - distinct colour change from 76 - 88 - dark purplish colour where NOT altered to pale greenish-yellow honey colour - alteration is distinctly banded paralleling qtz. veinlets & fractures - phenocrysts often have enhanced colours with reaction rims - mafic inclusions commonly have reaction rims - alteration is silicification & development of sericite (leucoxene - short sections of brecciation with heterolithic angular clasts - xxxx porphyry - non pyrhyritic - syenite to trachyte at 152 - 157	88 89 90 91 92 93 94 95	116-121 121-126 126-131 131-136 136-141 141-146 146-151 151-155	" " " " " " " "
		SLUDGE All NIL except		
			106-116 116-126 206-216	20 30/10 20
	194-201 DIABASE DIKE Type I thin chilled contact 244 contact @ 45° 251 " @ 20° very sharp contacts 201-207 Debris flow as above 207-220 Diabase Dike Type 1 chilled contacts at 20 - 30°/core variable textured f.g. to coarse grained to porphyritic to foliated 220-266 Debris flow as above 2 - large felsic inclusions or clast? 1 - pegmatitic 8" size 1 - f.g. dense dark purplish			
266	END OF HOLE NOTE: Type I Diabase may be augite syenite			

DRILLED BY Heath & Sherwood Drilling

SIGNED

L. J. Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals

Claim L.3442

LOCATION: 460' S and 25' E

LATITUDE: of No. 4 post of

DEPARTURE: claim L.3301

ELEVATION:

HOLE No. 85 - N - 5

STRIKE: N 30° W

DIP: 45°

DATE DRILLED: 13 - 15 April, 1985

PURPOSE: To test zone of alteration of Hole 85 - N - 4

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 42	O/B			PPB
42 - 95	DEBRIS FLOW dark brown-purplish coloured Medium hardness can be scratched with a knife - prominent white to creamy feldspar phenocrysts 1/8" - 1/4" - most euhedral although some are rounded (eroded?) - many mafic inclusions - chloritic-soft - generally magnetic variable size 1/4" to 6" & shapes angular to rounded often exhibit reaction rim as so some feldspar phenocrysts. Similar to 66 - 240 85 - N - 1 128 - 250 85 - N - 2 94 - 148 85 - N - 3 44-46 Diabase Dike Many mafic inclusions of varied size & shape but does not include occasional granitic to f.g. felsic inclusions There is a strong suggestion that this unit may be a trachytic crystal tuff/debris flow			
	55 - 57) silicified altered zone 2" white quartz 59 - 61) light brown colour rusty irregular patches of brown silicification No sulphides	6896 6897	2.0 2.0	Nil Nil
95 - 101	DIKE AUGITE SYENITE sharp contacts at 30° & 20°/core Contains 1/4 - 1/2" (felsite) pink, f.g. syenite dikelets cut by carbonate ladder veins			
101 - 153	DEBRIS FLOW as above			
153 - 241	ALTERED ZONE Rapid change over 1 - 2' to highly altered ~~Hanging~~ Q.F.P. lighter coloured greenish ~~or~~ yellow sericitized pervasively and as heavy seams & layers - closely packed qtx. and feldspar phenocrysts in a sericitic groundmass with sparse scattered 1/4" to 1/2" red feldspar 179 - 186 intruded by or interlayered with or has inclusions with sharp contact Grey to dull salmon to silver green rock 179 - 30°/core contact - bleached or chilled to grey white very f.g. hard gradational change to 179.5-183 pale purplish rock with small 1/16" reddish pink feldspar grading into a sericite schist at 70°/core - silvery green & becoming f.g. at 186.	6898 6899 6900 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810	144-149 149-154 154-159 159-164 169 174 179 186-190 195 201 206 211 216	10 Nil 10 Nil 30/20 Nil 20 10 Nil Nil Nil Nil Nil

continued

DRILLED BY Heath & Sherwood

SIGNED L. J. Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals

HOLE No. 85 - N - 5

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 2

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	187 - 2" qtz. white & feldspar to silicification little less than 1% pyrite	3811	216-219	Nil
		12	223	20
187	6" grey white soft silty material contacts @ 70° - 80°/core very sharp suggestive of a dike	13	226	Nil
		14	231	180
189	6" similar dike? with black stretched out small inclusions sharp contacts 70° - 80°/core			120
		15	236	0
206	8" similar dike?	16	241	20
236-238	sheared altered zone cut by qtz. carb. veinlets a little pyrite less than 1%	17	246	Nil
238-240	Similar sheared altered zone 1" qtz. & feldspar no pyrite - 60-70°/core			
241 - 266	DEBRIS FLOW			
	258 - 260 2" Red Feldspar Porphyry Dike Intrusive irregular contacts			
266	END OF HOLE			

SLUDGE

46 - 56	20	156 - 166	Nil
66	30	176	20
76	Nil	186	30/50
86	Nil	196	20
96	10	206	20
106	20	216	20
116	Nil	226	20
126	50/100	236	300/190
136	60	246	60
146	30	256	30
156	20	266	130

DRILLED BY Heath & Sherwood

SIGNED

L. J. Cunningham, B.Sc., P.Eng.

PROPERTY Newfield Minerals Inc.

Claim L.3301 Teck Twp.

HOLE No. 85 - N - 6

LOCATION: 330 ft. west & 500 ft.

LATITUDE: south of #1 Post

STRIKE: N 30° W

PAGE No. 1

DEPARTURE: L.3301

DIP: 45°

ELEVATION:

DATE DRILLED: 16th April 1985

PURPOSE: To continue the crosssection of the property

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 128	CASTING			
128 - 136	MAFIC SYENITE dark, broken			
136 - 496	DEBRIS FLOW - very hard dark brown purple very dense with f.g. reddish-brown matrix and small whitish, subdued feldspar phenocrysts - few inclusions			
160 - 496	GRADATIONAL CHANGE to a darker, less red variety - coarse more phenocrysts, both large and small - typical of 66-240 of hole 85-N-1 - appears more chaotic - more inclusions mostly mafic but some felsic - suggestive of a trachytic crystal tuff/debris flow - a few granitic-felsic inclusions to 6" dia.			
258-260	Augite syenite dike dark f.g. with sparse small 1/16" pink feldspar phenocrysts - little or no chilling Contacts sharp @ 80°/core			
282	2" diabase dike 30°/core f.g. chilled contacts			
358-362	3 diabase dikes 1 @ ~~1~~ 1", 1 @ 2" and 1 @ 18" all chilled all at 30°/core			
368-425	Swarm of f.g. black diabase dikes Chilled contacts parallel to 30°/core - 8 dikes 1" to 4" of core length - this is a N/S swarm of diabase dikes probably with steep westerly dip as in the mines			
496	END OF HOLE			

SLUDGES ARE NIL to 20 PPB

except:

128 - 146	30	PPB
146 - 156	50	
226 - 236	25	
286 - 296	70	
356 - 366	30	
486 - 496	60	

DRILLED BY Heath & Sherwood Drilling

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L.J.Cunningham, B.Sc., P.Eng.

PROPERTY NEWFIELD MINERALS INC.

Claim 1939 (367655) Teck Township

HOLE No. 85 - N - 7

LOCATION:

LATITUDE: 60 ft. North & 350 ft. STRIKE: 0° Ast

DEPARTURE: west of No. 2 Post Claim 1939 DIP: Collar 45° @ 100' 38° @ 500' 38°

ELEVATION: DATE DRILLED: 28 June 1985 - 1 July, 1985

PAGE No. 1 of 2

PURPOSE: To test for Narrows Break west of Lake Shore Fault

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 30	Overburden			
30 - 295	CONGLOMERATE 75% rounded clasts - composition varied with scattered jasper pebbles colour - grey to green - few greywacke sections of 3 - 5 ft. occasional bedding at 45°/core 200 - 1/2" - 3/4" shear at 45 - 60°/core layered sericite developed No mineralization 100 - broken, rusty core over 1' 0" little irregular qtz. carbonatized few blebs coarse, brassy, secondary pyrite			
295 - 327	CONGLOMERATE but increasing alteration & shearing colour getting lighter more breakage & shearing at 45°/core			
327 - 332	SYENITE DIKE sharp contacts ± 45°/core colour dark brown, fine grained, hard - chlorite & quartz filled fracture < 1% disseminated pyrite			
332 - 340	Highly sheared CONGLOMERATE strongest for 1 ft. at syenite dike contact (332)			
340 - 506	TUFF sharp change but a fault contact suspected fine grained purple to grey mostly thick massive beds 70°/core but varying to 45°/core			
506	END OF HOLE			
	SAMPLE DETAIL: 319-324 Conglomerate, sheared, altered sericitic mon carbonatized	3818	4.0	30
	324-327 Conglomerate sheared, altered sericitic non carbonatized	3819	3.0	NIL
	327-331 Intrusive Dike varying from syenite to Q.F. porphyry sericitic & cut by network of fine qtz. carb. veinlets at random angles 1% fine diss. pyrite	3820	3.0	NIL
	331-334.5 Conglomerate sheared light grey 1st foot highly sheared @ 45°/core	3821	3.5	30
	334.5-339 Conglomerate less sheared & altered	3822	3.5	30

GOLD P.P.B

NOTES: 85-N-7

1) A fault is postulated between 295 & 340

This correlates with a surface pit & strong shearing

Samples: Sludge assays are attached

The conglomerate appears to be slightly higher in gold than the tuff.

Weak anomaly at 177 - ?

DRILLED BY Heath & Sherwood

SIGNED

L. J. Cunningham, B.Sc., P.Eng.

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

NEWFIELDS MINERALS

Hole No. 85 - N - 7

Certificate No. 60447 Date: July 9, 1985 Page 2 of 2

Received July 2, 1985 66 Samples of sludge

Submitted by Newfields Minerals Inc., Vancouver, British Columbia Att: D. Clark

page 1 of 2

SAMPLE NO.	GOLD PPB	SAMPLE NO.	GOLD PPB	SAMPLE NO.	GOLD PPB
85-N-7					
30-37'	40	207-217'	50	387-397'	10
37-47'	20	217-227'	50	397-407'	Nil
47-57'	30	227-237'	70	407-417'	Nil
57-67'	20	237-247'	30	417-427'	10
67-77'	30	247-257'	50	427-437'	Nil
77-87'	30	257-267'	30	437-447'	Nil
87-97'	30 50	267-277'	70	447-457'	Nil
97-107'	20	277-287'	50 70	457-467'	Nil
107-117'	30	287-297'	50	467-477'	Nil 20
117-127'	30	297-307'	20	477-487'	10
127-137'	40	307-317'	20	487-500'	10
137-147'	90	317-327'	30	85-N-8	
147-157'	60	327-337'	20	4-15'	Nil
157-167'	80	337-347'	Nil	15-25'	Nil
167-177'	100	347-357'	20	25-35'	Nil
177-187'	110 100	357-367'	20	35-45'	Nil
187-197'	20	367-377'	20 10	45-55'	Nil
197-207'	30	377-387'	10	55-65'	Nil
				65-75'	Nil

con't...

Per G. Lebel

G. Lebel, Manager

PROPERTY NEWFIELDS MINERALS INC.

HOLE No. 85 - N - 8

LOCATION: Claim L.1939 (367655) Teck Twp.

LATITUDE: 390 ft. North & 70 ft. STRIKE: N 36° W 40° @ 600 ft. PAGE No. 1 of 2

DEPARTURE: east of No. 3 Post DIP: 45°

ELEVATION: DATE DRILLED: 1 - 3rd July, 1985

PURPOSE: To test feldspar porphyry and mafic syenite north of tuff horizon

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 7	CASING			
7 - 51	TUFF Trachytic pale mauve to grey to reddish colour fine grained to medium grained (grit size) short sections of well bedded - thin bedded) fine grained material 1/2" - 1" @ 45°/core Coarse material is thicker 6" - 2' with poor bedding			
51 - 85	INTRUSIVE qtz. - feldspar porphyry @ 51 irregular altered contact fine grained contact @ 45°/core @ 85 irregular contact at 0 to 10°/core			
85 - 494	MAFIC SYENITE 85 - 94 fine grained sheared - 20° to 45°/core 94 - 190 med. to coarse grained - dark grey rock flecked with white irregular shaped phenocrysts & cut by fine grained hard felsite syenite dikes (ribs) often fractured & filled with qtz.-carb. ladder veins ribs usually 1/2" - 2" wide & 60° - 90°/core 190 - 215 phase change gradational change to a dull brick coloured - becoming progressively fine grained & dense, dark & very hard 200 - 205 then gradationally increase in grain size to normal coarse grained dark mafic syenite 270 - 335 phase change or more probably an alteration zone - remains coarse grained but colour much lighter varying from grey to salmon pink - cut by scattered network of 1/4" to 1" highly irregular white barren quartz veins - some short sections of well developed augite XLS and prominent development of a pale creamy-yellow alteration product as wisps & patches particularly 275-285			
494 - 542	FELDSPAR PORPHYRY deep salmon to grey colour prominent whitish feldspar phenocrysts contacts sharp both at 45°/core Cut by qtz.-feldspar veins 1/2" - 1" wide 45°/core - thought to be early stage pre-mineralization veining 526 - 535 cut by hematitized fractures - deep red mostly 1/8" blood red fractures at about 30°/core usually accompanied by thinner bands of black chlorite - one band shows 1/8" band of fine brassy pyrite - fractured section respond to acid - carbonate introduced just on the fractures. 535-542 considerable silicia introduced not as distinct vein but in highly irregular scattered areas -			

continued.....

DRILLED BY Heath & Sherwood Drilling

SIGNED L. J. Cunningham, B.Sc., P.Eng.

PROPERTY Newfields Minerals Inc.

HOLE No. 85 - N - 8

LOCATION: Claim L.1939 Teck Twp.

PAGE No. 2 of 2

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	- appears to be the introduction of silicia into a shattered area. - rare disseminated pyrite cube			
542 - 623	MAFIC SYENITE as 94 - 190			
623-628	Fine grained MAFIC SYENITE DIKE very dark green, fine grained intrusive with sharp contacts at 70 & 90°/core Contacts chilled and very fine grained with a few scattered pale whitish-flesh coloured feldspar phenocrysts			
628-635	MAFIC SYENITE massive coarse grained			
	END OF HOLE 4 July, 1985			
				PPB
	SPLIT CORE SAMPLES: 505 - 510	3823	5.0'	Nil
	510 - 515	3824	5.0	nil
	515 - 520	3825	5.0	nil
	520 - 526	3826	6.0	30
	526 - 530	3827	4.0	60
	530 - 535	3828	5.0	10
	535 - 539	3829	4.0	30
	t39 - 542	3830	3.0	(220
				(220
				(110

SLUDGES ARE NIL to 20 PPB

EXCEPT: 535 - 545 155 PPB

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PROPERTY NEWFIELD MINERALS INC.

Claim L.1754 Teck Twp.

HOLE No. 85 - N - 9

LOCATION: 660 ft. south and

LATITUDE: 70 ft. east of No. 1 STRIKE: N 36° W

PAGE No. 1 of 7

DEPARTURE: post DIP: At 50' 41° @ 500 37°

ELEVATION: DATE DRILLED: 4th - 6th July, 1985

PURPOSE: To crossection the intrusive rocks

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 8	CASING MAFIC SYENITE massive coarse grained dark grey speckled appearance due to whitish augite xls			
27 - 50	ALTERATION ZONE intensely altered mafic syenite variable textured fin from coarse to fine grained Colour from pink to grey to green - augite prominently developed to pale creamy white colour - strong development of pale creamy yellow alteration materials as wisps, laths, etc. (leucoxene)?			
	38 - 42 pale apple green (epidotized?) with black ghostly phenocrysts very hard - boundaries marked by prominent qtz. carb. - chlorite shears 1/2" - 1" wide @ 45°/core			
	This may be a fault zone * This correlates to the north edge of a prominent surface ridge of mafic syenite			
50 - 505	AS ABOVE very coarse grained cut by felsite (syenite dikelets - 2" - 2 ft. wide which are very fine grained and pale pink in colour)			
	300 - 375 numerous white quartz veins at random angles totally devoid of mineralization			
	380 3 x 6" white quartz with wall rock inclusions approximately 90°/core no mineralization			
	406 4" white qtz. with wallrock inclusions @ 90°/core no mineralization			
	- white quartz veins are early stage non gold related fracture fillings			
505	END OF HOLE			

SLUDGE ARE NIL EXCEPT:

135 - 145	10 PPB
245 - 255	20
285 - 295	10
355 - 365	10

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SIGNED

L. J. Cunningham, B.Sc., P.Eng.

PROPERTY NEWFIELDS MINERALS INC.

Claim L.1754 Teck Twp.

LOCATION: 660 ft. south and

LATITUDE: 70 ft. east of No. 1

DEPARTURE: post

ELEVATION:

HOLE NO. 85 - N - 9 DEEPENED

PAGE No. 2 of 7

STRIKE: N 36° W

DIP: @ 50' 44° @ 500' 40°

DATE DRILLED: 1 - 15th September, 1985

PURPOSE: A deep test of veins in north half of property 29 Vein to 36 Vein

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	TROPARI TESTS: DIP STRIKE 35 44° N 36 W 435 40° N 40 W 935 40° N 32 W 1435 34° N 25 W 1935 38° N 25 W 2435 26° N 25 W 2935 20° N 25 W	Ftg.	W.	PPB
506-527	MAFIC SYENITE coarse grained, black	575-580 3846	5.0'	Nil
527-535	MAFIC DIKE fine grained, dark, pale flesh coloured, widely spaced, sparse 1 mm size feldspar phenocrysts 530-535 being f.g. soft, weakly sheared 3/4" white banded, barren qtz. at contact 45°/core	-585 3847	"	"
535-595	SYENITE PORPHYRY dull salmon coloured white to dull pink 1/8" phenocrysts 535 sharp contact @ 45° 578-585 scattered 1/4 qtz veins little coarse pyrite	725-730 3885	"	"
		735 3886	"	"
		740 3848	"	"
		745 3849	"	"
		750 3887	"	"
		755 3888	"	"
		760 3889	"	"
		765 3850	"	"
		770 3851	"	"
		795-800 3890	"	"
		805 3891	"	"
		810 3852	"	"
		812 3853	2.0'	"
		820-822 3854	"	"
595	3 feet GROUND CORE			
595-714	MAFIC SYENITE black to dark grey variable texture coarse to fine 700 - 714 highly sheared @ 40 - 45°/core			
714-1023	DEBRIS FLOW gradational contact over 1 foot to dark grey - salmon coloured porphyritic rock. generally very dark matrix with widely spaced & pale white 1/8 feldspar phenocrysts & numerous variable inclusions - angular to rounded, mafic to felsic, 1/4" to 6" 714-740) irregularly fractured & healed with 755-770) white qtz. in highly irregular parts - 805-810) fractures are discontinuous at all angles & 1/8 to 1/4 maximum 3 - 5% of the core a little <1% diss. pyrite 730-740 sheared parallel to core 762 concentration of coarse pyrite in irregular patches over 4" 810 2" white qtz with chloritic filled, fine fractured @ 60°/core barren (late stage veining) reddish alteration over 1' on north side of vein only 820 1/4" qtz & 1/4" chlorite @ 30°/core with irregular reddish alteration over 2-3" on each side of vein			

...continued

DRILLED BY Heath & Sherwood

SIGNED L. J. Cunningham

PROPERTY NEWFIELDS MINERALS — Deepened

HOLE No. 85-N-9

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
714-1023	continued 836 1/4" white qtz, thloritic @ 45°/core 3" red alteration on north side 836 - 1023 massive dark rock widely scattered pale 1/4" phenocrysts (feldspar) & variety of inclusions			
1023-1112	MAFIC SYENITE contact obscure but over 1 foot dark black massive medium grained. Many chloritic & quartz slips & fractures 60° - 80°/core 1100-1112 progressively altered & bleached to a dull salmon colour 1081-1083 pale grey, f.g. dike 90°/core with scattered pale phenocrysts 1/8"			
1112-1170	QTZ-BIMODAL FELDSPAR PORPHYRY contact broken estimated @ 45°/core small amount of qtz. filled fracturing at contact 1123 - 1125 1151-1152 pale green sericitic section - alteration adjacent to a 1/4 qtz. stringer @ 45°/core The sericitic alteration highlights the qtz. phenocrysts	3855	2.0'	PPB 20
1170-1179	MAFIC DIKE contacts @ 90°/core pale green slightly greenish cast finely porphyritic 1/16" size varying from black to dull brick to pale white - all are corroded and irregular (probably same as 1081-83) Few inclusions - generally mafic (chloritic) one felsic 575- 580 580- 585 740- 745 760-765 765- 770 805- 810 810- 812 820- 822			
1179-1627	QTZ-BIMODAL FELDSPAR PORPHYRY QF(BM)P 1200-1220 few barren white qtz. stringers red to greenish (sericitic) alteration			
	1609 - 1612 3 x 1/4" Qu @ 30°/core 1 x 1/2" Qu & chlorite @ 70°/core with 1/8" qtz. & chlorite branch vein at 30°	3859	3.0	Nil
	1615 - 1622 altered greenish sericitic fractured with qtz. veining no sulphides noted			
	1615 - 1618 contain (1616-17) white qtz. vein zone 2" irregular qtz. vein at 70-80°/core with 20% irregular qtz. in back walls for 6" Strong breakage	3856	3.0	Nil

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SIGNED L. J. Cunningham

PROPERTY NEWFIELDS MINERALS — Deepened HOLE No. 85-N-9

LOCATION:
LATITUDE: STRIKE: PAGE No. 4 of 7
DEPARTURE: DIP:
ELEVATION: DATE DRILLED: September, 1985

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
1179-1627	continued 1617-1618 1" layered white qtz. & feldspar at 20°/core & 1/4" qtz. at 30°/core & intersecting 1/4 normal to the 1/4" vein			PPB
	1618-1622 fractured QF(BM)P with 3 x 1/8-1/4" QCV @ 10° - 30°/core	3857	4.0'	Nil
	1627 Sharp & irregular contact est. 30°/core 1/ Q + chlorite @ 30°/core parallel to contact and 1/4" tapering layered QV irregular but approx parallel to core	3858	5.0	Nil
1627-1637	MAFIC SYENITE coarse grained red to grey-green motley colour with 2 only 2" red-pink felsite ribs roughly 70-80°/core both cut by ladder veins restricted to the felsite (syenite). Cut by a few spaced 1/4" barren white qtz. 1632 - 1" shear zone soft chloritic 70-80°/core with 1/2 creamy siliceous vein with small flaky mafic inclusions			
1637-1665	MAFIC SYENITE dark to black 1" shear soft chloritic 80°/core at 1627 and 1629 1665 2" sheared chloritic contact 70-80°/core			
1665-1680	GREYWACKE fine grained massive dark grey			
1680-1690	CONGLOMERATE dark grey rock variety clasts to 1" matrix supported			
1690-1718	GREYWACKE grit minor conglomerate mixture generally dark grey but contains irregular pale pink/salmon coloured patches (which are carbonate rich) Maybe partly tuffaceous 1692-3 3/4" banded white qtz. with chloritic inter-layers @ 45°/core - barren 1/2 isregular qtz. to 1" shearing at 45°/core			
1718-1744	TUFF greywacke mixture multi coloured brick red crudely banded tuff 80°/core with dark grey greywacke cut by 2 lamprophyre dikes 80-90°/core 1721-2) Tuff fractured & brecciated cut by low 1724-25) angle 1/8" qtz. vein 20-30°/core & brecciated & infilled with qtz. in irregular patch resembles section in 3075 Crosscut near 23-24 Veins			
	1739.5-1742 white qtz. vein at 80°/core 1/2", 1/4", 1/4", 3/4" banded by brown, brecciated qtz. healed tuff bands 1/2" - 2" - a little seam of coarse pyrite with each band < 1% - sericitic chloritic layers with each vein	3861	2.5'	10

DRILLED BY SIGNED

PROPERTY NEWFIELDS MINERALS — Deepened HOLE No. 85-N-9

LOCATION:
LATITUDE: STRIKE:
DEPARTURE: DIP:
ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
1718-1744	continued			PPB
	1742-1744 3 only 1/4 white qtz. veins 70°/core brick red alt./or tuff horizon brecciated - a < 1% coarse pyrite a little specularite small amount ladder (qtz.) veining	3862	2.0'	10
1744-1795	GREYWACKE massive, dark green fine sand to grit size occasional small clast few grains bright red chert few narrow bedded horizons usually showing concentrations of magnetite & pyrite @ 70°/core			
1795-1932	CONGLOMERATE Polymictic predominantly clast supported rare jasper - mostly mafic & felsic volcanics few porphyry streted @ 70°/core			
	1855 - 1865 considerable irregular barren white qtz. fracturing maximum 3/4 wide with some brownish-greenish wispy sericite developed generally 60-70°/core total qtz < 5% of core Conglomerate shows foliation @ 70°/core			
	1915 6" dark grey lamprophyre dike - 90°/core			
	1920 1' " " " " " " fractured & filled with several varieties of qtz. grey to white 3" wide - 80°/core no sulphides			
	1932 conglomerate			
1932-1946	MAFIC DIKE f.g. to med. grained uniform with pink to flesh coloured, widely spaced phenocrysts & f.g. pinkish felsite (wyenite) ribs - probably mafic syenite - contacts intruded by 6" - 12" lamprophyre & 2 6" irregular barren white to flesh coloured quartz - veins & lamprophyre at 70-80°/core Mafic dike has chilled contacts and chilled where cut by 1" barren white qtz and pink calcite at 1944			
1946-1957	CONGLOMERATE as above			
1957-1962	MAFIC DIKE as 1932-46			
1963-1964	also MAFIC DIKE at 1963-1964			
1964-1993	CONGLOMERATE as above 1992 - 1995	3863	3.0'	Nil
1993-1995	SILICIFIED ZONE or FELSIC TUFF massive dark grey with fine phenocrysts sheared dense packed			
1995-1997	CONGLOMERATE 1995 - 1997.5	3864	2.5'	Nil
1997-1999	SHEAR ZONE broken core ± 10-20% qtz. with various shades of white & grey - 80°/core			

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PROPERTY NEWFIELDS MINERALS Deepened

HOLE No. 85-N-9

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 6 of 7

PURPOSE:

FOOTAGE	DESCRIPTION
1999-2010	QUARTZ FELDSPAR PORPHYRY pale salmon pink, fractured & healed with irregular white qtz. stringers - altered many small wispy sericitic inclusions & pale creamy white inclusions of - broken & reheated - cut by irregular narrow 1/8" white qtz. veins probably fault zone
2010-2012	LAMPROPHYRE DIKE 20° - 30°/core
2012-2026	QTZ. FELDSPAR PORPHYRY as above colour darkened
2026-2028	LAMPROPHYRE DIKE
2028-2030	MAFIC DIKE dark f.g. mafic syenite
2030-2037	LAMPROPHYRE DIKE
2037-2067	QTZ. FELDSPAR PORPHYRY as above many inclusions brecciated maybe debris flow very distinct difference from B Modal Porphyry
2067-2076	LAMPROPHYRE DIKE
2076-2090	QTZ. FELDSPAR PORPHYRY as above
2090-2625	CONGLOMERATE (2225) clast support general dark predominance of dark pebbles Matrix 2300 - 2340 lighter coloured carbonatized (does not react to acid) 2440 - 2490 Sericitic section sheared cut by approx. 12 only 1"-2" vari-coloured qtz. veins (white to grey) green colour pale to dark shades possibly some fuschite
2625-2935	TUFF 2625 - 2720 f.g. dark grey to black massive MAFIC ash to fine lapilli tuff bedded 90°/core 2720 - 2760 50% felsic 50% mafic tuff colour varies from pale creamy white to pale green to dark green bedded 90°/core felsic tuff is coarse to lapilli size 1" - 3" 2760 Mafic tuff dark grey massive to poorly bedded predominantly ash very fine lapilli with occasionally section of 1/2 size dark purplish to grey rounded clasts occasional narrow section show white shards to 1/4 long x 1/16-1/8" wide
2935	END OF HOLE

SAMPLE NO.	Ftg.	WIDTH No.	W	ASSAY VALUE PPB
	1997.5-2002	3865	4.5'	Nil
	2007	3866	5.0	"
	2007 - 2010	3867	3.0	"
	2012 - 2014	3868	2.0	"
	2026 - 2027	3869	0.8	"
	2037 - 2038.5	3870	1.5	"
	2067 - 2068	3871	1.0	"
	2088 - 2090	3872	2.0	"
	2440 - 2445	3873	"	"
	2450	74	"	"
	2455	75	"	"
	2460	76	"	"
	2465	77	"	10
	2470	78	"	25
	2475	79	"	10
	2480	80	"	10
	2485	81	"	Nil
	2490	82	"	"
	2725 - 2730	83	"	"
	2735	84	"	"

1992 - 1995	3.0
1995 - 1997.5	2.5
- 2002	4.5
- 2007	5.0

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PROPERTY NEWFIELDS MINERALS Deepened

HOLE No. 85-N-9

PAGE No. 7 of 7

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	SLUDGE ALL NIL OR 10 or 20 PPB EXCEPT: 595 - 605 30 685 - 725 30 1055 - 1065 40 1105 - 1135 30 1185 - 1195 30 1335 - 1345 30 1395 - 1405 30 1685 - 1695 30 1795 - 1815 30 1815 - 1835 50 1835 - 1865 30 1895 - 1925 30 1965 - 1975 30 2115 - 2125 30 2145 - 2155 40 2195 - 2215 35 2315 - 2325 40 2335 - 2345 35 2355 - 2365 30			

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PROPERTY NEWFIELDS MINERALS INC.

HOLE No. 85 - N - 10

Claim L.1754 Teck Twp.
LOCATION:
LATITUDE: 370 ft. South & 140 ft. STRIKE: N 36° W
DEPARTURE: West of No. 1 Post DIP: Collar 45° 500' - 38°
ELEVATION: DATE DRILLED: 6th - 8th July, 1985

PAGE No.

PURPOSE: To crossection the intrusive rocks

FOOTAGE	DESCRIPTION		SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 131	CASING	SLUDGE ARE NILL TO		30	PPB
131 - 214	MAFIC SYENITE dark grey - black coarse grained Speckled black/white colour pattern	EXCEPT	225-235	45	
			275-285	60	
			305-315	90	
			385-395	150	
214 - 220	Fine Grained MAFIC DIKE sharp contacts @ 45°/core - exhibits sparse scattered development of white to salmon coloured feldspars - considered to be compositionally similar to the mafic syenite				
220 - 222	MAFIC SYENITE as 131 - 214				
222 - 270	FELDSPAR PORPHYRY - INTRUSIVE DIKE medium grained dark salmon called prominent equi sized feldspar - white - red - green - small 1/16" - 1/8" sized feldspars - scattered mafic inclusions to 2" size - 4" bleached whitish grained contact at 222 @ 45° - few quartz-filled fractures				PPB
	270 - contact @ 45° no bleaching	226 - 228	3860	2.0'	25
270 - 345	MAFIC SYENITE as 131 - 214				
345 - 357	MAFIC SYENITE becoming increasingly sheared at 45°/core Strong reaction to HCL				
357 - 545	DEBRIS FLOW 357 contact sharp unbleached at 60 - 70°/core variable coloured - salmon to grey to dark green phenocrysts equi-sized & variable coloured as 222-270 - many mafic chloritic inclusions 1/4" to 4" size - considerable quartz filled fractures @ random angles				
	END OF HOLE				
	SAMPLES:	395 - 400	3831	5.0	
		400 - 405	3832	5.0	
		405 - 410	3833	"	
		410 - 415	3834	"	
		415 - 420	3835	"	
493 - 494	1.0 Vein zone - 4" broken sheared core	420 - 425	3836	"	NIL
	Strong K alteration - core bright salmon colour	425 - 430	3837	"	
		430 - 435	3838	"	
		445 - 450	3839	"	
	Strongly fractured & quartz filled (white qtz.)	450 - 455	3840	"	
		485 - 488	3841	3.0	
	Appears almost normal to core	488 - 490.5	3842	2.5	
	Minor carbonate in slips & fractures	490.5 - 493	3843	2.5	
		493 - 494	3844	1.0	100/60
	A quartz filled shattered zone est. 30% qtz. < 1% fine to coarse disseminated pyrite	494 - 497.5	3845	3.5	30
	Less altered & fracture for 3 - 5 feet on each side of vein zone.				

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SIGNED
L. J. Cunningham, B.Sc., P.Eng.

PROPERTY NEWFIELD MINERALS INC.

Claim L. 1754 Teck Twp.

HOLE No. 85 - N - 11

LOCATION:
LATITUDE: 90 Ft. South & 350 ft. STRIKE: N 36° W
DEPARTURE: west of No. 1 post DIP: Collar 45° @ 110 - 38°
ELEVATION: DATE DRILLED: 8th - 11th July, 1985

PAGE No. 1

PURPOSE: To crossection the intrusive rocks

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 106	CASING			
106 - 426	DEBRIS FLOW dark grey-brown strongly porphyritic rock with prominent white to creamy feldspar phenocrysts - many inclusions both large & small mostly mafic but granitic to felsic - not as massive as true intrusive porphyries			
426 - 440	MAFIC SYENITE 426 sharp contact at 45° Sheared at contact for 2' - 3' 440 sharp contact @ 45°/core			
440 - 454	BIMODAL FELDSPAR PORPHYRY prominent salmon red prominent enhedral xls of 2 sizes 1/8 & 3/8" size			
454 - 456	Fine grained DIKE light grey colour sharp chilled contacts irregular contact at ~~454~~ 454 @ 60° @ 456 very hard shows sparse very small 1/16" rounded green to salmon phenocrysts?			
456 - 527	BIMODAL PORPHYRY as 440 - 454			
	END OF HOLE			
	454 - 456 Similar to dikes cut in holes 85 - N 4 85 - N - 5			

SLUDGE:
All nil except:

	PPB
115 - 125	30
125 - 145	10/20
215 - 235	10
255 - 265	10
285 - 304	10
315 - 325	20
325 - 335	20/10

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PROPERTY NEWFIELDS MINERALS INC.

HOLE No. 85 - N - 12

Claim 72712 (L.3442)

LOCATION: 8 580' W) of No. 1

LATITUDE:

DEPARTURE: 320' S) Post

ELEVATION:

STRIKE: @ 500' 143°
@ 1000' 147°

DIP: Collar 60° ; 500' 58° ; 100' 57°

DATE DRILLED: 16 Oct. - 21 Oct. 1985

PAGE No. 1

PURPOSE: To test veins 14, 15, 16 (i.e. veins in south part of property as identified in 3075 crosscut)

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0- 68	OVERBURDEN			
68-143	QUARTZ BIMODAL PORPHYRY dark purplish to reddish colour prominent feldspar phenocrysts of 2 sizes 100 - 115 cut by widely spaced series of 1/4 qtz. veins 30 - 45°/core with sericitic alteration			
143-735	DEBRIS FLOW dark grey brown massive rock porphyritic (feldspar) matrix with considerable number of inclusions 163, 175 2" - 3" dark balck f.g. mafic dikes 30°/core 412 2" - 3" irregular banded grey white pink qtz. 20°/core 467 4" irregular white to grey-pink qtz. @ 10°/core 735 sheared contact f.g. schistose for 1-2 ft. @ 60°/core			
735-1047	MAFIC SYENITE sharp contact no chilling immediately coarse grained dark Barren white late stage qtz veins as follows: 836 3/4" & 1/4" vein 60°/core 835 1 1/2 banded creamy grey qtz. 20°/core 870 1" vein at 70°/core 922 qtz. filled breccia zone 60°/core wall rock inclusions contains angular qtz. fragments creamy brown matrix 922 - 923			PPB
		3893	1.0	Nil
970-972	6" vein 70°/core grey white 3/4" wide to 1/4"	3892	2.0	Nil
	973 1/2 30°/core 1000 1" 30°/core HOLE STOPPED TEMPORARILY AT 1047			

SLUDGE:

ALL NIL - 20 PPB EXCEPT:

75 - 80	40
95 - 105	100
125 - 135	90
735 - 745	30
755 - 765	30

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SIGNED

L. J. Cunningham

PROPERTY NEWFIELD MINERALS INC.

HOLE No. 85-N-13

Claim L.1754 Teck Twp.
LOCATION: 90 ft. South & 350 ft.
LATITUDE: west of No. 1 post
DEPARTURE:
ELEVATION:

STRIKE: @ 100' 70° N 30° W
500' 70° N 30° W
~~1000' 71° N 24° W~~
DIP: ~ 70°
DATE DRILLED: 21 October -

@ 2500' 51° N 14° W

PAGE No. 1 of 6

PURPOSE: A deep test of 29, 35 & 36 Veins

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
0 - 74	O/B			
74 - 541	DEBRIS FLOW dark grey to pale brown rock massive porphyritic (feldspar white to flesh 1/16 - 1/8" size) numerous inclusions predominantly mafic with a few felsic (granitic) clasts size from 1/4" to 3"			
	286-288 f.g. drak brown mafic syenite dike with pink syenite rib parallel to core 1/8" wide			
	290-325 fractured numerous narrow 1/16 - 1/4" quartz veinlets cutting core at 30 to 80°/core some bleaching with a few dull red sections developed			
	348-358 fractured ~ brecciated numerous grey quartz veinlets & stringers 1/4" - 1/2" wide mainly 60 - 80°/core several pale buff coloured altered sections 2" black, f.g. mafic dike at 45°/core possibly a fault zone at 45 - 60°/core			
	510-541 alt. dull brick brown			
541 - 661	MAFIC SYENITE contact sharp at 20°/core variable texture corase to fine dark grey to black at about 640 alteration colour change less dark colour change to grey to pale grey brown - spots of magnetite developed about 642-643			
	645-657 silicified, altered - fractured zone sericitic - black spots of blood red to black hematite, cut by swarm of qtz. stringers & veins being ± 5% of core random angles from 0 to 60° several prominent layered grey to white veins at 60°/core a little <1% pyrite			
	645 - 650	3894	5.0	TR
	650 - 655	3895	5.0	0.02
	655 - 658	96	3.0	0.002
	658 - 661	97	3.0	Tr
661 - 724	QTZ. BIMODAL FELDSPAR PORPHYRY 707 - 708.5	42438	1.5	17 PPB
	709 - 710 altered sericitic ± 2% irregular quartz filled fractures < 1% coarse pyrite			
724 - 741	MAFIC DIKE distinct grey colour f.g. to sections with pronounced black flecks of ferromagnesium mineral ~ 1/6" size cut by few white qtz. stringers 45°/core Contacts at 60°/core and altered			
741-1532	Q BIMODAL FELDSPAR PORPHYRY ±			
	855 - 857 quartz flooded ~ 30% irregular quartz			

DRILLED BY Heath & Sherwood Drilling

SIGNED L. J. Cunningham

PROPERTY NEWFIELD MINERALS

HOLE No. 85-N-13

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 2 of 6

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	745-750) few qtz. fractures	3898	5.0	Tr
	750-755) weakly altered	3899	5.0	Tr
	755-760	3900	5.0	Tr
	760-765	42401	5.0	Tr
	855-857 cut by swarm of irregular white qtz. veins (est. 7-10% qtz.) no no pyrite, no alteration	42402	2.0	Tr
741-1532 (cont'd)	QTZ. BI MODEL PORPHYRY variable shades of brown			
	994-996 40% white qtz. at 50°/core, brown alteration for several feet on each side	42403	2.0	Tr
	1090-1100 pale apple green coloured altered section phenocrysts subdued			
	1103 - 1" white qtz. @ 60°/core			
	1090-1095	42404	5.0	Tr
	1095-1100	42405	5.0	Tr
	1100-1105	42406	5.0	Tr
	1105-1110	42407	5.0	Tr
	1105-1110 scattered fine 1/16" qtz. fractures @ 60°/core			
	1117.5-1126.5 brown alteration zone pronounced brick brown colour scattered with introduction of fine stringers & blots of qtz. over 3.0 feet including a 1" fracture zone at 30°/core			
	1117.5-1122.5	42408	5.0	Tr
	1122.5-1126.5	42409	4.0	Tr
	1183.5-1185 2" white qtz. - 60°/core with green alteration	42410	1.5	Tr
	1184 and 1189 4" brick brown alteration associated with fine qtz. filled fracturing			
	1189-1190	42411	1.0	Tr
	1194-1195	42412	1.0	Tr
	1212-1215 2 x 1" qtz. white barren @ 45°/core minor bleaching (alteration	42413	3.0	Tr
	1225.5-1228.5 greenish altered zone cut by approx. 6 fine qtz. fractures at 45 & 60°/core	42414	3.0	.002
	1340-1345 Fractured altered sections - 1" white qtz. vein at 45°/core plus few qtz. stringers Also chloritic slips - paler brown in colour -fine qtz. filled fractures random angles -phenocrysts largely destroyed	42415	5.0	Tr
1532 - 1554	MAFIC SYENITE dark grey with sparse dark blood red phenocrysts augite well developed in sections - contacts broken - angles undetermined			

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PROPERTY NEWFIELDS

HOLE No. 85-N-13

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE No. 3 of 6

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
				PPB
1554-1555	Badly broken possibly fault or breakage on contact			
1554-1622	Q. BIMOD PORPHYRY 1554-1560	42424	6.0	11
	1560-1565	42425	5.0	6
	1554-1665 broken few widely spaced 1/8 - 1/4" grey qtz. stringers 60 - 80°/core sparse coarse pyrite < 1% 1592-1597	42426	5.0	7
	1592.7 broken fracture few qtz. stringers greenish alteration			
1622-1710	MAFIC SYENITE dark variable textured coarse to fine magnetic fine sections have felsite ribs			
	1643-1645 Fault zone 30°/core 1" gouge 3 x 1/2 - 1" white late stage qtz.	42427	2.0	25
	1665-1690 coarse grained cut by wispy qtz. fractures 1696-1697	42428	1.0	8
	1697 3/4" rosy qtz. 90°/core			
1710-1719	GREYWACKE contact at 45° f.g. gritty occ. clast of black cherty I.F.			
	1715-1718 fine hairy fractures showing fine silicification alteration along fractures, very restricted alteration along fracture pronounced buff coloured silicifiation in erratic patches at 1718-19 adjacent to a 1" banded qtz. vein at 60°/core			
1718-1724	MAFIC DIKE dark grey mottled appearance med. f.g. contact 60°/core			
	1723-1724 silicified adjanent to hairy like fractures			
	1715-1717	42429	2.0	12
	1717-1718	42430	1.0	17
	1718-1723	42431	5.0	10
	1723-1724	42432	1.0	22
1724-1740	GREYWACKE predominantly with some qtzite, grit siliceous silt			
	1726 f.g. black cherty looking 6" section may be sedimentary, alteration or intrusive?			
1740-1897	CONGLOMERATE polymatic clast supported foliated 30°/core			
	1759 8" mafic dike, possibly lamprophyre at 80°/core with 3/4" white-pink qtz. veins grey salt/pepper appearance 1758-1759	42433	1.0	8
	1812-1820 pale green uniform coloured med. grained mafic dike			
	1820 4" highly silicified zone around intricate fine fracturing at 90°/core	42434	6"	8
	1833-1836 pale grey-brown (Lamprophyre?) motley dike much white qtz. veining introduced at 60-70° core Total about 6" 1833-1836	42435	3.0	40
	sericitic in part			

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PROPERTY NEWFIELD

HOLE NO. 85-N-13

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PAGE NO. 4 of 6

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
1897-1900	SHEARED GREYWACKE sharp contact to sheared light grey greywacke with increasing shearing & fracturing to 1900			PPB
1900-1905	FAULT ZONE IN GREYWACKE sheared 45°/core some qtz. introduced & reddish feldspathic material less than 2%	42436 1897-1900 42437 1900-1905	3.0 5.0	14 10
1905-1915	GREWACKE massive unsheared 1.5 feet lost core			
1915-1916	8" MAFIC DIKE with magnetite clots chilled edges irregular 60-80°/core			
1916-2280	CONGLOMERATE			
	2078-2081 dark brown mafic dike contacts 60°/core 2100 Fault zone 18" wide 4" gouge 12" qtz. veins 2113-2117 dark brown mafic dike few qtz. stringers 2200-2206 dark green lamprophyre dike cut by banded qtz. veins 3-5% qtz. 2210 2" white barren qtz. with hard pale brown alteration over 4" 2240 4" white qtz. brecciated	42440	5.0	15
	2180-2185	42439	5.0	11
2280-2296	TRACHYTE TUFF			
	2280-2285 brown in colour cut by scattered 1/16" very hard - dark qtz. fractures black to grey to brown fine grained laminated (bedded) 30°/core dark brown to pale creamy cherty horizon - very hard to black, very fine grained, material of medium hardness to a grey-green med. grained tuff with sparse small flattened 1/16 x 1/4" lappilli	42441	5.0	8
	2285-90	42442	5.0	23
	96	42443	6.0	7
	2295 possible fault			
	99	42444	3.0	11
2296-2300	ALTERED CONGLOMERATE pale green highly sericitized - clasts partially destroyed			
	2299-2303	42445	4.0	7
2300-2303	fine grained, pale green dense massive rock with sparse, scattered flesh coloured syenite inclusions Dike? or tuff? considered to be a dike 2303 -2308 Contacts are conformable at 30° - 45°/core	42446	5.0	14
2303-2335	CONGLOMERATE AS BEFORE			
2335-2338	Dark, fine grained dike with conformable contacts which are chilled at 30°/core similar to 2300-2303			
2338-2650	CONGLOMERATE as above Numerous flattened slab clasts 1/4" x 4" of very black, fine grained, silty material			
	2395-2404 sheared 2395 - 2400	42463	5'	7
	2404-2407 dike as 2335-2338 2400 - 2404	42464	4'	74
	2430-2441 sheared sericitic 2430 - 2435	42465	5'	10
	2500-2550 lighter coloured 2435 - 2441	42466	6'	8
	Considerable green fuschite as flattened, elongated clasts.			

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PROPERTY NEWFIELDS MINERALS

HOLE No. 85-N-13

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
	2635 becoming highly sheared carbonatized sericitized fuschitic Clasts becoming fewer and spaced out from clast supported to matrix supported			
	PPB 2600 - 2603 42447 3.0 67 2605 42448 2.0 11 2607.8 42449 2.8 12	2607.8 - 2610 42450 2.2 52 - 2612 51 2.0 14 - 2615 52 3.0 67 - 2620 42467 5.0 10 -2625 68 " 19 - 2630 69 " 10 - 2635 70 " 17 - 2640 71 " 10 - 2645 72 " 14 - 2650 73 " 12 - 2655 74 " 15 - 2660 75 " 12 - 2665 76 " 11 - 2670 77 " 8 - 2675 78 " 10 - 2680 79 " 8		
		2681.5 - 2683 80	1.5	10
2650-2678	SHEARED, fine grained SEDIMENT 1/32" dia. quartz grains in sericitic matrix pale yellow green shearing 60°/core few chert fragments cut by few barren whte qtz veins fuchsitic highly contorted <1% coarse pyrite	2688 - 2690 42481	2.0	17
2678-3005	MAFIC TUFF dark to black generally fine grained with sections of lapilli tuff to 1" diameter clasts which are dark to purplish f.g. & porpjyritic			
	2786 - 2787 3" barren white qtz, 90°/core	42482	1'	8
	2850-2865 coarse grained, breccia variety of fragments both angular & rounded volcanic clastic conglomerate			
	2858-2860 pale grey, med. grained with pale green to grey to black phenocrysts sharp altered (sericitic) contacts at 90°/core Alteration is 1" - 3" wide a little coarse pyrite			
	2865-2970 f.g. pale grey to black bedded tuff at 80° - 90°/core occasional clast			
	2970-2976 coarse mafic lapilli tuff pale grey-black clasts generally angular			
3005	END OF HOLE			

DRILLED BY Heath & Sherwood Drilling Ltd.

SIGNED

L. J. Cunningham

PROPERTY Newfields Minerals Inc. Teck Township

HOLE No. N-85-13

LOCATION:

LATITUDE: STRIKE:

DEPARTURE: DIP:

ELEVATION: DATE DRILLED:

PURPOSE:

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY VALUE
2912.2-2913.8'	Quartz-feldspar veining	99664	1.6'	nil
2922-2925'	(Reworked mafic tuff, lightly sericitic, very fine)	99665	3.0'	nil
2925-2928'	(Disseminated pyrite, local pyrite nodules)	99666	3.0'	nil
2928-2931'	As above	99667	3.0'	10
2931-2934'	As above	99668	3.0'	10
2934-2937'	As above	99669	3.0'	nil
2937-2940'	As above	99670	3.0'	nil
2940-2943'	(Reworked mafic tuff, lightly sericitic, very fine, disseminated pyrite, local pyrite nodules	99671	3.0'	nil
2943-2946'	As above	99672	3.0'	nil
2946-2949'	As above	99673	3.0'	10
2949-2952'	As above	99674	3.0'	nil
2952-2955'	As above	99675	3.0'	nil
2955-2958'	As above	99676	3.0'	nil
2958-2960.6'	As above	99677	2.6'	nil
2960.6-2963'	As above	5178	2.4'	nil
2963-2966'	As above	5179	3.0'	nil
2966-2969.8'	As above	5180	3.8'	nil
2969.8-2973'	Agglomeratic to lapilli tuff, local coarse pyrite	5181	3.2'	20
2973-2977.1'	As above	5182	4.1'	30
same 2977.1-2978.5	As above	5183	1.4'	40
2995-2997'	As above	5183	2.0	40
2978.5-2980'	Same as at 2922-2969.8	5189	1.5'	90
2980-2983.5'	As above	5188	3.5'	30
2983.5-2986'	Agglomerate; numerous zone of coarse pyrite	5187	2.5'	30
2986-2989'	As above	5186	3.0'	70
2989-2992'	As above	5185	3.0'	40
2992-2995'	As above	5184	3.0'	100/170
2997-3001.6'	As above	5190	4.6'	60
3001.6-3003.6'	As above	5191	2.0'	50
3003.6-3005'	Fine-grained, massive or tuffaceous	5192	1.4'	20

SLUDGE VALUES NIL - 10 - 20 PPB
EXCEPT:

285 - 295	35	1645 - 1655	25	2235 - 2245	40
415 - 425	45	1745 - 1755	25	22425 - 2435	25
515 - 535	50	1775 - 1785	30	2475 - 2495	30
535 - 555	30	1835 - 1845	25	2505 - 2515	30
565 - 575	30	1865 - 1875	50	2825 - 2835	50
645 - 655	30	1875 - 1885	30	2985 - 3005	60
655 - 665	135	2095 - 2125	30		
665 - 675	30	2145 - 2165	30		
1385 - 1395	30	2175 - 2185	30		
1445 - 1455	25	2195 - 2215	40		

DRILLED BY SIGNED

Old Kirkland Lake Shoreline

BREAK

PORPHYRY

CONGLOMERATE

PORPHYRY

NORTH ZONE

3054 EAST DRIFT

3052 NORTH CROSS - CUT

L 2832

L 3301

L 3442

L 1754

NARROWS BREAK

No 2 VEIN AT SURFACE

(NEWFIELDS MINERALS INC.)
KIRKLAND LAKE GOLD MINES
KIRKLAND LAKE SHORE BASIN MINES

LAKE SHORE
No 5 SHAFT

No 3 SHAFT

No 1 SHAFT

3001 W

3001 E

Strong dry shear zone. Considerable scattered calcite in narrow stringers No sulphide mineralization and no quartz

Altered silicified por. with quartz-carbonate stringers.

Porphyry intensely altered and silicified

Zone of altered & crushed porphyry containing white quartz stringers.

Narrow white quartz stringer.

Narrow white quartz stringers weak breaks

Rock highly altered slight mineralization

200

L 2515

L 39091

L 2859

L 2516

L 3442
72712

L 2832

L 1754
71900

L 3391
71898

L 1939

KINOJEVIS VOLCANICS

BASAL TUFF

GREYWACKE

BIMODAL FELDSPAR PORPHYRY

TUFF

MAFIC SYENITE

CONGLOMERATE

FELDSPAR PORPHYRY

LAKESHORE No. 5 SHAFT

LEGEND

- DIABASE
- SYENITE PORPHYRY (F.P.)
- SYENITE
- MAFIC SYENITE
- CONGLOMERATE / GREY
- DEBRIS FLOW
- TUFF (T)
- BOUNDARY LINE
- EDGE OF TAILINGS
- EDGE OF DRY TAILINGS
- TUFF
- GEOLOGICAL FAULT
- GOLD SHOOT

NEWFIELDS MINERALS INC.

KIRKLAND BASIN PROPERTY

TECK TOWNSHIP, ONTARIO

3075' LEVEL, LAKESHORE MINE

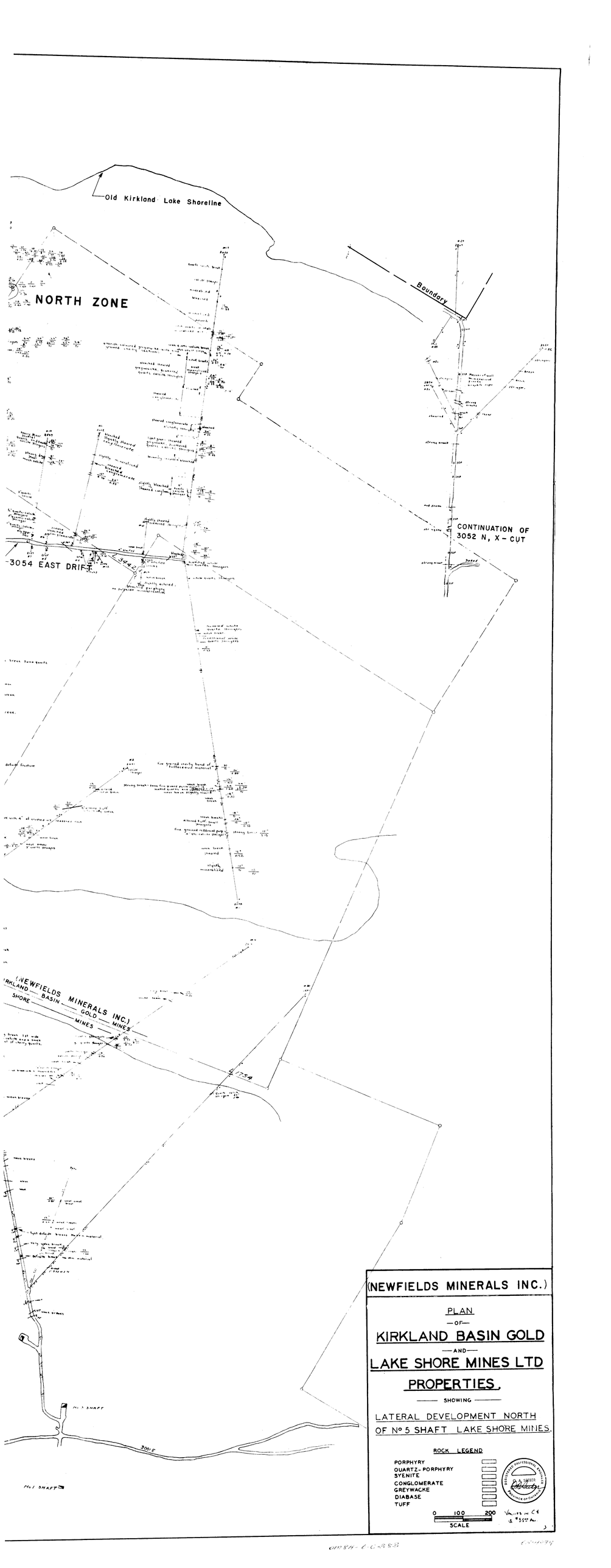
SCALE - 1:2000 OR 1" = 167' (APPROX.)

METRES 100 0 100 200 METRES

FEET 100 0 100 200 300 400 500 600 700 800 900 1000 FEET

L. J. CUNNINGHAM, B. Sc., P. Eng.
AUGUST 1985

- NEWFIELDS UNDERGROUND SAMPLING Aug. and Sept. 1985.
- LAKESHORE DRILL HOLES, 1940's.
- NEWFIELDS SURFACE DRILLHOLES, to 1986.


Old Kirkland Lake Shoreline
NORTH ZONE
Boundary
CONTINUATION OF
3052 N, X - CUT
3054 EAST DRIFT
(NEWFIELDS MINERALS INC.)
KIRKLAND BASIN GOLD MINES
SHORE
1734
No. 1 SHAFT
300 E
No. 1 SHAFT
(NEWFIELDS MINERALS INC.)
PLAN
OF
KIRKLAND BASIN GOLD
AND
LAKE SHORE MINES LTD
PROPERTIES.
SHOWING
LATERAL DEVELOPMENT NORTH
OF No 5 SHAFT LAKE SHORE MINES.
ROCK LEGEND
PORPHYRY
QUARTZ-PORPHYRY
SYENITE
CONGLOMERATE
GREYWACKE
DIABASE
TUFF
0 100 200
SCALE
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO