

674495
Rod 1, 2
82K/4W

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 1

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ DIORITE

DESCRIPTION: Coarse crystalline, equigranular, hypidiomorphic
Slightly rusty weathering

Modal %

20% quartz

45% plagioclase

20% K-feldspar

9% hornblende - dark green

5% biotite

1% epidote - pistachio green

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 2

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ MONZONITE?

DESCRIPTION: Light pink gray weathering porphyritic fine-ground
($\approx 0.1\text{mm}$) quartz monzonite?

30% Phenocrysts

10% biotite - replaced by dark green chlorite, 1 - 2mm

20% hornblende - dark green, largely replaced by chlorite,
subhedral, 1mm to 0.5 x 7 mm

50% plagioclase - anhedral, gray-white, 1 - 2mm, zoned

20% K-feldspar - subhedral, gray-white 1 - 2 mm

70% Groundmass - light pink, equigranular - leucocratic
quartz monzonite (?) composition.

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 3 CLAIMS: ROD 1, 2
SUBMITTED BY: D. Copeland NTS MAP: 82K/4
EXAMINATION BY: A. HEAGY DATE: Sept. 22, 1983

FIELD NAME: QUARTZ VEIN

DESCRIPTION: Gray blacky, weathering, fine-grained gray-white quartz vein containing $\approx 70\%$ silicified brecciated fragments. Fragments, subrounded 1mm, to angular and at least 10cm across, silicified calc-silicate or calcareous quartzite - composition: quartz - diopside - minor calcite. Quartz vein has minor small vugs with calcite, and/or oxidized pyrite cubes (to 5mm)

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HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 4

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ MONZONITE/APLITE

DESCRIPTION: (a) Jointed, foliated, leucocratic fine-grained, quartz monzonite/aplite? with $\approx 0.2\%$ very fine disseminated pyrite (oxidized to earthy limonite).

Most joints are limonitic orange weathering.

(b) Leucocratic white fine-grained aplite with $\approx 15\%$ cloudy (clay altered?) K-feldspar phenocrysts to > 1 cm. Limonitic, goethite stained joints with up to 10% pyrite cubes to 1mm, also traces of epidote.

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HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 5 or 8 Labels not on CLAIMS: ROD 1, 2
bags
SUBMITTED BY: D. Copeland NTS MAP: 82K/4
EXAMINATION BY: A. HEAGY DATE: Sept. 22, 1983

FIELD NAME: DIORITE

DESCRIPTION: Coarse-grained diorite, weakly foliated
60% plagioclase, slightly porphyritic, weakly altered.
10% quartz
15% K-spar
10% biotite
5% black hornblende
traces very fine pyrite

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HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 6

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: APLITE/QUARTZ MONZONITE(?)

DESCRIPTION: Strong joint set with weak lineation.

Subconcordant leucocratic aplite as 1 to 5 cm
bands in strongly foliated, weakly hematite -
stained, medium grained quartz monzonite(?) with
≈5% black hornblende and traces of limonite after
pyrite.

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HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 7A

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ DIORITE

DESCRIPTION: Very rusty weathering, coarse-grained (1 - 2mm) equigranular, hypidiomorphic hornblende - biotite quartz diorite (as in RX - 1). Rusty weathering due to Fe oxides and traces of fine pyrite on joints (although there are also traces of very fine pyrite in the quartz diorite).

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 7B

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ DIORITE

DESCRIPTION: Coarse-grained quartz diorite with clay-sericite (?) altered feldspar. Dark rusty weathering. 5cm wide glassy gray-white quartz vein with ≈10% fine vugs with clay, very fine marcasite(?).

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX 5 or 8

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: APLITE?

DESCRIPTION: Orange limonitic, hard to get fresh surface.
Leucocratic aplite? fractured, ≈1% disseminated
fine pyrite, is largely altered to limonite,
goethite.

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HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 9

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZ MONZONITE

DESCRIPTION: Leucocratic, medium grained, equigranular quartz monzonite (20% quartz, 50% K-spar, 30% plagioclase) with segregations (irregular veins?) of glassy gray quartz with \approx 15% white euhedral K-spar (1 - 10mm) and erratically distributed anhedral pyrite (in one sample seen surrounding a K-spar phenocrysts).

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 11

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: APLITE

DESCRIPTION: White foliated leucocratic aplite with traces of fine red garnet and fine limonite spots (oxidized very fine pyrite). One piece with bit of wallrock (?) of quartz diorite.

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 31

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: QUARTZITIC METASEDIMENT

DESCRIPTION: (a) Blacky gray fine-grained banded quartzitic metasediment
quartz - sericite - biotite - diopside - K-spar -
sillimanite?

(b) Non-foliated, fine-grained quartz - K-spar - plagioclase
biotite. Possibly metasedimentary but texture and
composition suggests intrusive. Weakly bleached
weathering rim with hematite band marking fresh core
with traces of very fine pyrite. Surfaces have dark
hematite - goethite coating.

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 32

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: PELITIC METAEMIMENT

DESCRIPTION: Pelitic metasediment. Inter-layered (gneissic or bedding?): Fine-grained quartz - K-spar and micaceous coarse muscovite - biotite - quartz - feldspar - sillmonite(?) layers. Weak crenulation. Moderately rusty weathering, traces of pyrite on joints.

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 33

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: TUFFACEOUS METAVOLCANIC?

DESCRIPTION: Blacky gray tuffaceous metavolcanic? Sparse angular fragments to 2 cm of coarse-grained quartz - feldspar - chlorite (pseudomorphing mafic) - calcite, and very sparse feldspar phenocrysts in a fine-grained groundmass of feldspar - chlorite - biotite - hornblende - quartz.

J.C. STEPHEN EXPLORATIONS LTD.

HAND SPECIMEN EXAMINATION

SAMPLE NUMBER: RX - 35

CLAIMS: ROD 1, 2

SUBMITTED BY: D. Copeland

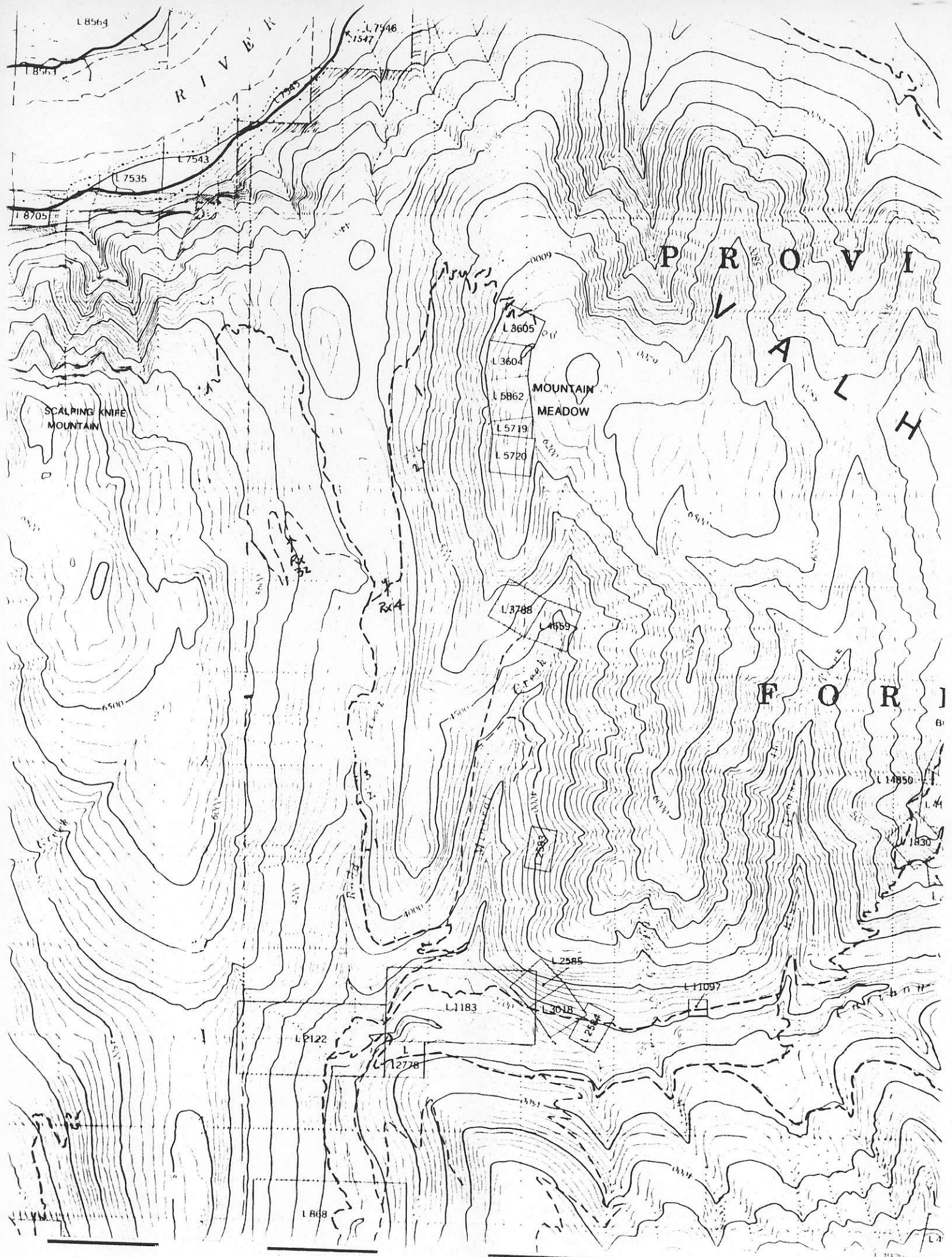
NTS MAP: 82K/4

EXAMINATION BY: A. HEAGY

DATE: Sept. 22, 1983

FIELD NAME: PEGMATITIC QUARTZ-FELDSPAR SEGREGATIONS

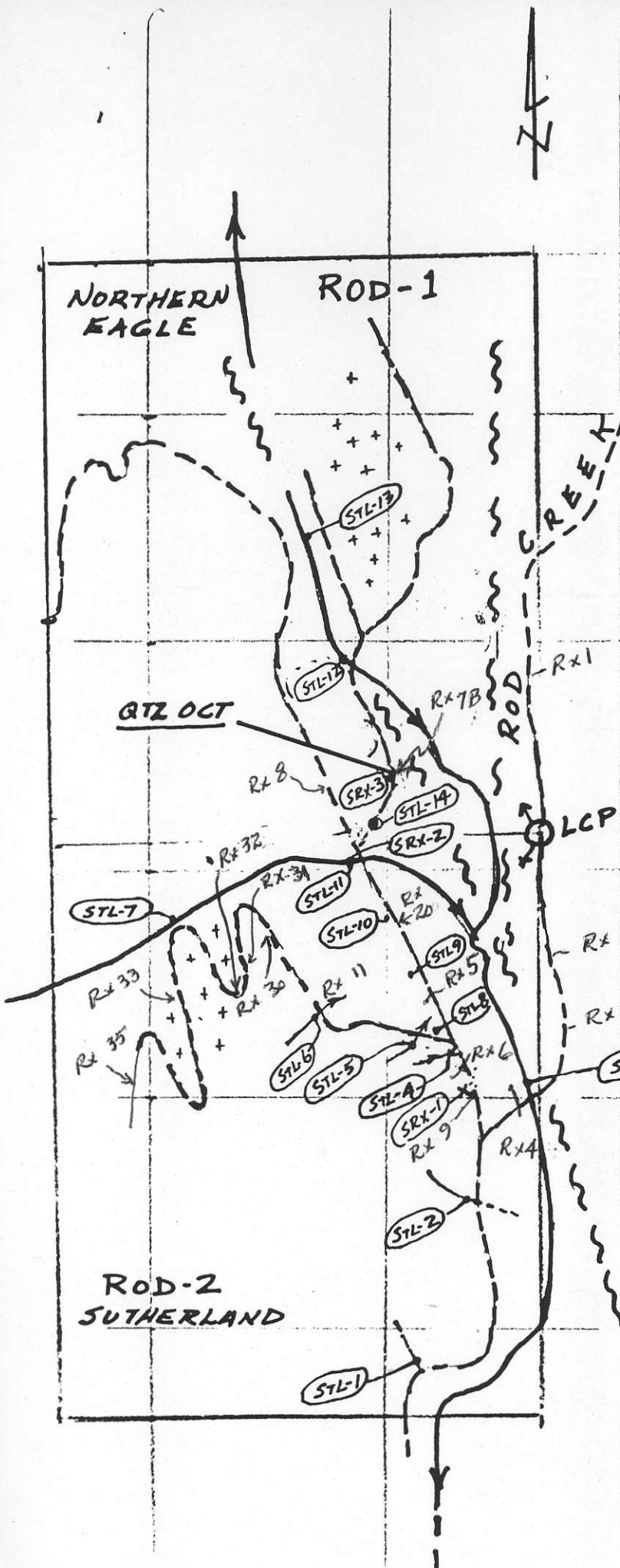
DESCRIPTION: Pegmatitic concordant quartz - feldspar segregations
in fine-grained plagioclase - quartz biotite/chlorite
- sericite schist. Joints are moderately rusty.



REF: 1:50,000 NAKUSP

82K-4W
ROD 1 - 2965
ROD 2 - 2986 (8)
Aul 3197 (10)

July



- LEGEND -

- - - ROAD
- (STL-1) STREAM, SILT SAMPLE SITE
- X-(SRX-3) ROCK SAMPLE

FIELD TEST RESULTS
(MILLITERS .001 % DZ.)

STL-1	8 ML
STL-2	+ 10 ML
STL-3	4 ML
STL-4	2 ML
STL-5	+ 10 ML
STL-6	+ 6 ML
STL-8	+ 2 ML
STL-9	4 ML
STL-10	4 ML
STL-11	+ 8 ML
STL-12	2 ML
STL-14	6 ML

SUTHERLAND RESOURCES LTD.
SILT & ROCK SAMPLE LOCATIONS
SCALE 1:25,000 APPROX.

H. J. WAHL 10 JULY 1983

