

1:6000 TYNDALL SHEET 7 GEOLOGY 1970

7280

9/203

1976

GEOLOGY (INTERPRETATION)

DORA - SPICER
TYNDALL
SHEET 9

1:6,000

03_4917

Tyndall, Lyell, Beatrice, Comstock, 1972-76

Placer Dome Asia Pacific*
Green, D.

5 cm

LEASE BOUNDARY

LAKE DORA

LAKE SPICER

LEGEND

QUATERNARY
- GLACIAL MORAINE.

ORDOVICIAN
- LIMESTONE - GORDON LIMESTONE.
- HAEMATITIC CONGLOMERATE - OWEN CONGLOMERATE.

CAMBRIAN
- HAEMATITIC FINER GRAINED QUARTZ CONGLOMERATE WITH MINOR SEDIMENTS (JUKES CONGLOMERATE) } TYNDALL GROUP
- CONGLOMERATE WITH QUARTZITE AND VOLCANIC FRAGMENTS (DORA CONGLOMERATE)
- LAPILLI TUFF CONTAINING FRAGMENTS OF QUARTZ FELDSPAR PORPHYRY.
- "TUFF LAVA" - PORPHYRITIC ACID LAVA WITH QUARTZ / FELDSPAR XENOLITHS AND MINOR ROCK FRAGMENTS.
- QUARTZ - FELDSPAR PORPHYRITIC LAVA OR EQUIVALENT MEDIUM GRAINED INTRUSIVE, STRONG CHLORITE - SERICITE ALTERATION.
- FINE TO COARSE GRAINED LITHIC TUFF WITH FREQUENT CONSPICUOUS XENOCRYSTS OF QUARTZ.
- SIMILAR TUFFACEOUS SEQUENCE BUT EXTENSIVE CHLORITE - HAEMATITE - SERICITE ALTERATION AND MINOR DISSEMINATED SULPHIDES.
- UNDIFFERENTIATED VOLCANICS.

} CENTRAL LAVA BELT

- QUARTZITES, SHALES AND MINOR SILTSTONES WITH THIN QUARTZ PEBBLE CONGLOMERATE AT BASE.

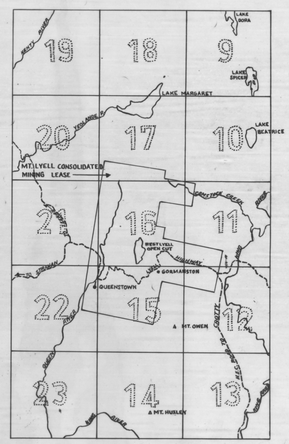
PRECAMBRIAN
- DEFORMED, METAMORPHOSED QUARTZITES - QUARTZ MICA SCHISTS.
- QUARTZ - FELDSPAR - HORNBLENDE PORPHYRY.

- 300/60 TRUE STRIKE AND DIP OF BEDDING.
- STRIKE AND DIP OF FOLIATION.
- GEOLOGICAL BOUNDARY.
- INFERRED GEOLOGICAL BOUNDARY.
- POSTULATED GEOLOGICAL BOUNDARY.
- FAULT.
- INFERRED FAULT.
- SYNCLINE.
- UNCONFORMITY.
- OLD WORKINGS.

T M

N

LOCATION



THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

DORA - HUXLEY AREA
E L 10/69
SHEET 9
GEOLOGICAL MAP

DRAWN.	P. BROPHY.
TRACED.	R.G.WILSON.
CHECKED.	
DATE.	MAY 1976
SCALE.	1" = 500' 1:6000

03_4917

Tyndall, Lyell, Beatrice, Comstock, 1972-76

Placer Dome Asia Pacific*
Green, D.

1:6,000

TYNDALL-COMSTOCK DORA-SPICER SHEET 9

GEOLOGY INTERPRETATION

1971

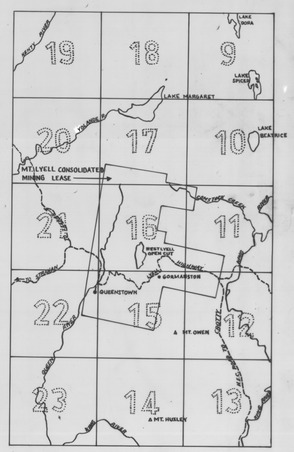
LEGEND

	Q	QUATERNARY COVER
ORDOVICIAN	Og	GORDON LIMESTONE
	Oo	UNDIFFERENTIATED OWEN CONGLOMERATE
	Oo(l)	LOWER OWEN CONGLOMERATE
	Oo(b)	BRECCIATED OWEN SANDSTONE
CAMBRO-ORDOVICIAN	€jc	JUKES BRECCIA
	€c	DORA CONGLOMERATE
CAMBRIAN	€a	AGGLOMERATES
	€qa	QUARTZ CRYSTAL AGGLOMERATE
	€qfp	QUARTZ - FELDSPAR PORPHYRIES AND FELSITIC AGGLOMERATES
	€s	CAMBRIAN SLATES
	pC	PRE CAMBRIAN QUARTZITES
	----	GEOLOGICAL BOUNDARY
	- -	FAULTS
	+	ANTICLINE
	+	SYNCLINE
	—	BEDDING, STRIKE & DIP
	----	HAEMATITE LENS
	o	PYRITE MINERALISATION
	+	PROPOSED GRID

T M

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LOCATION



5 cm

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. P.H.
	TRACED. R.G.W.
	CHECKED. H.W.
	DATE. 18 - 6 - 71
DORA – HUXLEY AREA E.L. 10/69 SHEET 9 GEOLOGICAL MAP	SCALE. 1" = 500' 1:6000

9/201

9/1101

1976

GEOLOGY (OUTCROP)

DORA-SPICER (TYNDALL) SHEET 9

1:6000

03_4917

Tyndall, Lyell, Beatrice, Comstock, 1972-76

Placer Dome Asia Pacific*

Green, D.

LEASE BOUNDARY

LAKE DORA

LAKE SPICER

NO OUTCROP

LOCATION

PRECAMBRIAN

LYELL CONSOLIDATED MINING LEASE

QUEENSTOWN

QUEENSTOWN

& MT. OWEN

& MT. HUXLEY

5 cm

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. P. BROPHY.
	TRACED. R.G.WILSON.
DORA – HUXLEY AREA	CHECKED.
EL 10/69	DATE. 1975 / 76
SHEET 9	SCALE. 1" = 500' 1:6000
OUTCROP GEOLOGY	

10/101

BEATRICE (TYNDALL) SHEET 10

1:6,000

GEOLOGY (OUTCROP)

03_4917

Tyndall, Lyell, Beatrice, Comstock, 1972-76

Placer Dome Asia Pacific*
Green, D.

LAKE BEATRICE

OWEN BOULDERS

OWEN BOULDERS (+ MINOR JUKES BOULDERS)

Gordon Lmst.

Jukes Cong.

Owen Conglomerate boulders

Coarse grained-hornblende-conglomerate (Owen)

Acid conglomerate with large frags of felsic porphyry + abundant chert pebbles -20%-70% frags in range 2cm-20cm (Jukes Cong.)

Continuous exp. of Darwin type rhyolite - breccia - acid lava & very abundant hornblende (30% or more) esp. strong silicification and recrystallisation.

Numerous small outcrops of coarse grained congl. size of frags decreased. Some acid units frags increasing in age.

Boulders and blocks of Darwin-type rhyolite - much hornbl. in parallel veins and as breccia matrix. Up to 1900 at neck is hornbl.

Minor interbedded beds as above & congl.

Fine grained grey-green acid lava + silicified breccia & minor felsic tuffites. Extensive brecciation and veining

Rhyolite-rock lapilli tuff breccia. altered + frags. of Darwin type rhyolite in hornbl. chl. matrix. Possible bands of agglomerate.

Coarse hornbl. congl. (Owen)

Boulders and blocks of Owen pebbles and boulders - insitu?

Brown weathered tuff?

Thinly bedded tuffs + lapilli tuffs + minor flows

Pink-brown silicified acid lava & pyrite

Green silic. acid lava - silic.

Green silic. acid lavas & metasomatic & veining - some hornbl. 20%

Pink-green silic. acid lavas & chert veins - 30% hornbl.

Pink-green breccia altered acid lava (Beatrice)

Coarse conglomerate

Sequence of siliceous micaceous shales & impure banks & lenses of impure limest. with dol. veining.

Mainly fine grained acid lavas & tuffs - minor breccia

Pink-grey silic. acid lavas and chert(?) pisolitic(?) metasomatic veins (MS 56)

Green chl. lapilli tuff + agglom. with abundant chert pebbles & boulders

Green chl. lapilli tuff + agglom. with abundant chert pebbles & boulders

Pink-grey silic. acid lavas and chert(?) pisolitic(?) metasomatic veins (MS 56) - silic. + chl. - blocky - interbedded with silic. lavas

1:6,000

TYNDALL- LYELL
SHEET 11

GEOLOGY
FACT

1974

11/101

03_4917

Tyndall, Lyell, Beatrice, Comstock, 1972-76

Placer Dome Asia Pacific*
Green, D.

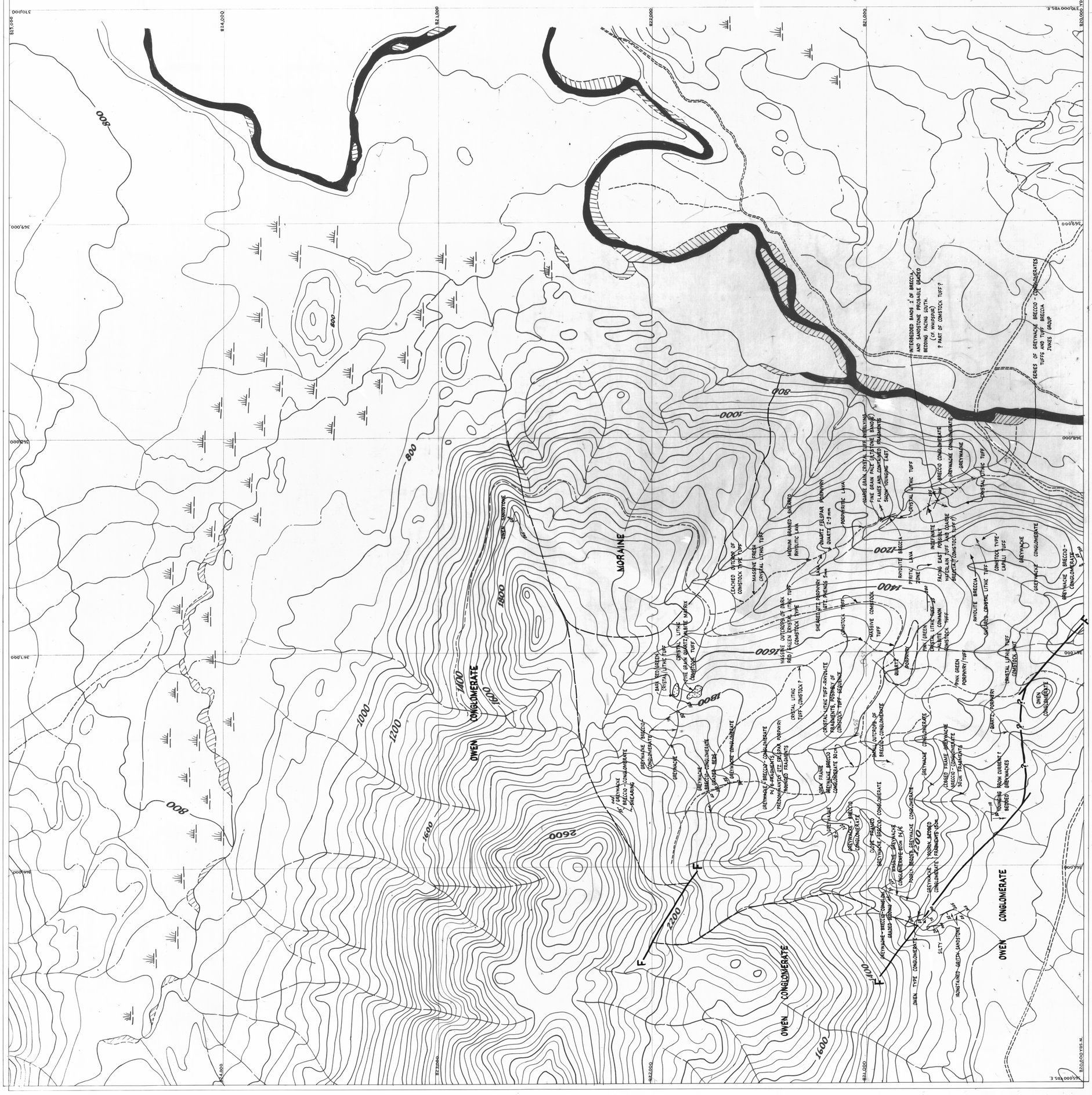
THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

DORA – HUXLEY AREA
E.L. 10/69
SHEET 11
GEOLOGICAL MAPPING

DRAWN K.J. LEE
TRACED R.G. WILSON
CHECKED
DATE 11-2-'74
SCALE 1:6000

LOCATION

5 cm


MORAINE
OWEN CONGLOMERATE
UNCONFORMITY
F
GREYWACKE
GREYWACKE CONGLOMERATE
GREYWACKE BRECCIO CONGLOMERATE
CRYSTAL LITHIC TUFF
CRYSTAL LITHIC TUFF-RHYOLITE FRAGMENTS, POSSIBLY OF COMSTOCK TUFF-SEQUENCE
MASSIVE COMSTOCK TUFF
RHYOLITE BRECCIA
PORPHYRY/TUFF
PINK GREEN PORPHYRY
QUARTZ PORPHYRY
COMSTOCK TUFF
LAPILLI TUFF
COMSTOCK LAVA
OWEN CONGLOMERATE
INTERBEDDED BANDS 1' OF BRECCIA AND SANDSTONE PROBABLE GRADED BEDDING FACING SOUTH. (CF WHIRLPOOL)
? PART OF COMSTOCK TUFF?
SERIES OF GREYWACKE BRECCIO - CONGLOMERATES TUFFS AND TUFF BRECCIA
JONES / GROUP
OWEN CONGLOMERATE
SILTS
RONSTAINED - GRITS - SANDSTONE
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1:6000 TYNDALL-LYELL SHEET 11 GEOLOGY INTERPRETATION 1974

03_4917

Tyndall, Lyell, Boatrock, Comstock, 1972-76
Placer Dome Asia Pacific
Green, D.

LEGEND

QUATERNARY
- Qm MORAINE
- Qg FLUVO-GLACIALS AND GRAVELS

SILURIAN
- SEDIMENTS (SHALES / SANDSTONES)

ORDOVICIAN
- OWEN CONGLOMERATE

CAMBRIAN
- JUKES CONGLOMERATE (GREYWACKE BRECCIAS) } TYNDALL GROUP
- COMSTOCK TUFF (LAPILLI TUFF)
- RHYOLITE UNIT (RHYOLITES, BRECCIAS AND AGGLOMERATES) } CENTRAL LAVAS
- QUARTZ PORPHYRY INTRUSIVE AND/OR LAVA
- UNDIFFERENTIATED CAMBRIAN

LOCATION

5 cm

THE MOUNT LYELL M. & R. COY. LTD
GEOLOGICAL DEPARTMENT

DRAWN K.J. LEE
TRACED R.G. WILSON
CHECKED K.J. LEE
DATE 17-5-'74
SCALE 1" = 500' 1 : 6000

DORA – HUXLEY AREA
E.L. 10/69
SHEET 11
INTERPRETATIVE MAP

MAP 4

MORAINE UNDERLAIN BY GORDON LIMESTONE

03_4917
Tyndall, Lyell, Beatrice, Comstock, 1972-76
Placer Dome Asia Pacific*
Green, D.

1:6,000

TYNDALL SHEET 14

GEOLOGY

1972

QUATERNARY
- MORAINE AND SCREE

SILURO – DEVONIAN
- SHALES AND SANDSTONES

ORDOVICIAN
- GORDON LIMESTONE
- PIONEER BEDS
- OWEN CONGLOMERATE

CAMBRIAN
- JUKES CONGLOMERATE WITH SEDIMENTS
- COMSTOCK TUFFS
  } TYNDALL GROUP
- ANDESITE INTRUSIVES
- QUARTZ PORPHYRY INTRUSIVE
- IGNIMBRITES, TUFFS, AGGLOMERATES, SEDIMENTS, SANDSTONES, LAVAS } QUEENSTOWN PYROCLASTIC SEQUENCE
- IGNIMBRITES, TUFFS, AGGLOMERATES, SEDIMENTS, SANDSTONES, LAVAS } HUXLEY TYPE RHYOLITE SEQUENCE
- DARWIN TYPE RHYOLITE / BRECCIA

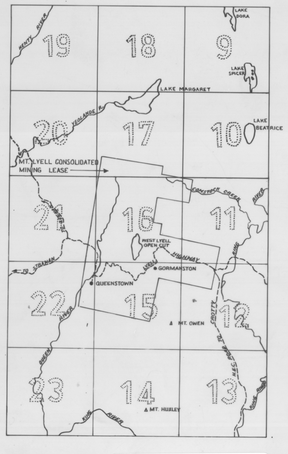
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- INFERRED GEOLOGICAL BOUNDARY
- SYNCLINE
- ANTICLINE
- BEDDING WITH DIRECTION OF DIP
- VERTICAL BEDDING
- SHEARING
- DIRECTION OF YOUNGING
- FAULT

- OLD WORKINGS
- OUTCROP
- Py PYRITE
- Ccp CHALCOPYRITE
- HEMATITE
- QUARTZ VEINS

T M

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LOCATION



5 cm

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. K.WELLS.
	TRACED. R.G.W.
	CHECKED. K.Wells.
DORA – HUXLEY AREA	DATE. 30-6-1972
E.L. 10/69	SCALE. 1" = 500' 1:6000
SHEET 14 GEOLOGICAL MAP	MAP 4

14/101

1:6,000

TYNDALL
SHEET 14

GEOLOGY
OUTCROP

1976

14/102

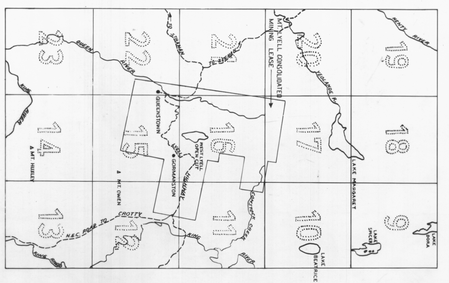
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LOCATION



THE MOUNT LYELL M. & R. COY. LTD
GEOLOGICAL DEPARTMENT

DRAWN P.MURPHY
TRACED R.G.WILSON
CHECKED
DATE. 7:12:76
SCALE. 1" = 400'

DORA – HUXLEY AREA
E L 10/69
SHEET 14
OUTCROP GEOLOGY

SECTION 3

UNDIFFERENTIATED VOLCANICS

UNDIFFERENTIATED VOLCANICS PROBABLY PYROCLASTICS

MINOR SHALE HORIZON

MINOR SHALE HORIZON

LEGEND

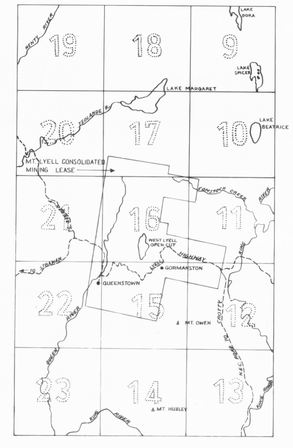
- MORAINE AND/OR SCREE.
- OWEN CONGLOMERATE.
- UNDIFFERENTIATED VOLCANICS.
- JUKES CONGLOMERATE AND EQUIVALENTS WITH TUFFS GREYWACKES, WELDED TUFFS AND MINOR SEDIMENTS. — TYNDALL GROUP
- COMSTOCK TUFF. — TYNDALL GROUP
- FINE - MEDIUM GRAINED ASH-FALL TUFFS WITH INTERBEDDED SILTSTONE AND SHALE HORIZONS. — QUEENSTOWN PYROCLASTICS
- ACID PYROCLASTIC SEQUENCE INCLUDING CRYSTAL TUFFS, AGGLOMERATES AND MINOR WELDED TUFFS. — EAST OF MT. HUXLEY — CENTRAL LAVA BELT
- GREY - GREEN FELDSPAR PORPHYRY LAVAS. — ACID LAVA SEQUENCE — CENTRAL LAVA BELT
- MASSIVE PINK - PURPLE ACID LAVAS. — ACID LAVA SEQUENCE — CENTRAL LAVA BELT
- BASIC INTRUSIVE.
- QUARTZ PORPHYRY, DOMINANTLY INTRUSIVE.
- STRIKE AND DIP OF BEDDING.
- STRIKE AND DIP OF FOLIATION.
- SYNCLINE.
- ANTICLINE.
- FAULT.
- UNCONFORMITY.
- P_y ZONE OF PYRITE.
- Hm HAEMATITE.

T M

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LOCATION

5 cm



03-4917

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. P. BROPHY.
	TRACED. R.G. WILSON.
DORA – HUXLEY AREA	CHECKED
E L 10/69	DATE. 27:10:'75
SHEET 14	SCALE. 1" = 500' 1:6000
GEOLOGICAL MAP	MAP 4

1:6000

TYNDALL SHEET 14

GEOLOGY INTERPRETATION

1975

14/201

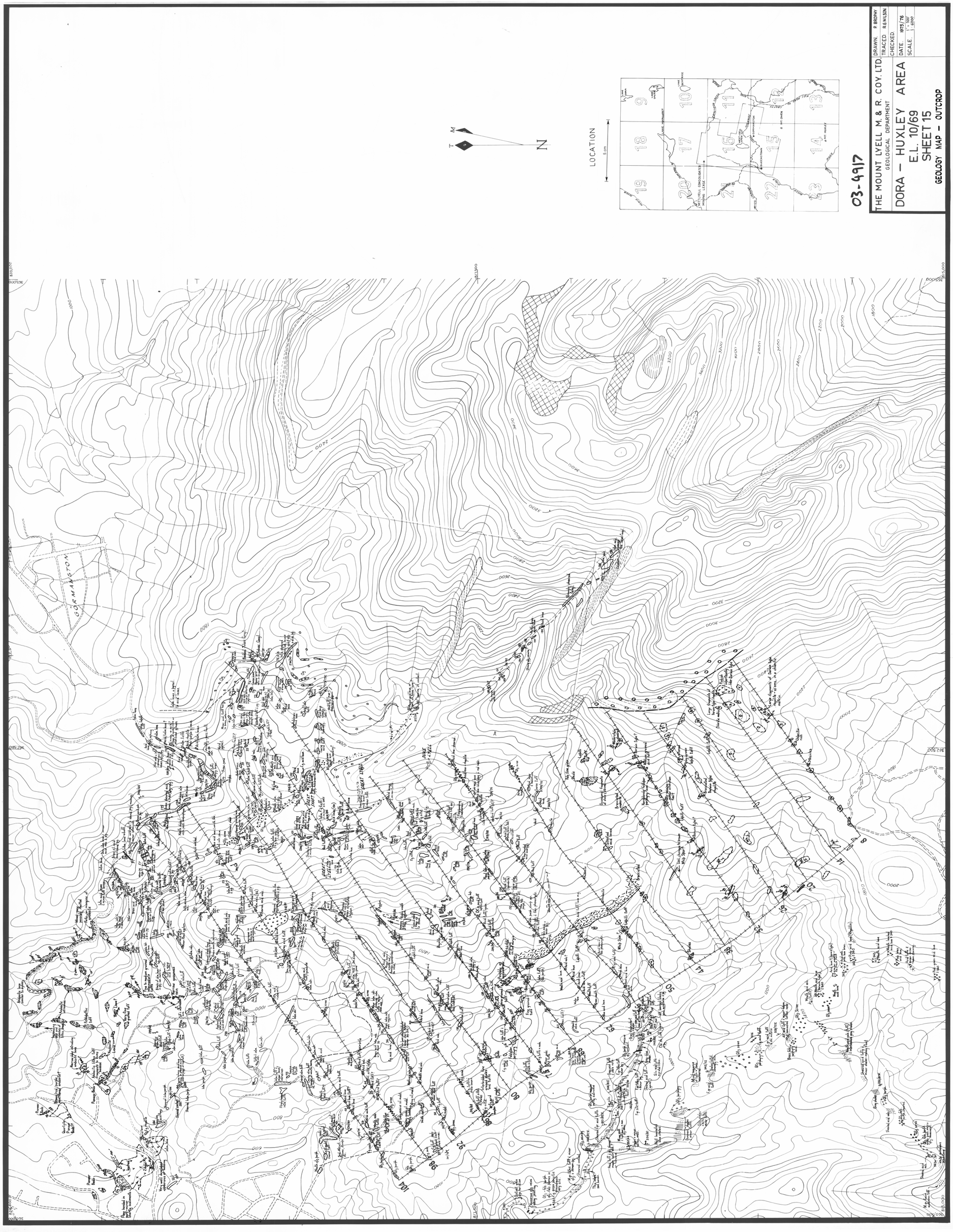
LYELL- HUXLEY

GEOLOGY
OUTCROP

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1976

15/101



LEGEND

QUATERNARY

- MORAINE AND/OR SCREE.

ORDOVICIAN

- GORDON LIMESTONE.
- PIONEER BEDS. } OWEN CONGLOMERATE
- CONGLOMERATE AND SANDSTONE. } OWEN CONGLOMERATE

CAMBRIAN

- GRADED TUFF UNITS, AGGLOMERATES AND MINOR FELDSPAR PORPHYRY LAVAS. } TYNDALL GROUP
- MEDIUM GRAINED, ACID, LITHIC TUFFS WITH MINOR BLACK SHALE HORIZONS. } QUEENSTOWN PYROCLASTICS
- INTERMEDIATE LAVAS AND MINOR INTRUSIVES. MEDIUM COARSE GRAINED INTERMEDIATE PYROCLASTICS. } INTERMEDIATE VOLCANIC SEQUENCE (MINE LEASE)
- DOMINANTLY IGNIMBRITES WITH MINOR ACID TUFF HORIZONS.
- AGGLOMERATES CONTAINING COARSE ELONGATED ACID LAVA BLOCKS. MINOR INTERBEDDED SEDIMENT HORIZONS.
- ALTERED CHLORITIC TUFF.
- ALTERED ACID LAVAS WITH VARIABLE SULPHIDES, BARITE AND HAEMATITE MINERALISATION.
- FINE GRAINED SOMETIMES LAMINATED SILICEOUS SILTSTONES AND SHALES WITH MINOR INTERBEDDED GRADED TUFF UNITS.
- THINLY BEDDED GREY SHALES.
- ACID TUFFS MAINLY CRYSTAL LITHIC.

} PYROCLASTIC SEQUENCE (LITTLE OWEN) } CENTRAL LAVA BELT

- GREY GREEN FELDSPAR PORPHYRY LAVAS.
- MASSIVE PINK - PURPLE ACID LAVAS.
- BRECCIA.
- DARWIN TYPE RHYOLITES.

} ACID LAVA SEQUENCE

- QUARTZ PORPHYRY, DOMINANTLY INTRUSIVE.
- INTERMEDIATE INTRUSIVES - PYROXENE FELDSPAR PORPHYRY.
- QUARTZ - SERICITE - PYRITE ALTERATION.

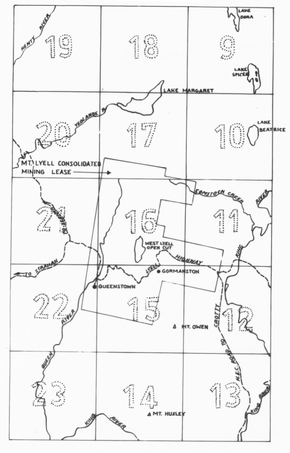
- FAULT
- POSSIBLE FAULT
- GEOLOGICAL BOUNDARY
- POSSIBLE GEOLOGICAL BOUNDARY
- BEDDING AND FACING
- FOLIATIONS
- UNCONFORMITY
- SYNCLINE AXIS
- ANTICLINE AXIS
- OLD ADITS AND WORKINGS

T M

N

LOCATION

5 cm



03-4917

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. P. BROPHY.
	TRACED. R.G.WILSON
	CHECKED.
DORA – HUXLEY AREA E.L. 10/69 SHEET 15 GEOLOGICAL MAP	DATE. 21·8·75
	SCALE. 1" = 500' 1:6000
	MAP 3

1:6,000

DORA – HUXLEY

GEOLOGY

INTERPRETATION

1975

13/2 pt

17/101

1976

GEOLOGY
OUTCROP

LYELL-COMSTOCK
SHEET 17

1 : 6,000

LAKE MARGARET

MORAINE

OWEN CONGLOMERATE

LOCATION

5 cm

03. 9917

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. N.W.S. 1974 P.B. 1975
	TRACED. R.G.W.
	CHECKED.
DORA – HUXLEY AREA E.L. 10/69 SHEET 17 OUTCROP GEOLOGY	DATE. 30:11:'76
	SCALE. 1" = 500' 1:6000

LEGEND

QUATERNARY
- SWAMP
- ALLUVIUM
- MORAINE AND SCREE

DEVONIAN
- BELL SHALE (SHALE, SILTSTONE, MINOR SANDSTONE)

SILURO - DEVONIAN
- SHALES, SANDSTONE, QUARTZITE

ORDOVICIAN
- GORDON LIMESTONE
- OWEN CONGLOMERATE

CAMBRIAN
- JUKES BRECCIA AND SEDIMENTS (NEWTON CREEK SANDSTONES) COMSTOCK TUFFS } TYNDALL GROUP

QUEENSTOWN PYROCLASTICS
- MAFIC INTRUSIVES. GABRO. DOLERITE
- MAFIC EXTRUSIVES. BASALT. SPILITE
- INTERMEDIATE (HORNBLENDE) - FELDSPAR PORPHYRY
- INTERMEDIATE APHANITIC OR PORPHYRITIC (FELDSPAR) LAVAS
- ACID QUARTZ, QUARTZ - FELDSPAR, QUARTZ - FELDSPAR - MICA PORPHYRY
- ACID QUARTZ - FELDSPAR - MICA ? - HORNBLENDE ? LAVAS
- ACID, PORPHYRITIC (FELDSPAR) NO QUARTZ, OR APHANITIC LAVA AND/OR SILLS.
- IGNIMBRITE
- AGGLOMERATE (>32 MM)
- LAPILLI TUFF (4 - 32 MM)
- COARSE GRAINED TUFF (1-4 MM)
- FINE - MEDIUM GRAINED TUFF (<1 MM)
- VOLCANIC BRECCIA/CONGLOMERATE (EPICLASTIC)
- SHALE AND SILTSTONE (OFTEN WITH GRADED TUFF BANDS)
- CHERT

LAMPROPHYRE
- COARSE GRAINED TUFF (1-4 MM)
- FINE - MEDIUM GRAINED TUFF (<1 MM)

HENTY - YOLANDE BELT
- VOLCANIC BRECCIA/CONGLOMERATE (EPICLASTIC)
- GREYWACKE AND SANDSTONE
- SHALE AND SILTSTONE (SOMETIMES INTERBEDDED WITH TUFFS)

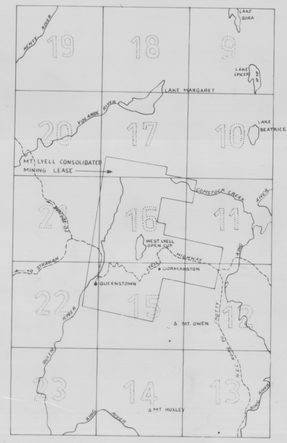
TRENCHES
- OLD WORKINGS
- PYRITE
- CHALCOPYRITE
- QUARTZ VEINING
- GOSSAN
- ANTICLINE
- SYNCLINE
- BEDDING WITH DIRECTION OF DIP (E(68))
- VERTICAL BEDDING
- SCHISTOSITY OR CLEAVAGE
- FAULT

E. = EAST etc.
GR. = GRADED BEDDING
C. = CONTACT
S.F. = SHALE FRAGMENT
F. = FLAMES

N

5 cm

LOCATION



03-4917

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN. N.N.S.
	TRACED. R.G.N.
	CHECKED
HENTY — YOLANDE AREA E.L. 41/71 SHEET 21 GEOLOGICAL FIELD NOTES	DATE 30/6/73
	SCALE 1" = 500' 1 : 6000

1:6000

TYNDALL SHEET 21

GEOLOGY OUTCROP

1:6000

TYNDALL
SHEET 18

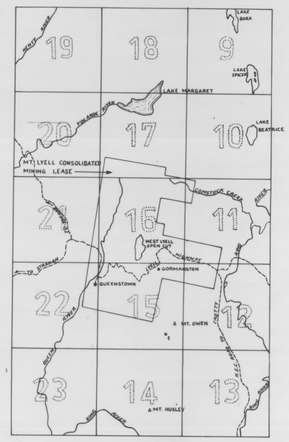
GEOLOGY
OUTCROP

LAKE MARGARET

N

5 cm

LOCATION



03-4917

THE MOUNT LYELL M. & R. COY. LTD. GEOLOGICAL DEPARTMENT	DRAWN.
	TRACED.
	CHECKED.
HENTY – YOLANDE AREA	DATE.
E.L. 41/71	SCALE. 1" = 500' 1 : 6000
SHEET 18	
GEOLOGICAL MAP	

18/101

835,000 Yes. N.

833,000 Yes. N.

834,000 Yes. N.

832,000 Yes. N.

831,000 Yes. N.

830,000 Yes. N.

350,000 Yes. E.

358,000 Yes. E.

360,000 Yes. E.

BLUE/GREY FELDSPAR PORPHYRY? INTERMEDIATE LAVAS? AND COARSE-GRAINED CRYSTAL LITHIC TUFFS

CHLORITIC HORNBLENDE OCCURS IN PATCHES

DISSEMINATIONS AND OCCASIONAL VEINS OF PYRITE IN LEACHED HORNBLENDE-FELDSPAR PORPHYRY.

MORAINE LOCALLY > 10' THICK

FINELY DISSEMINATED PYRITE IN LEACHED GREY/GREEN TO BLUE/GREY EXTENSIVELY SCHISTOSE FELDSPAR-HORNBLENDE? PORPHYRY

TAWNY-PURPLE/GREY-GREY/GREEN, ALL WEATHERING TO PALE GREEN OR WHITE, FAIRLY MASSIVE FINE-MEDIUM GRAINED TUFFS OFTEN WITH SCATTERED FELDSPAR CRYSTALS. MINOR BANDED AND LAMINATED GREY-BLUE/GREY SHALE/SILTSTONE TUFF UNITS. BOTH SEDIMENTARY AND TUFFS OFTEN SILICIFIED.

BLACK SHALES

QUARTZ PORPHYRY FINE GROUNDMASS

COARSE GRAINED CRYSTAL LITHIC TUFF

CRYSTAL LITHIC TUFF WITH BLACK SHALE FRAGMENTS

74/139 (5240)

74/134 (5241)

74/158 (5239)

MASSIVE-SLIGHTLY SCHISTOSE, CRYSTALLINE GREY/GREEN, FELDSPAR CRYSTALS OFTEN FAIRLY COMMON. ACID LAVA? OR COARSE GRAINED CRYSTAL TUFF.

MORAINE THIN AND PATCHY < 2'

SCATTERED GREY CHERTY FRAGMENTS MOSTLY <1 CM. APPROX. 10×3×2 cm? OCCUR IN THE TUFF?

DIRTY BLUE/BLACK LAMINATED SHALES

74/156 (5238)

SCATTERED SHALE FRAGMENTS

SEVERAL THIN BLACK CHERTY SHALES, GENTLY FLEXURED

LARGE MASSIVE QUARTZ

DISSEMINATED CHALCOPYRITE AND PYRITE SOME COARSE AS 2mm, OVER STRIKE WIDTH OF 900'+, WHITISH LEACHED, SCHISTOSE, HORNBLENDE PORPHYRY?

BLUE/GREY, FINE GRAINED VARIETY SCATTERED FELDSPAR PHENOCRYSTS, NO HORNBLENDE (INTERMEDIATE LAVAS?)

74/196 (5242)

BLUE-GREEN, WEATHERING PALE GREEN, QUARTZ PORPHYRY, QTZ (40%) FELDS. (20%) QUARTZ PHENOCRYSTS, AVERAGE SIZE 4 mm, ANHEDRAL - SUBHEDRAL.

SCATTERED LARGE (3-5 cm) ROUNDED LAPILLI, GEL? STRUCTURES

DARK BLUE/GREY FELDSPAR (HORNBLENDE) PORPHYRY? FELDSPAR (80%) ALTERED HORNBLENDE? (10%)

BLUE-GREY BANDED SILTSTONES GRADING EAST TO BLACK LAMINATED SHALES.

75/2 (5243)

BANDED BLUE/BLACK SHALE

PALE GREEN PUMICE LAPILLI TUFF?

ABUNDANT, LOOSE SURFACE QUARTZ

MASSIVE GREY TO BLUE/GREY OFTEN EXTENSIVELY WEATHERED TO A WHITISH OR PALE GREEN COLOUR, FINE-MEDIUM GRAINED TUFFS, TUFFACEOUS SANDSTONES AND SILTSTONES. IN THE FINER UNITS OFTEN TEND TO BE CLEAVED, SOMETIMES CONTAIN SMALL SHELL LAPILLI (1 cm PUMICE FRAGMENTS). INDISTINCT LAMINATIONS AND BROAD BANDING OFTEN PRESENT. SOME BEDS SILICIFIED WITH CONCHOIDAL FRACTURES. SOME MASSIVE CRYSTAL LITHIC COARSE GRAINED TUFFS AND OCCASIONAL THIN UNITS OF SHARP NARROW BANDED BLUE/BLACK SHALE AND TUFF

CRYSTAL LITHIC, MOSTLY FINE TO MEDIUM GRAINED TUFF, SOME COARSE GRAINED TUFF, SOME BANDED SILTSTONE/TUFF UNITS, LARGE SCALE GRADING

TS/11 • (5245)

HA 5/2

HA 4/2

TS/12 (5244) HA 7+ 6/2

CHERTY MUDSTONES AND SILTSTONES

HA 6/1

HA 1+2/2

ABUNDANT EPIDOTE IN JOINTS AND SHEAR PLANES, OCCASIONAL PATCHES OF DISSEMINATED PYRITE

SLIGHTLY CHLORITIC HEMISPHERICAL CONCENTRIC FOLDS, AXES STRIKE PARALLEL TO STRIKE OF BEDS, DIP VERTICAL, MINOR CRUMPLES, SMALL SCALE FAULTING

INDISTINCT FLOW BANDING? 15-0°

MASSIVE, BRICK RED > PURPLE IN PATCHES, STRONGLY WEATHERED, RHYOLITIC, SCATTERED FELDSPAR PHENOCRYSTS AND SMALL PATCHES OF CHLORITE AND/OR SERICITE, SHEARED IN PART.

BANDED AND/OR LAMINATED OFTEN SILICIFIED BLUE/GREY TUFFACEOUS SILTSTONES, SEVERAL ASSYMETRIC OVERTURNED FOLDS?

HA 6/1

HA 3/1

HA 2/1

CHERTY MUDSTONES AND SILTSTONES

THIN BEDS OF MEDIUM-COARSE GRAINED TUFF INTERBEDDED WITH BLUE/BLACK LAMINATED SHALES, LOCALLY SMALL SCALE CRUMPLING AND FAULTING

BLUE/BLACK SHALES GRADING EASTWARD INTO FINE-MEDIUM GRAINED TUFFS

CLEAVED AND SILICIFIED BLUE/BLACK/BLUE-GREY SHALES

UP TO 80' BANDED LAMINATED BLUE/BLACK CLEAVED SHALES

QUARTZ IS COMMON AS SMALL MASSES, VEINS AND FILMS ALONG JOINTS.

BLUE GREY SHALES

LARGE SCALE GRADED UNITS FROM COARSE GRAINED TUFF - SHARPLY BANDED BLUE-BLACK SHALE/TUFF

PORPHYRY/TUFF CONTACT ESSENTIALLY PARALLEL IN DIP AND STRIKE WITH THE UNDISTURBED LAMINAE AND BANDING OF THE TUFF. IN DETAIL THE CONTACT IS IRREGULAR OVER A WIDTH OF 6'. SMALL "XENOLITHS" OF PORPHYRY IN TUFF.

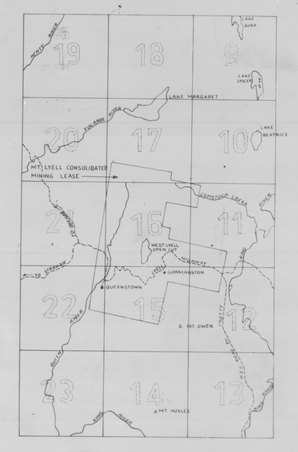
74/142

BASIN LAKE

T M

N

LOCATION



03-4917

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

HENTY - YOLANDE AREA
E.L. 41/71
SHEET 19
GEOLOGICAL FIELD NOTES

DRAWN N.N.S.
TRACED R.G.N.
CHECKED
DATE 30/6/73
SCALE 1" = 500' 1 : 6000

5 cm

1:6000

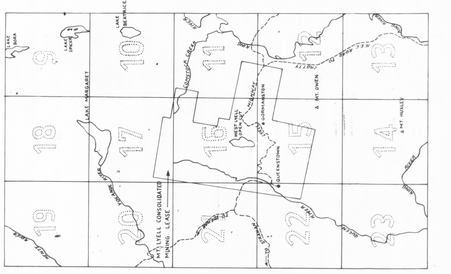
TYNDALL
SHEET 19

GEOLOGY
OUTCROP

03-4917

5 cm

LOCATION



N

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

DRAWN
TRACED
CHECKED
DATE
SCALE 1" = 500' / 1:6000

HENTY – YOLANDE AREA
E.L. 41/71
SHEET 19

BASIN LAKE

1:6000

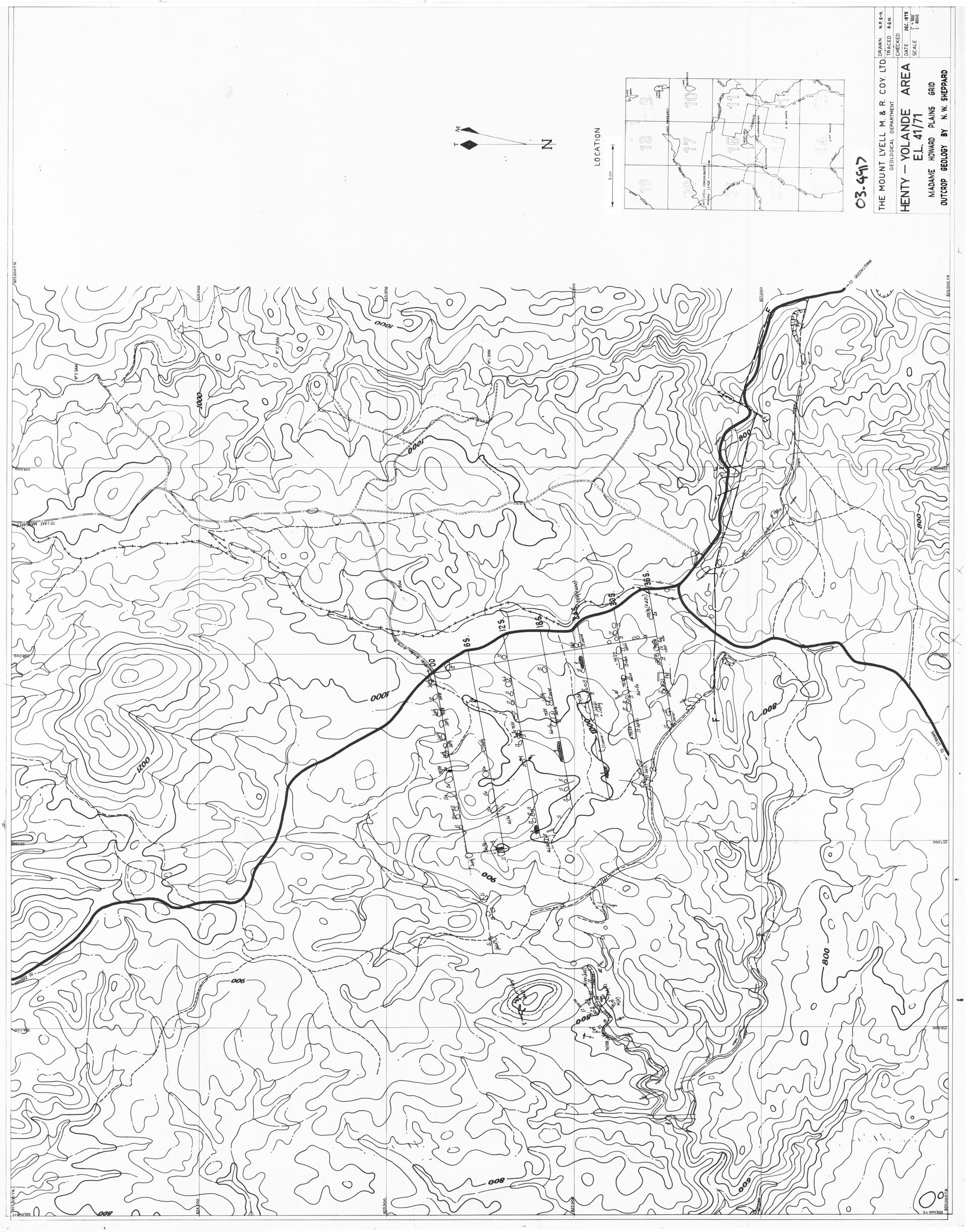
TYNDALL
SHEET 19

GEOLOGY
OUTCROP

1:6,000

TYNDALL SHEET 21

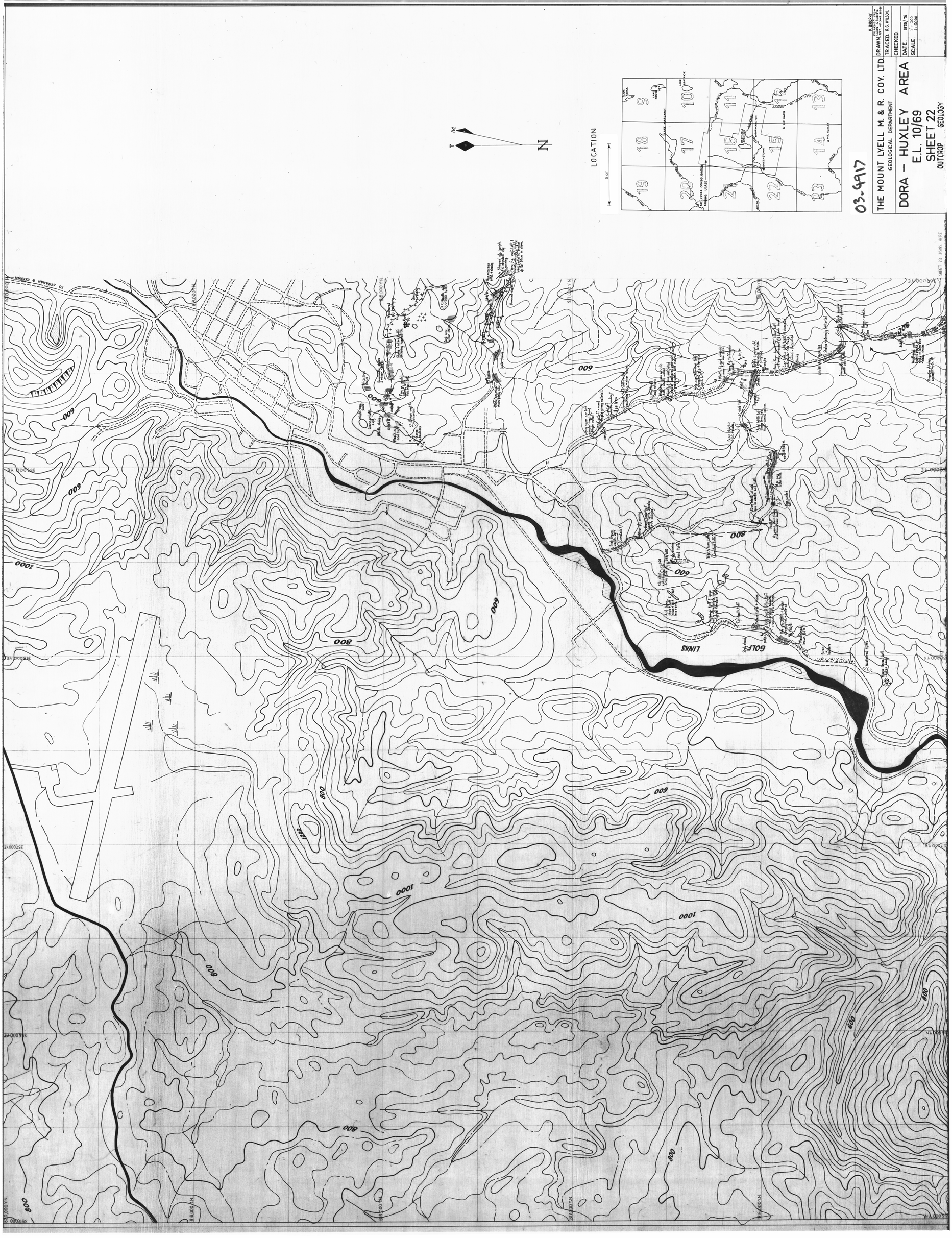
GEOLOGY OUTCROP



1 : 6,000

SHEET 22
(TYNDALL)

GEOLOGY
OUTCROP



820,000 Y.N.

819,000 Y.N.

817,000 Y.N.

816,000 Y.N.

355000

356000 E

357000 E

358000 E

359000 E

360000 E

STRAHAN & STRAHAN

800

1000

1022

600

PALAEOZOIC SEDIMENTS

POST - CAMBRIAN LOWER

UNDIFFERENTIATED

UNDIFFERENTIATED PYROCLASTICS (QUEENSTOWN)

CROTTY QUARTZITE

LINKS GOLF

F

Og

CLEAVED FINE GRAINED TUFF

SHALE IN TUFF

COARSE TUFF

FINE GRAINED SILTY MATERIAL INTERBEDDED WITH CRYSTAL TUFF

COARSE CRYSTAL LITHIC TUFF

CLAY REPRESENTING WEATHERED TUFF

SEDIMENTS OF FINE AND COARSE TUFFS

BEDDED SEQUENCE OF SHALES AND CRYSTAL TUFFS

VERY COARSE CRYSTAL LITHIC TUFF FRAGMENTS OF SILTY MATERIAL

FRESH ROCK SHOWS FINE GRAINED CRYSTAL LITHIC TUFF

CLAY MAY REPRESENT TUFF

QUEENSTOWN PYROCLASTICS

INCREASE IN TUFFACEOUS COMPONENT

MIXED TUFFS AND SEDIMENTS

LOTS OF QUARTZ SCREE

LIGHT GREY VESICULAR LAVA SIMILAR TO ANDESITES

SEDIMENTS AND BEDDED TUFFS

208

QUATERNARY

MORAINE AND SCREE

SILURO - DEVONIAN

SHALES AND SANDSTONES

ORDOVICIAN

GORDON LIMESTONE

PIONEER BEDS

OWEN CONGLOMERATE

CAMBRIAN

JUKES CONGLOMERATE WITH SEDIMENTS
COMSTOCK TUFFS
} TYNDALL GROUP

ANDESITE INTRUSIVES

QUARTZ PORPHYRY INTRUSIVE

IGNIMBRITES
TUFFS
AGGLOMERATES
SEDIMENTS
SANDSTONES
LAVAS
} (QUEENSTOWN) PYROCLASTIC SEQUENCE

IGNIMBRITES
TUFFS
AGGLOMERATES
SEDIMENTS
SANDSTONES
LAVAS
} HUXLEY TYPE RHYOLITE SEQUENCE

DARWIN TYPE RHYOLITE / BRECCIA

DEFINITE GEOLOGICAL BOUNDARY

APPROXIMATE GEOLOGICAL BOUNDARY

INFERRED GEOLOGICAL BOUNDARY

SYNCLINE

ANTICLINE

BEDDING WITH DIRECTION OF DIP

VERTICAL BEDDING

SHEARING

DIRECTION OF YOUNGING

FAULT

OLD WORKINGS

OUTCROP

Py PYRITE

Ccp CHALCOPYRITE

HEMATITE

QUARTZ VEINS

POST CAMBRIAN GEOLOGY
MODIFIED AFTER M.SOLOMON

T M

N

LOCATION

5 cm

19 18 9
20 17 100
21 16 11
22 15 12
23 14 13

LAKE VERA
LAKE SPICER
LAKE MARGARET
LAKE BEATRICE
MT LYELL CONSOLIDATED MINING LEASE
QUEENSTOWN
BOOTHAMSTON
WEST LYELL MINING LEASE
MT. OWEN
MT. HUXLEY

03-4917

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

DORA - HUXLEY AREA
E.L. 10/69
SHEET 22
GEOLOGICAL MAP

DRAWN	ENLARGED FROM 1:2,500 SURVEY DEPT. 26 JUNE 1970
TRACED	
CHECKED	
DATE	
SCALE	1" = 500 1:6000

1:6,000

SHEET 22
(TYNDALL)

GEOLOGY
INTERPRETATION

1976

GEOLOGY
INTERPRETATION

SHEET 22
(TYNDALL)

1:6,000

03-4917

8

LEGEND

QUATERNARY
- MORAINE AND/OR SCREE.

SILURO - DEVONIAN
- POST ORDOVICIAN SEDIMENTS.

ORDOVICIAN
- GORDON LIMESTONE.

CAMBRIAN

TYNDALL GROUP
- JUKES CONGLOMERATE.
- INTERBEDDED TUFFS AND SEDIMENTS.
- WEATHERED ACID LITHIC TUFFS.
- LAMINATED BLUE - GREY SHALES.
- COARSE GRAINED CHLORITIC CRYSTAL TUFF - COMSTOCK TUFF.

CENTRAL LAVA BELT — LITTLE OWEN PYROCLASTIC SEQUENCE
- WELDED TUFFS WITH MINOR LITHIC TUFF HORIZONS.
- MEDIUM - COARSE GRAINED INTERMEDIATE PYROCLASTICS.
- THINLY BEDDED GREY SHALES.
- ACID TUFFS MAINLY CRYSTAL LITHIC.
- FINE GRAINED ACID LAVAS.

QUEENSTOWN PYROCLASTICS
- QUARTZITE - RICH SANDSTONE / GRIT.
- FINE TO COARSE GRAINED CRYSTAL AND CRYSTAL LITHIC TUFFS WITH ISOLATED BLOCKS OF BLUE SHALE - DOMINANTLY PYROCLASTICS.
- LAPILLI TUFF WITH CHLORITIC MATRIX CONTAINING MINOR WELDED UNITS.
- TUFF BRECCIA WITH LARGE BLOCKS OF ACID LAVA UP TO 25 CM IN DIAMETER.
- FINE TO MEDIUM GRAINED LITHIC AND CRYSTAL LITHIC TUFFS WITH FREQUENT LAMINATED SHALE HORIZONS - DOMINANTLY SEDIMENTS.
- FINE TO COARSE GRAINED ACID CRYSTAL TUFF.
- UNDIFFERENTIATED PYROCLASTICS.

- UNDIFFERENTIATED CAMBRIAN VOLCANICS.
- QUARTZ - FELDSPAR PORPHYRY INTRUSIVES / EXTRUSIVES.
- BASIC, STRONGLY BRECCIATED FLOWS.
- INTERMEDIATE INTRUSIVES - PYROXENE FELDSPAR PORPHYRY.

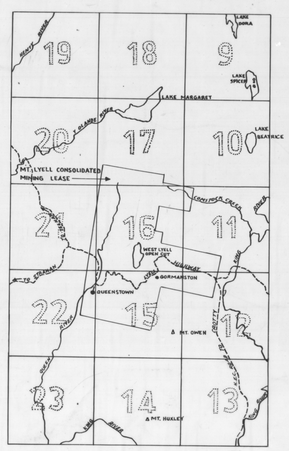
- FAULT.
- POSSIBLE FAULT.
- GEOLOGICAL BOUNDARY.
- POSSIBLE GEOLOGICAL BOUNDARY.
- BEDDING AND FACING.
- FOLIATIONS.
- UNCONFORMITY.
- SYNCLINE AXIS.
- ANTICLINE AXIS.

T M

N

5 cm

LOCATION



THE MOUNT LYELL M. & R. COY. LTD.	DRAWN. P.S.
GEOLOGICAL DEPARTMENT	TRACED. R.G.W.
DORA – HUXLEY AREA	CHECKED.
E.L. 10/69	DATE. JUNE 1976
SHEET 22	SCALE. 1" = 500' 1 : 6000
GEOLOGICAL MAP	

SHEET 22
(TYNDALL)

1:6,000

GEOCHEMISTRY
SOIL and ROCK
RESULTS

LEGEND

'C' HORIZON
SOIL SAMPLE -80#

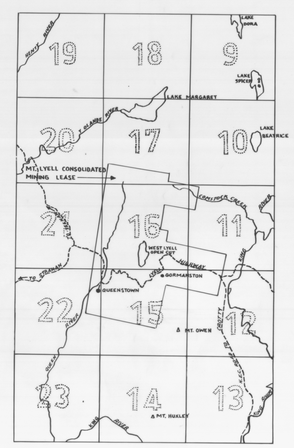
ROCK CHIPS
FROM AUGER

T M

N

5 cm

LOCATION



03-4917

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

E.L. 9/66 - SHEET 22
CYPRUS MINES GRID
GEOCHEMISTRY
CYPRUS MINES CORP. 1972

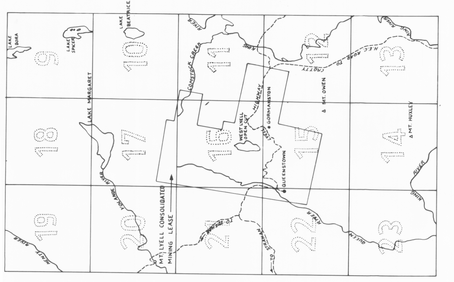
DRAWN. ENLARGED FROM LANDS & SURVEY DEPT. 40 CHNS. SERIES
TRACED. P.J.R.
CHECKED.
DATE. 16-4-80
SCALE. 1" = 500' 1 : 6000

1:6,000

SHEET 23
(TYNDALL)

GEOLOGY
- OUTCROP -

LOCATION



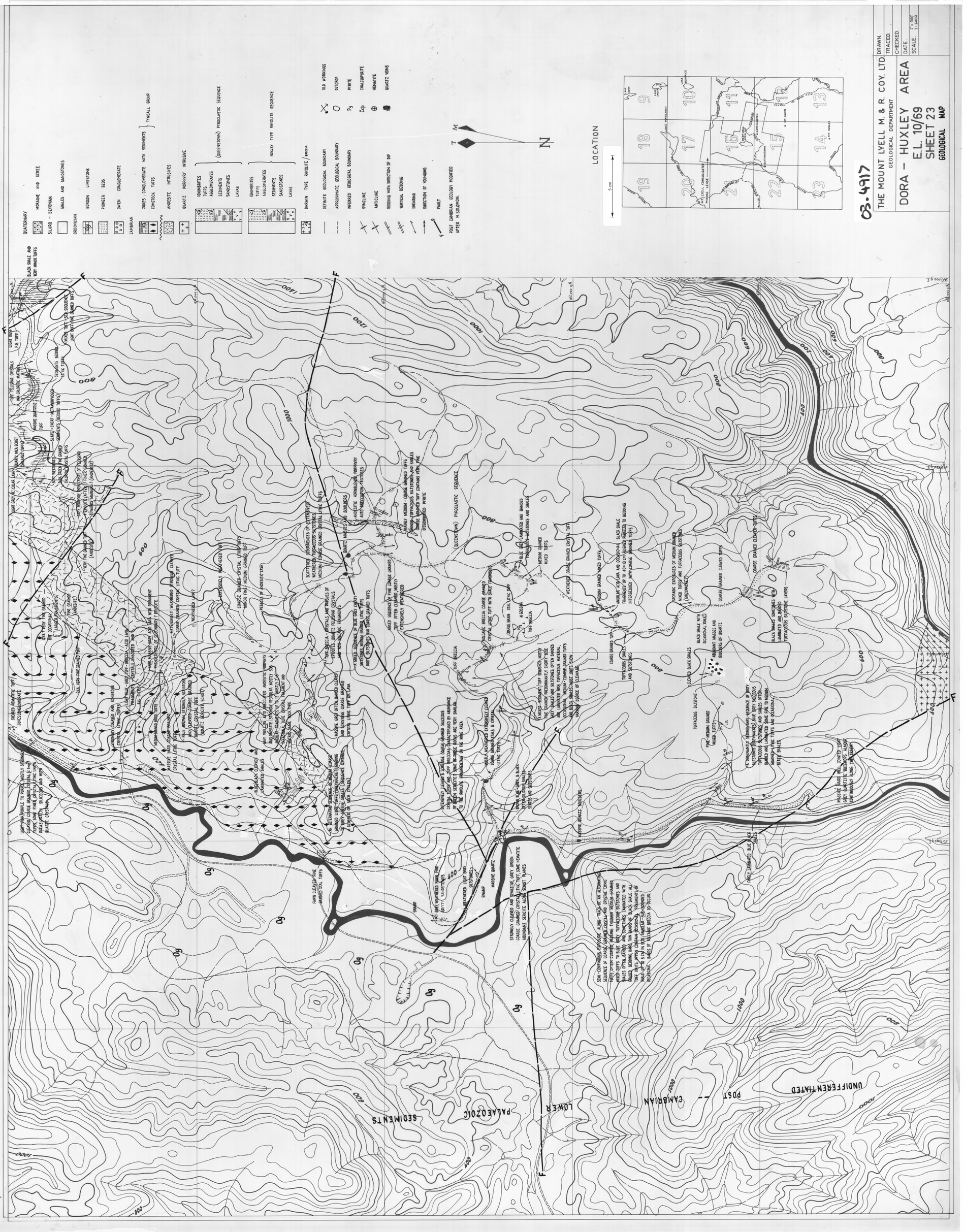
03-4917

THE MOUNT LYELL M. & R. COY. LTD.	DRAWN P.BROPHY
GEOLOGICAL DEPARTMENT	TRACED R.&W.ELSON
	CHECKED
DORA – HUXLEY AREA	DATE 1975/76
E.L. 10/69	SCALE 1:6000
SHEET 23	
OUTCROP GEOLOGY	

1:6,000

SHEET 23
(TYNDALL)

GEOLOGY
INTERPRETATION



1976

GEOLOGY

INTERPRETATION

SHEET 23

(TYNDALL)

1:6,000

POST

ORDOVICIAN

SEDIMENTS

POST ORDOVICIAN SEDIMENTS

UNDIFFERENTIATED CAMBRIAN VOLCANICS

LEGEND

QUATERNARY

MORAINE AND/OR SCREE.

SILURO - DEVONIAN

POST ORDOVICIAN SEDIMENTS.

ORDOVICIAN

GORDON LIMESTONE.

CAMBRIAN

TYNDALL GROUP

JUKES CONGLOMERATE.

INTERBEDDED TUFFS AND SEDIMENTS.

WEATHERED ACID LITHIC TUFFS.

LAMINATED BLUE - GREY SHALES.

COARSE GRAINED CHLORITIC CRYSTAL TUFF - COMSTOCK TUFF.

CENTRAL LAVA BELT

WELDED TUFFS WITH MINOR LITHIC TUFF HORIZONS. MEDIUM - COARSE GRAINED INTERMEDIATE PYROCLASTICS. THINLY BEDDED GREY SHALES. ACID TUFFS MAINLY CRYSTAL LITHIC. → LITTLE OWEN PYROCLASTIC SEQUENCE.

FINE GRAINED ACID LAVAS.

QUEENSTOWN PYROCLASTICS

QUARTZITE - RICH SANDSTONE / GRIT.

FINE TO COARSE GRAINED CRYSTAL AND CRYSTAL LITHIC TUFFS WITH ISOLATED BLOCKS OF BLUE SHALE - DOMINANTLY PYROCLASTICS.

LAPILLI TUFF WITH CHLORITIC MATRIX CONTAINING MINOR WELDED UNITS.

TUFF BRECCIA WITH LARGE BLOCKS OF ACID LAVA UP TO 25 CM IN DIAMETER.

FINE TO MEDIUM GRAINED LITHIC AND CRYSTAL LITHIC TUFFS WITH FREQUENT LAMINATED SHALE HORIZONS - DOMINANTLY SEDIMENTS.

FINE TO COARSE GRAINED ACID CRYSTAL TUFF.

UNDIFFERENTIATED PYROCLASTICS.

UNDIFFERENTIATED CAMBRIAN VOLCANICS.

QUARTZ - FELDSPAR PORPHYRY INTRUSIVES / EXTRUSIVES.

BASIC, STRONGLY BRECCIATED FLOWS.

INTERMEDIATE INTRUSIVES - PYROXENE FELDSPAR PORPHYRY.

FAULT.

POSSIBLE FAULT.

GEOLOGICAL BOUNDARY.

POSSIBLE GEOLOGICAL BOUNDARY.

BEDDING AND FACING.

FOLIATIONS.

UNCONFORMITY.

SYNCLINE AXIS.

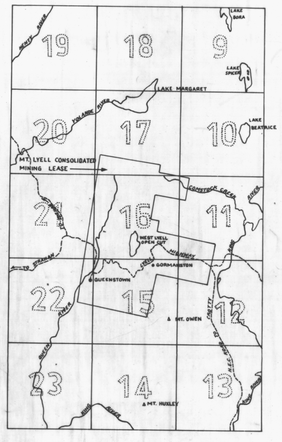
ANTICLINE AXIS.

T M

N

5 cm

LOCATION



03-4917

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

DORA - HUXLEY AREA
E.L. 10/69
SHEET 23
GEOLOGICAL MAP

DRAWN.	P.B.
TRACED.	R.G.W.
CHECKED.	
DATE.	JUNE 1976
SCALE.	1" = 500' 1:6000

825,000 Yes.N.

358,000 Yes.E.

351,000 Yes.E.

352,000 Yes.E.

353,000 Yes.E.

354,000 Yes.E.

355,000 Yes.E.

824,000 Yes.N.

823,000 Yes.N.

822,000 Yes.N.

821,000 Yes.N.

820,000 Yes.N.

1000

800

600

400

200

BANDED BLUE/GREY SHALES AND SILTSTONES

CRYSTAL LITHIC TUFF

NO EXPOSURE

SEVERAL TRENCHES PLUS A WATER FILLED SHAFT SILICEOUS BLUE/GREY SILTSTONES AND SHALES ENCRUSTED AND VEINED BY LIMONITE + HEMATITE, OCCASIONAL SMALL PATCHES OF PYRITE, FEW GRAINS OF GALENA? ALSO SOME QUARTZ VEINING.

IRON CEMENTED "CONGLOMERATE"

10' LONG ADIT AND SMALL SPOIL HEAP, CONTAINS HEMATITE/LIMONITE GOSSAN, SOME QUARTZ, OCCASIONAL MASSIVE FINE SANDSTONES

LIMONITIC GOSSANS - MARK LINE OF MAJOR FAULT?

QUARTZITE AND GREY SHALES (THE LATTER CONTAINS ANGULAR SHALE FRAGMENTS)

WHITE SANDSTONE CONTAINS OCCASIONAL QTZ. CRYSTALS

MASSIVE, OFTEN PURPLE COARSE SANDSTONES, PEBBLY CONGLOMERATES

CONTACT BETWEEN CONGLOMERATE AND SANDSTONE EXPOSED IN STREAM BED

ROUGHLY FOLIATED BRECCIA/CONGLOMERATE, GREY, ANGULAR FRAGMENT/MATRIX RATIO 40:10

HARD GREY SILICEOUS GREYWACKES, SILTSTONES MINOR BLUE/BLACK SHALES

GREYWACKES DOMINANT, WELL DEVELOPED, GRADING AND BEDDING COMMON. GRADING TO THIN, MINOR SHALE/SILTSTONE UNITS, OCCASIONAL PYROCLASTICS.

MASSIVE, SILICEOUS, FAWN FRAGMENTS - ORG. WHITE ACID LAVA OR MINOR? SHALES (SOIL) ALSO SCATTERED QUARTZ CRYSTALS. (LAPILLI TUFF OR BRECCIATED TOP OF LAVA)

CURRENT BEDDING WELL DEVELOPED MAXIMUM WIDTH OF SUCH UNITS ½"

BANDED ACID PORPHYRY? INDISTINCT BANDS WHITE & GREY, V. V. MINOR SCATTERED QTZ (80%) AND FELDS(20%) CRYSTALS & ANGULAR FRAGMENTS + INTENSELY SILICIFIED

MASSIVE SILICEOUS CRYSTAL TUFF

MASSIVE HARD BLUE/GREY PORPHYRITIC (FELDSPAR) LAVA OR INTRUSIVE.

THICKLY BEDDED BLUE/BLACK SILICEOUS SHALES

RAPIDS AND WATERFALLS

FAIRLY CONTINUOUS EXPOSURES OF BLUE/BLACK SILICEOUS SHALES, MINOR BANDS OF GREY, THIN TO MEDIUM BANDED SILTSTONES.

BLACK SHALES

PATCHES AND SMALL REEFS OF QUARTZ FAIRLY COMMON

LEGEND

QUATERNARY
- SWAMP
- ALLUVIUM
- MORAINE AND SCREE

DEVONIAN
- BELL SHALE (SHALE, SILTSTONE, MINOR SANDSTONE)

SILURO - DEVONIAN
- SHALES, SANDSTONE, QUARTZITE

ORDOVICIAN
- GORDON LIMESTONE
- OWEN CONGLOMERATE

SISTERS HILLS SEQUENCE EQUIVALENT TO TYNDALL GROUP AND/OR CONGLOMERATE
- CONGLOMERATE
- EPICLASTIC VOLCANIC BRECCIA
- GREYWACKE AND QUARTZITE
- SHALE AND SILTSTONE

CAMBRIAN
- JUKES BRECCIA AND SEDIMENTS (NEWTON CREEK SANDSTONES) COMSTOCK TUFFS } TYNDALL GROUP

QUEENSTOWN PYROCLASTICS
- MAFIC INTRUSIVES. GABRO. DOLERITE
- MAFIC EXTRUSIVES. BASALT. SPILITE
- INTERMEDIATE (HORNBLENDE) - FELDSPAR PORPHYRY SILLS
- INTERMEDIATE APHANITIC OR PORPHYRITIC (FELDSPAR) LAVAS
- ACID QUARTZ, QUARTZ - FELDSPAR, QUARTZ - FELDSPAR - MICA PORPHYRY SILLS
- ACID QUARTZ - FELDSPAR - MICA ? - HORNBLENDE ? LAVAS
- ACID, SPARSELY PORPHYRITIC (FELDSPAR) OR APHANITIC LAVAS AND/OR SILLS
- IGNIMBRITE
- AGGLOMERATE (>32 MM)
- LAPILLI TUFF (4 - 32 MM)
- COARSE GRAINED TUFF (1-4 MM)
- FINE - MEDIUM GRAINED TUFF (<1 MM)
- VOLCANIC BRECCIA/CONGLOMERATE (EPICLASTIC)
- SHALE AND SILTSTONE (OFTEN FINELY/COARSELY INTERBEDDED WITH TUFFS)
- CHERT

HENTY - YOLANDE GREYWACKE
- COARSE GRAINED TUFF (1-4 MM)
- FINE - MEDIUM GRAINED TUFF (<1 MM)
- VOLCANIC BRECCIA/CONGLOMERATE (EPICLASTIC)
- GREYWACKE AND SANDSTONE
- SHALE AND SILTSTONE (SOMETIMES INTERBEDDED WITH TUFFS)

- OLD WORKINGS
- PYRITE
- CHALCOPYRITE
- QUARTZ VEINING
- GOSSAN
- ANTICLINE
- SYNCLINE
- BEDDING WITH DIRECTION OF DIP, FACING AND TYPE OF LATTER (E(6&C))
- VERTICAL BEDDING
- SCHISTOSITY OR CLEAVAGE
- FAULT

E = EAST ETC.
G& = GRADED BEDDING
C = CONTACT
S.F. = SHALE FRAGMENT
F = FLAMES

T M N

LOCATION

5 cm

19 18 9 20 17 10 21 16 11 22 15 12 23 14 13

LAKE MARGARET, LAKE BEATRICE, MT. LYELL CONSOLIDATED MINING LEASE, QUEENSTOWN, GORMANSTON, MT. OWEN, MT. HUXLEY

03.4917

THE MOUNT LYELL M. & R. COY. LTD.
GEOLOGICAL DEPARTMENT

HENTY – YOLANDE AREA
E.L. 41/71
SHEET 24
GEOLOGICAL FIELD NOTES

DRAWN. N.N.S.
TRACED. R.G.N.
CHECKED.
DATE. 30/6/73
SCALE. 1" = 500' 1 : 6000

1:6,000

TYNDALL SHEET 24

GEOLOGY OUTCROP

24/101