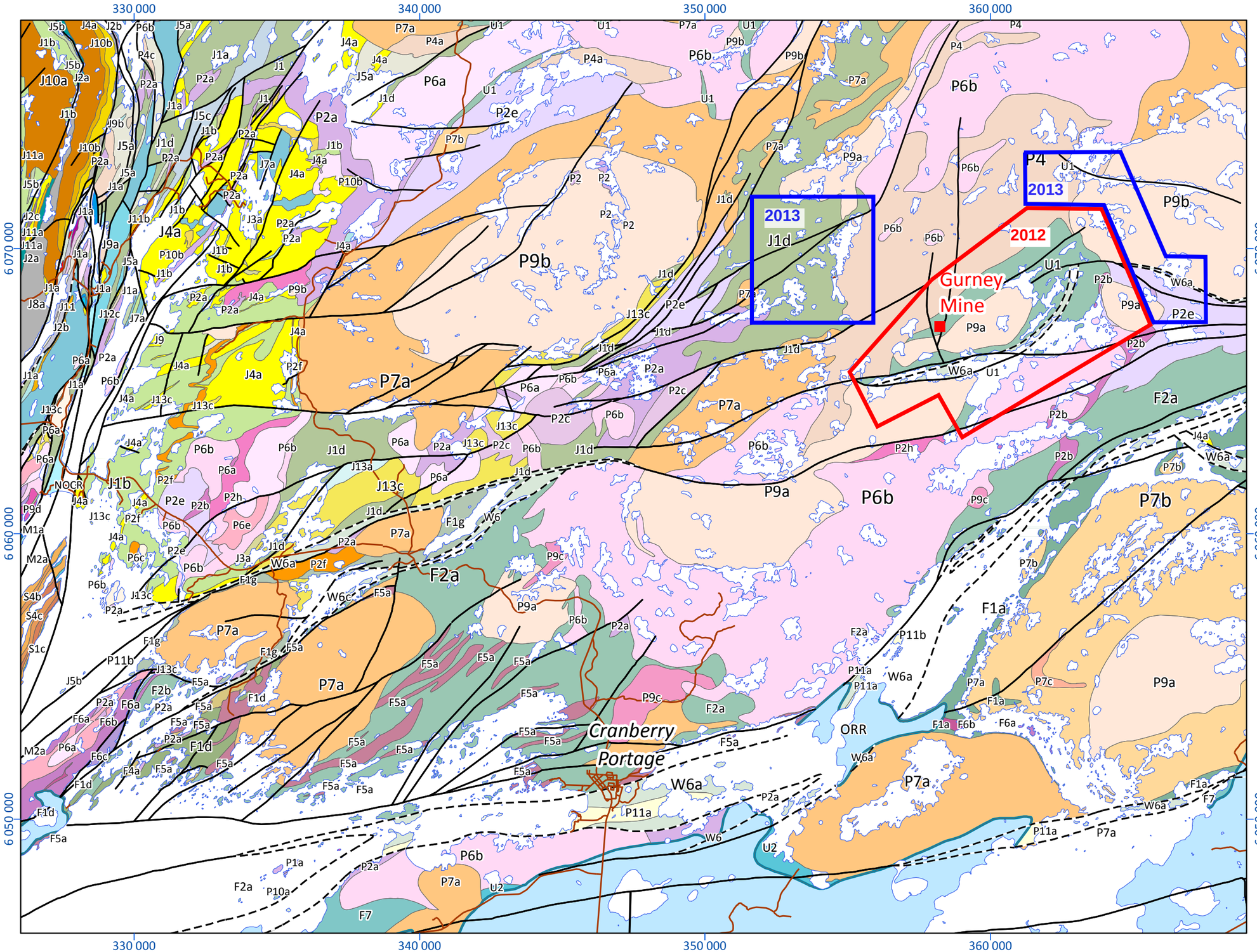


## PALEOZOIC

| | |
|---|---|
| ORR | Red River Formation (Herald and Yeoman formations, <55m) |

## PALEOPROTEROZOIC

### SEDIMENTARY, VOLCANIC AND HYPABYSSAL ROCKS

#### MISSI GROUP

| | |
|---|---|
| M3a | Sandstone, crossbedded sandstone |
| M3d | Siltstone, mudstone, crossbedded sandstone ± pebble conglomerate |
| M2a | Pebbly sandstone, pebble conglomerate, sandstone |
| M1a | Polymictic conglomerate, sandstone |

#### SCHIST-WEKUSKO ASSEMBLAGE

Fractionated mafic sills

| | |
|---|---|
| S4a | Magnetiferous ferrodiorite |
| S4b | Coarse quartz diorite |
| S4c | Fine grained diorite/quartz diorite |
| S1b | Greywacke, mudstone, felsic sandstone ± pebbles |
| S1c | Siliceous argillite, rhyolite tuff |

#### ROCKS OF UNCERTAIN AGE

| | |
|---|---|
| W6 | Tectonite, phyllonite, mylonite |
| W6a | Mafic tectonite, phyllonite, mylonite |
| W6b | Mafic tectonite with mafic-felsic intrusive sheets |
| W6c | Mafic phyllonite ± carbonate, cataclasite |

### INTRUSIVE ROCKS

Tectonite, mylonite

| | |
|---|---|
| P11a | Felsic tectonite, mylonite |
| P11b | Felsic phyllonite, quartz-sericite ± carbonate schist |

Dykes and dyke complexes

| | |
|---|---|
| P10a | Aphyric and porphyritic felsic-intermediate dykes |
| P10b | Quartz/feldspar/quartz-feldspar porphyry |

Granite to granodiorite

| | |
|---|---|
| P9a | Granite |
| P9b | Granite to granodiorite |
| P9c | Syenite to monzonite |
| P9d | Pegmatite, aplite |

Granodiorite to tonalite

| | |
|---|---|
| P7a | Granodiorite |
| P7b | Granodiorite to tonalite |
| P7c | Xenoliths-rich phase |

Tonalite to quartz diorite

| | |
|---|---|
| P6a | Tonalite |
| P6b | Quartz diorite |
| P6c | Leucotonalite |
| P6e | Xenoliths-rich phase |

Monzodiorite to quartz monzonite

| | |
|---|---|
| P4 | Monzodiorite to quartz monzonite |
| P4a | Quartz monzonite |
| P4c | Monzodiorite to quartz monzodiorite |

Gabbro, diorite, quartz diorite

| | |
|---|---|
| P2 | Gabbro, diorite, quartz diorite and derived amphibolite |
| P2a | Gabbro, diorite |
| P2b | Melagabbro |
| P2c | Diorite |
| P2d | Quartz diorite and gabbro |
| P2e | Diorite to quartz diorite |
| P2f | Diabase, diabase dyke complex |
| P2h | Xenoliths-rich phase |

Ultramafic rocks

| | |
|---|---|
| P1a | Pyroxenite, melagabbro |
| P1b | Peridotite, serpentinite |

## VOLCANIC, INTRUSIVE AND SEDIMENTARY ROCKS

### JUVENILE ARC

Hypabyssal intrusions

| | |
|---|---|
| J13a | Basalt, mafic porphyry |
| J13c | Rhyolite, dacite; quartz porphyry, feldspar porphyry, quartz-feldspar porphyry |

Tonalite to granodiorite, granite

| | |
|---|---|
| J12c | Tonalite, quartz diorite |

Gabbro, diorite, diabase

| | |
|---|---|
| J11 | Gabbro, diorite, diabase |
| J11a | Diorite, gabbro |
| J11b | Porphyritic diorite, gabbro |
| J11c | Diabase |

Compositionally layered gabbro sills and intrusions

| | |
|---|---|
| J10a | Gabbronorite, gabbro |
| J10b | Ferrogabbro |
| J10c | Quartz ferrodiorite, ferrotonalite, leucotonalite |

Volcaniclastic rocks

| | |
|---|---|
| J9 | Volcaniclastic rocks, calc-silicate rocks |
| J9a | Volcanic conglomerate |
| J9b | Greywacke, siltstone, mudstone |
| J8a | Resedimented shoshonitic tuff |
| J7a | Felsic tuff, lapilli tuff, breccia, heterolithologic breccia |
| J5a | Resedimented mafic tuff, lapilli tuff, breccia; mafic wacke |
| J5b | Pillow fragment breccia |
| J5c | Heterolithologic breccia, dominantly mafic fragments |

Rhyolite to dacite (flows, flow breccia)

| | |
|---|---|
| J4a | Rhyolite to dacite flows, flow breccia |

Andesite (pillowed and massive flows)

| | |
|---|---|
| J3a | Andesite; derived fine grained garnetiferous amphibolite |

Arc-rift basalt (pillowed and massive flows; related sill

| | |
|---|---|
| J2a | Ferrobasalt, rhyolite crystal tuff |
| J2b | Basalt, synvolcanic dykes and sills |
| J2c | Gabbro, ferrogabbro, quartz ferrodiorite sills |

Basalt, basaltic andesite (pillowed and massive flows)

| | |
|---|---|
| J1 | Basalt, basaltic andesite (pillowed and massive flows) |
| J1a | Tholeiitic basalt, basaltic andesite; gabbro; derived amphibolite |
| J1b | Calc-alkaline basalt, basaltic andesite |
| J1d | Basalt, basaltic andesite (geochemical affinity unknown); derived amphibolite |

### OCEAN FLOOR

| | |
|---|---|
| F7 | Undivided ocean-floor rocks |

Synvolcanic mafic-ultramafic complexes

| | |
|---|---|
| F6a | Gabbro, gabbro pegmatite; leucogabbro; wispy-layered gabbro |
| F6b | Pyroxenite, peridotite, serpentinite |
| F6c | Layered gabbro, leucogabbro, anorthosite |

Gabbro, diabase sills and dykes

| | |
|---|---|
| F5a | Gabbro, diabase |

Mafic volcaniclastic rocks

| | |
|---|---|
| F4a | Hyaloclastite, reworked hyaloclastite, mafic wacke |

E-type basalts

| | |
|---|---|
| F2a | Athapapuskow massive and pillowed basalt, diabase |
| F2b | Pillow basalt, gabbro, derived amphibolite |

N-type basalts

| | |
|---|---|
| F1a | McDougalls Point pillowed and massive basalt, diabase |
| F1d | Millwater pillowed basalt |
| F1g | Basalt, diabase; derived amphibolite |

### UNKNOWN GEOCHEMICAL AFFINITY

| | |
|---|---|
| U2 | Intermediate to mafic volcanic and volcaniclastic rocks |
| U1 | Mafic volcanic, minor volcaniclastic and intrusive rocks |

## PALEOPROTEROZOIC & ARCHEAN

| | |
|---|---|
| A1 | Granodiorite to tonalite |