HOLE NO. BHD 6

# PASMINCO EXPLORATION
# DIAMOND DRILL CORE RECORD



| | |
|---|---|
| LOCATION | TASMANIA |
| PROJECT | BULGOBAC HILL |
| PROSPECT | HIGH POINT |
| DESIGNED BY | J.G. PURVIS |
| LOGGED BY | J.G. PURVIS |
| RELOGGED | |
| COMMENCED | 26·8·94 |
| COMPLETED | 21·11·94 |
| DRILLED BY | F. DRTNER |
| DRILL RIG | MINDRILL 66 |

## OBJECTIVE

TO COMPLETE TEST OF DUE-HELLYER MIXED SEQUENCE, ORIGINALLY DESIGNED TO BE CARRIED OUT BY ABORTED HOLE BHD5.

## RESULT

MIXED SEQUENCE BRECCIO-CONGLOMERATES INTERSECTED 677-815m (55m TRUE THICKNESS), CONTAINING DISSEMINATED SPHALERITE AND PYRITE. BEST INTERSECTIONS: 7.7m @ 0.33% Zn IN MIXED SEQUENCE AND 2m @ 1.2% Zn IN FOOTWALL BASALTS.

## LOCATION/SURVEY DATA (AMG)

| | | | | |
|---|---|---|---|---|
| Grid | AMG | | RL Collar m | 682.9 |
| Northing m | 5 392 522.9 | | Bearing Collar | 131° 50' |
| Easting m | 387 998.8 | | Dip Collar | −80° |
| DH Survey Type | EASTMAN DOWNHOLE CAMERA | | Length Hole m | 1060.9m |

## SIGNIFICANT INTERSECTIONS

| From m | To m | Interval m | Zn | Pb | Ag | Au | | Comments |
|---|---|---|---|---|---|---|---|---|
| 708 | 741 | 33 | 0·17% | <0·05% | <1 | <0·008 | | DISSEMINATED SULPHIDES IN MAFIC |
| INCL: 718·6 | 720·8 | 2·2 | 0·38% | <0·02% | <1 | <0·008 | | BRECCIO-CONGLOMERATES |
| 754·8 | 762·5 | 7·7 | 0·33% | <0·05% | <1 | <0·008 | | AS ABOVE |
| 853·5 | 862·5 | 9 | 0·41% | 0·08% | <1 | <0·008 | | DISSEMINATED + STRINGER SULPHIDES |
| INCL: 854·5 | 856·5 | 2 | 1·2% | 0·08% | <1 | <0·008 | | IN ALTERED BRECCIATED BASALT |

## SIGNIFICANT CORE LOSS

| From m | To m | % Lost |
|---|---|---|
| 379·9 | 381·3 | 21 |
| 624·3 | 625·5 | 20 |
| | | |

## POOR GROUND CONDITION ZONES

| From m | To m | Condition |
|---|---|---|
| 314·5 | 327·7 | BROKEN BY BRITTLE FAULTS + FRACTURES ALMOST // LCA |
| 574 | 615 | BROKEN BY NUMEROUS FAULTS AT LOW ANGLE TO LCA (POSSIBLY A SINGLE STRONG STRUCTURE) |
| 889 | 970 | EXTENSIVELY DEFORMED + BROKEN BY STRONG DUCTILE/BRITTLE FAULTING AT LOW ANGLE TO LCA. |

## HOLE SIZE

| Size | Depth m |
|---|---|
| HW | 8 |
| HQ | 366 |
| NQ | 1060·9 |
| | |
| | |

## HOLE CONDITIONS AFTER COMPLETION

| | |
|---|---|
| Collar | HW CASING WITH STEEL SCREW-ON TOP |
| Steel Casing | 8m HW CASING LEFT IN TOP OF HOLE |
| PVC Casing | 40mm ID CLASS 9 PVC PLACED TO BASE |
| Ground Water | – |
| Wedge | – |
| Drill Pad | – |

| Depth m | Bearing | Dip | Depth m | Bearing | Dip |
|---|---|---|---|---|---|
| 0 | 132° | −80° | 781 | 146·8° | −75·4° |
| 30 | 126° | −80·7° | 811 | 146° | −75·2° |
| 61 | 130° | −80·9° | 841 | 147° | −75·75° |
| 91 | 132° | −80·5° | 871 | 149° | −75·8° |
| 127 | 137° | −80·7° | 904 | 149·25° | −76° |
| 157 | 133° | −80·1° | 934 | 151° | −76·5° |
| 187 | 137° | −80·5° | 964 | 151·75° | −76·5° |
| 217 | 135° | −80·2° | 997 | 155° | −77° |
| 247 | 143° | −80·1° | 1030 | 153° | −77·5° |
| 280 | 145° | −80·2° | 1060·9 (EOH) | 154° | −78° |
| 310 | 147° | −80·5° | | | |
| 340 | 150 | −80·1° | | | |
| 364 | 151·5° | −80·9° | | | |
| 403 | 153° | −79·7° | | | |
| 433 | 154·5° | −79·7° | | | |
| 493 | 153° | −78·5° | | | |
| 526 | 151·5° | −78·2° | | | |
| 559 | 149·5° | −77·3° | | | |
| 592 | 151° | −76·1° | | | |
| 622 | 146·7° | −75·3° | | | |
| 655 | 144·5° | −75° | | | |
| 688 | 145° | −75° | | | |
| 748 | 146·5° | −75·3° | | | |

# LOG OF HOLE BHD6

## 0 - 211.0m: SOUTHWELL SUBGROUP

### 0 - 8.4m: NO CORE

### 8.4 - 70.6m: CRYSTAL-LITHIC SANDSTONE/BRECCIA

**Lithology:** Creamy-grey to black & white.

Up-hole fining mass-flow pulses of coarse qtz-feld xyl sst to fine breccia, with thin tops of fine bedded sst.

Zones of black shale/siltstone as matrix, lumps & bands, increasing below 54m & predominant below 66.5m.

Volc qtz xyls to 8mm, av <4mm, sl rounded & fractured. Feld xyls 1-3mm.

Subangular lithics (av <15mm, rarely to 150mm) of qtz-feld porph, flow-banded qtz-phyric rhyolite & fi gr volcs. Two 15mm pyritic mafic frags @ 67-69m.

Some fine deformed pumice in matrix.

**Alteration:** Weak oxidation on fracts to 15m, carb leaching to 60m.

Weak sericite-chlorite. Some silica-albite above 26m, carbonatisation below 54m.

**Structure:** Bedding: 65°/LCA @ 12m & 39m; 50°/LCA @ 27.8m (dips 33° to 122° AMG); 43°/LCA @ 56m (dips 41° to 070°AMG); 62°/LCA @ 67m.

Gradational contact at base.

**Mineralization:** Minor to 1% dissem & fract-filling py. Trace dissem sp below 36m.

### 70.6 - 104.8m: BLACK SHALE

**Lithology:** Dark grey, weakly calcareous siltstone/shale. Sl carbonaceous & vitric.

Intervals of up-hole fining volcaniclastic sst above 85m.

**Structure:** Fine regular bedding (except for small-scale folding in upper 3m): 72°/LCA @ 83m (dips 9° to 112° AMG); 63°/LCA @ 97m.

Fault 15°/LCA @ 72.7m;

Broken by fracts @ 78.2-79.3m (10-20°/LCA) & 103.8-104.8m.

Basal contact abrupt, broken.

**Mineralization:** Minor to 1% dissem & fract-filling py. 2% py just below top contact. Rare cp-sp on fracts & in carb veinlets.

**104.8 – 125.2m: FINE VOLCANICLASTIC SANDSTONE**

**Lithology:** Pale grey. Massive. Uniform. Even-grained.
Largely finely comminuted qtz and sericitic volc glass. Minor feld & lithic grains.
Grainsize av <0.5mm, but coarsens gradually to 1mm at base.
Blotchy appearance due to diagenetic de-watering.
Minor sericitic bands & wisps after pumice (abund 115–116m). Frags of fuchsitic pumice to 8mm below 124m.
**Alteration:** Weak sericitisation of glass & along faults.
**Veining:** Leached qtz(–carb) veins below 121m.
**Structure:** Massive. Poorly-defined bedding: 35°/LCA @ 109m (dips 45° to 110° AMG); 60°/LCA @ 124.5m.
Broken in places by fracts & brittle faults almost //LCA.
Faulted at intervals 104.8–110.3m by prob single structure <15°/LCA.
Abrupt basal contact 55°/LCA (bedding).
**Mineralization:** Minor dissem py.

**125.2 – 211.0m: PUMICEOUS BRECCIO-CONGLOMERATE**

**Lithology:** Grey. Massive. Hard. Largely unbroken.
Mass-flow deposit coarsening downhole overall.
Angular to subrounded volc clasts (incl pumice) in sandy matrix of volc qtz, felds & glass.
Clasts incl: abund deformed pumice; variable dacites (incl fi gr, feld-porph, flow-banded, perlitic, & amygdaloidal); mafics (gen amygdaloidal); qtz-feld porph; lithified black shale & greywacke.
Above ≈ 133m: fine pumice-rich bx (frags/clasts av <8mm, to 25mm), fining downhole.
133–150m: diffuse bands of sandy open-framework fine bx-cong, grit & coarse sst.
Below ≈150m: bx-cong gradually coarsens, with increasing clast abundance.
185–198.5m: Clasts av 10–25mm, max 300mm (black shale).
Below 198.5m: v coarse & packed, with rounded boulders to 1.8m of dacite & mafics.
**Alteration:** Weak-mod sil (dacitic clasts strongly sil±alb). Pumice sericitised.
Local v strong carbonatisation below 195m (clasts & matrix).
Some mafic clasts (& some pumice) strongly fuchsitic, eg: 198–199m.

**Structure:** Bedding expressed as weak 1° orientation of clasts, av 50–60°/LCA: @ 145m: 54°/LCA (dips 28° to 105° AMG); @ 175.5m: 53°/LCA (dips 26° to 088° AMG).

Basal contact abrupt, irreg: black shale squeezed up 200mm amongst basal clasts.

**Mineralization:** To 198m: Minor to 1% py – dissem & on fracts.

25x10mm massive py nodule @ 163.7m.

198–211m: 1–2% py, trace sp. Dissem, patches & stringers, both in clasts & matrix. Several massive py clasts to 20x10mm @ 198–199m.

## 211.0 – 336.55m: QUE RIVER SHALE

### 211.0 – 336.6m: BLACK SHALE

**Lithology:** Dk grey to black, carbonaceous shale.

Silty in places in upper half. More carbonaceous at depth. Graphite on some partings.

To 287.5m, occasional up–hole fining turbiditic beds to 600mm of qtzo–feldspathic micaceous sst & sed bx (clasts to 10mm of shale, sst, mafics).

**Alteration:** Silty & sandy sections (& parts of shale 245–287.5m), are calcareous.

**Veining:** Calcite veins/veinlets, esp in faulted zones in lower half.

**Structure:** Fine regular bedding. Weak cleavage sub//LCA (gen same sense as bedding).

(to LCA): B63° @ 219m; B55° & C20° @ 227m; B43° @ 241.6m (dips 54° to 050° AMG); B55° & C 20° @ 258m; B28° @ 271.8m (dips 56° to 094° AMG); B35° & C//LCA @ 289m; B15° @ 301.5m (dips 75° to 070° AMG); B23° & C10° (opp sense) @ 308m; B26° @ 324m.

Largely unbroken in upper half. Increasingly broken below 279m (esp 314.5–327.7m) by brittle faults & fracts almost //LCA.

Fault 264.6–264.9m, 35°/LCA (sub// bedding). Fault 292.65–295.4m, <5°/LCA.

Strong fault 310.8–313.5m, 25°/LCA //bedding, crush zone & carb–annealed cataclasite.

Major fault at base: 5–25°/LCA (sub// bedding). Extends 327.7m – 338.5m (centred 329–331.5m in graphitic, carb–veined, annealed cataclasite).

Actual contact a fault plane 25°/LCA (dips 67° to 030° AMG) at base of 400mm qtz–

carb vein.

**Mineralization:** 211-218.5m: 2-3% dissem py, some bedded.

218.5-270m: av 1-2% dissem py. Some bedded.

270-289m: av 2-3% dissem py (5% locally as bedded dissem in shale).

281.5m: "worm burrow-like" slugs of massive py to 60x10mm.

289-336.6m: 1% py, mainly dissem (some on fracts & in calcite veinlets).

**(NB: Total lack of sp & low pyrite content of shale, are unusual).**

## 336.6 - 676.8m: QUE-HELLYER HANGINGWALL VOLCANICS

### 336.6 - 367.3m: MAFIC BRECCIAS

**Lithology:** Grey-green. Massive.

Largely-monomict breccias, mainly hyaloclastite.

Highly angular to subangular frags (gen <100mm) of fi gr mafic with calcite amygdales & sparse feld phenos (1mm). In fi gr volc matrix occasionally replaced by calcite or silica.

Upper half sl variable: several blocks of med gr feld-porph andesite, frags of mafic with broken qtz xenocrysts, & 30% of matrix silif (baked?) shale or qtzose sst.

Unit becomes more massive & closed-framework with depth.

Sl transport of bx debris evident, with bleached silif (±pyritic) frags amongst unsilif frags.

**Alteration:** Mod-strong patchy sil (±.bleach & py). To 360m silif confined to discrete frags. Below 360m conc in matrix, smaller frags & marginal parts of larger frags.

Strong carbonatisation in upper 10m. Weak chlorite>sericite, increasing with depth.

**Veining:** Abund calcite veinlets & comb-structured qtz(±calcite) veins.

**Structure:** Upper 2m broken by faulting on shale/volcanics contact.

Basal contact marks abrupt appearance of qtz-phyric mafic frags in bx - matrix here contains minor black shale.

**Mineralization:** To 340m: 3% dissem py.

340-357.5m: 1-2% patchy dissem py (clasts & matrix).

357.5-364m: 2-3% dissem py, conc in silif frags.

364-367.3m: 3-5% dissem & stringer py, assoc with silif of frags & matrix. Trace sp, cp & fuchsite in qtz-carb veins.

**367.3 – 388m: MIXED MAFIC BRECCIAS**

**Lithology:** Greenish–grey. Massive. Hard.

Mafic hyaloclastite breccias.

Angular frags of all sizes in fi gr volc matrix (rarely black shale).

Mafics are of at least two types:

1. Fi–med gr, finely feld–phyric, as in unit above. Forms bulk of bx & also occurs as massive partly–brecciated zones to 4m wide.
2. Med gr, qtz & feld–phyric, amygdaloidal. Qtz sparse, corroded or fragmented xyls, 1–2mm. This type most common where matrix contains traces of black shale.

**Alteration:** Patchy mod–strong sil (+py & bleach), in places only affects matrix & margins of some frags.

Weak–mod chlorite–sericite, best where less silif. Trace fuchsite.

**Veining:** Abund carb–qtz veins & veinlets to 100mm.

**Structure:** V strong fault 370.9–372m,15°/LCA, crushed & sericitised.

Basal contact gradational & sl arbitrary – some black shale in matrix here.

**Mineralization:** 367.3–375m: 3–5% py (locally 5–10% @ 370m). Mostly dissem, minor stringers. Rare cp in carb veinlets.

375–381.75m: 2% py, dissem.

381.75–388m: 3–5% py, dissem.

**388 – 482m: QUARTZ–PHYRIC ANDESITE HYALOCLASTITE BRECCIAS**

**Lithology:** Grey–green. Massive. Hard.

Gen open–framework, monomict, with highly angular frags of all sizes (90% <50mm), in fi gr silif volc matrix.

Several zones of partly –brecciated andesite (eg: 396.5–419m & 466.5–469m).

Andesite is finely feld–phyric, amygdaloidal (calcite/qtz), with qtz xyls 1–3mm (gen corroded or fragmented). Qtz most common 425–456m & markedly sparser below 456m.

Rarely, matrix contains silif (baked?) black shale (eg: above 396.5m, & 460–463m).

**Alteration:** Patchy mod–strong sil to 420m (chlorite mod–strong above 396.5m).

Below 420m, patchy mod–strong chlorite–carbonate predominates, with weak sil (conc in matrix) & sericite (in vein–like zones).

**Veining:** Abund carb–qtz veins & veinlets to 420m.

Some chalcedonic qtz veining 415–420m.

**Structure:** Faults 10°/LCA @ 425.8–426.8m, & 476.4m.

Chloritic fract set, 5-20°/LCA, 435-441.5m.

Basal "contact" put at last visible qtz (no other change in andesite evident).

**Mineralization:** 388-400m: 2-3% py, dissem>stringer, very patchy.

400-406m: 2-3% py>po. Dissem. Patchy -best sulphs assoc with silif.

406-427m: 1% po>py. Trace cp. Rare sp in carb-qtz veins.

427-450m: V minor py. Trace sp & cp.

450-454m: Minor to 1% sp, minor gn, py & cp. Dissem & tiny stringers.

454-466.5m: Minor py-sp>cp.

466.5-468m: 2% py, 1-2% sp>gn-cp. Dissem & stringers in massive silif andesite.

468-482m: Minor py-sp>cp.

## 482 - 532m: ANDESITE HYALOCLASTITE BRECCIAS

**Lithology:** Grey-green.

Similar to above, but lacks qtz xyls.

Monomict quench breccias, with highly angular frags (90% <50mm) of sparsely feld-phyric amygdaloidal (calcite>qtz) andesite, in silif or carb-cemented fine volc matrix. Intervals of net-vein brecciated andesite below 518.5m.

**Alteration:** Mod-strong carbonate-chlorite (former absent & latter strong, below 518m).

Weak-mod sil, conc in bx matrix & smaller frags. Patches of sericitisation.

**Veining:** Abund carb (±qtz) veinlets & veins.

**Structure:** Sericitic fault 0-10°/LCA at intervals 505.3-513.6m, centred 509.5m (cataclasite with frags of qtz-carb vein material).

Basal "contact" marks appearance of black shale in bx matrix.

**Mineralization:** 482-506m: 1% sp-py, trace cp-gn, dissem (sp also in carb veinlets & amygdales).

506-509m: 3% py, dissem & stringers.

509-532m: Minor to 1% py, most dissem. Persistent minor cp, trace sp-gn.

## 532 - 534.85m: ANDESITE PEPERITE BRECCIA

**Lithology:** Dark greenish-grey.

Brecciated andesite (as above except rare qtz xyl frags), in black shale matrix (90% andesite, 10% shale).

**Alteration:** Mod chloritised. Silif-bleaching of andesite marginal to matrix.

**Veining:** Calcite patches & veinlets.

**Structure:** Fault 20°/LCA @ 532.1m.

Basal contact fault 5–10°/LCA, commencing 533m.

**Mineralization:** V minor dissem py, cp, sp.

**534.85 – 546.9m: ANDESITE**

**Lithology:** Greenish-grey. Massive.

Andesite as above 532m, with feld laths av 1mm & sparse small qtz/calcite amygdales.

No qtz xyls.

**Alteration:** Zones of mod chlorite interspersed with mod–strong sil zones.

Talc on fracts & small faults.

**Veining:** Qtz–carb veins & veinlets, former comb–structured.

**Structure:** Basal contact abrupt, 30°/LCA, // orient of frags in black shale immed below: a 1° depositional surface with some later shearing.

**Mineralization:** V minor dissem py, rare cp & sp.

**546.9 – 574.3m: VARIABLY-BRECCIATED ANDESITE**

**Lithology:** Dark grey-green.

Feld–phyric amygdaloidal andesite as before (amygs increase with depth).

Ranges from lightly–brecciated andesite (most common, with massive andesite intervals to 2m), hyaloclastites (fi gr volc matrix), to minor peperites (black shale matrix).

**Alteration:** Mod–strong chlorite.

Sil–bleach in diffuse bands assoc with qtz–carb veining in bx matrix (affects frags within & andesite adjacent to such zones).

Talc on fracts & faults.

**Veining:** Abund irreg qtz–carb veinlets.

**Structure:** Broken in places, esp at base, by faults at low angle to LCA.

571.25–572m: faulted zone 25°/LCA (dips 78° to 282° AMG).

Strong brittle fault at base, 5–20°/LCA, extends 573.7–576.5m.

**Mineralization:** Minor dissem py. Rare cp & sp.

**574.3 - 614.8m: MIXED ANDESITIC BRECCIAS**

**Lithology:** Dark grey-green.

Mixed breccias of finely feld-phyric amygdaloidal andesite similar to above except contains fragmented qtz xyls to 2mm.

Mostly peperite (black shale matrix) & hyaloclastite (volc matrix), but ranges from epiclastic breccias (small subangular frags, incl black shale, in sandy/shaley matrix), to partly-brecciated lava.

**Alteration:** Mod-strong chlorite-carbonate.

Minor sil in vein-like zones in bx matrix.

Weak sericite>fuchsite below 600m. Talc on fracts.

**Veining:** Common tiny irreg carb(±qtz) veinlets & cement in bx matrix.

Zones of brecciated carb>qtz veins, largest 609.6-610.25m.

**Structure:** Broken by numerous faults at low angle to LCA, poss a single strong brittle structure cutting hole at intervals, as follows:

Strong faults 10° LCA, @ 582-583.3m & 594.5-596.6m.

Small fault @ 610.4m, 20°/LCA (dips 64° to 150° AMG).

Weak ≈25°/LCA orientation of bx frags & matrix in places (@ 608m: frags 35°/LCA, dip 51° to 213° AMG).

Basal contact irreg & gradational.

**Mineralization:** Minor to 1% py, dissem/stringer. Rare sp, cp, gn.

**614.8 - 622.4m: SANDSTONE**

**Lithology:** Grey-black. Downhole-coarsening unit.

Massive fi gr quartzo-feldspathic carbonaceous sst, with 1m black shale top & 1m fine sedimentary breccia base (latter has 5-10mm subangular frags of bleached perlitic basalt & black mafic glass).

Basal 0.65m: black shale with lumps of perlitic basalt from unit below.

**Alteration:** Patchy carbonatisation, locally strong.

**Structure:** Fine bedding @ 620.5m: 48°/LCA. Bedding disturbed in places.

Strong puggy fault on top contact (614.9-615.6m), 15°/LCA, badly broken.

Basal contact intruded by highly feld-porph amygdaloidal mafic dyke, 622.4 - 623.1m, with chilled contacts (upper 50°/LCA, lower 15°/LCA, both approx same sense).

**Mineralization:** 614.8-620m: 2% py, dissem & veinlets. Trace sp.

620–621.75m: 3–5% py>sp, dissem (sp conc in bleached perlitic mafic frags).

621.75–622.4m: 2% py>sp.

**622.4 – 676.8m: BASALT HYALOCLASTITE BRECCIAS**

**Lithology:** Pale greenish–grey. Hard.

Open–framework breccias, with angular & sub–angular frags (av 5–20mm) of glassy basalt, in altered fi gr volc matrix.

Basalt fi gr, commonly perlitic (esp above 635m & towards base where also variolitic), with v rare small feldspar laths & amygdales.

Minor peperite intervals with black shale matrix.

Variablity of adjacent frags (eg: perlitic / non–perlitic), sub–angularity & weak frag alignment (esp above 635m), suggests minor transport.

**Alteration:** Conc in matrix, smaller frags & margins of larger frags.

Mod–strong sil &/or sericite–bleaching (ser best above 644m, sil best below).

Larger frags mod chlorite–carbonate alt.

**Veining:** Qtz–carb veins to 150mm, common above 654m.

**Structure:** Weak 1° alignment of frags: 30°/LCA @ 624, 630 & 648m.

650.3–651.8m: fault <5°/LCA.

Basal contact abrupt, sl irreg, 20°/LCA (dips 85° to 340° AMG).

**Mineralization:** Sulphs assoc with silif & conc in matrix. Dissem, clots & irreg stringers. Sp pale brown, replaces or rims small intensely silif–bleach frags.

622.4–635m: 2% py, minor sp–gn (5% py 628–629.5m).

635–647.4m: 1% py>sp, sp increasing with depth.

647.4–651.5m: 3% sp>py.

651.5–654m: 5% py, stringery dissem. Minor cp.

654–676.8m: 1–2% sp>py, dissem & clots. Sp increasing with depth, with zones of 5% sp>py @ 661–662m & 672.2–673.5m.

## 676.8 – 815.1m: QUE-HELLYER MIXED SEQUENCE

770052

### 676.8 – 682.15m: MIXED VOLCANIC CLASTS IN BLACK SHALE

**Lithology:** Grey-black & khaki.

A slumped deposit. Irreg clasts (to 500mm) of fi-med gr basalt (highly amygdaloidal at base), & minor silif-bleached clasts to 150mm of flow-banded feld-porph dacite. All in disturbed matrix of black shale > carbonaceous qtzose sst.

**Alteration:** Patchy strong carbonatisation.

**Structure:** 1° soft-sed flow angle 20°/LCA @ 680m.

Basal contact a small fault, 20°/LCA (// 1° flow angle).

**Mineralization:** Pale brown sp>py, dissem & veinlets. Sp in matrix & mafic/dacite clasts, esp in small frags & marginal areas of larger frags.

676.8-682.3m: 2-5% sp>py. Trace cp & gn. Sp best towards top & bottom contacts.

Several massive py clasts to 15x5mm @ 677.65m. 15x8mm massive py clast @ 680m.

### 682.15 – 732.0m: VOLCANIC BRECCIO-CONGLOMERATE

**Lithology:** Greenish-grey. Hard. Massive.

Open-framework polymict unit of mafic to dacitic provenance.

Mixed epiclastic & quench breccias, with highly angular frags amongst transported subangular to subrounded clasts, in grey, finely sandy, silif volcaniclastic matrix.

Most clasts/frags <150mm, to 500mm max.

Clasts/frags incl: fine feld-phyric andesite (predom below 697m, gen subangular); amygdaloidal basalt; non-amygdaloidal basalt (gen highly angular), & silif-bleached feld & hornblende-phyric flow-banded dacite (gen sub-rounded).

**Alteration:** Strong sil of matrix & some clasts (esp dacite).

Minor sericitisation around faults.

Most mafic frags mod-strongly chloritised.

**Structure:** Weak 1° orientation of small clasts in upper 7m (20°/LCA @ 684m) & below 730m (25°/LCA @ 731m).

Fault 30°/LCA @ 727.5m.

Basal contact gradational.

**Mineralization:** Sulphs mainly dissem (some veinlets), conc in matrix & rimming or in marginal parts of clasts. Best where silif strongest.

682.3-684.4m: 2-3% patchy sp>>py>po.

684.4-701m: 3% py>po-sp, patchy -locally +5%. Sp decreases with depth.

701–718.6m: 2–3% py>sp, minor cp.

718.6–732m: 2–5% sp>py, minor cp.

**732.0 – 738.0m: MINERALIZED DACITIC/ANDESITIC BRECCIA**

**Lithology:** Grey. V hard.

Small frags & large lumps (to 500mm) of partly–brecciated dacite/andesite with white porphyritic feld laths av 2mm, in fi gr matrix containing similar felds.

Small intervals of mafic breccio–conglomerate.

**Alteration:** V strong sil (±bleaching) of matrix & frags.

**Veining:** Comb–structured qtz–carb veins at high angle to LCA.

**Structure:** Basal contact abrupt, irreg.

**Mineralization:** 5–10% py>sp, dissem & veinlets, conc in matrix. Much of sp in & marginal to tiny fracts.

**738.0 – 747.85m: VOLCANIC EPICLASTIC BRECCIA**

**Lithology:** Greenish–grey. Massive. Hard.

Similar to above 732m. Predom v angular quench–brecciated frags mixed with lesser subangular (rarely subround) transported clasts.

Clasts/frags to 200mm (most <70mm), in fine sandy volcaniclastic matrix.

Clasts/frags mainly basalt (some sub–ophitic), lesser andesite (some amygdaloidal), minor finely feld–phyric silif andesite/dacite, & rare feld & hornblende–phyric dacite.

**Alteration:** Mod sil, mainly matrix & discrete clasts.

Mod chlorite–carbonate of mafic frags/clasts, others strongly sericitised with trace fuchsite.

**Structure:** Weak 1° orientation of smaller clast/frags: 10°/LCA @ 740.5m, 25°/LCA @ 747m.

Fault (with strong sericite & weak fuchsite alt) @ 743.9m: 20°/LCA.

Basal contact abrupt, approx 35–50°/LCA (cuts across frag attitude).

**Mineralization:** 738–741m: 3% sp>py, dissem. Sp pale reddish–brown.

741–747.85m: 2% py, minor sp. Dissem.

**747.85 – 750.85m: FINE QUARTZO-FELDSPATHIC SANDSTONE**

**Lithology:** Grey. Massive. Uniform.

Grains, av 1mm, of qtz, feldspar & lithics (some black shale).

**Alteration:** Felds carbonatised.

**Structure:** Not bedded.

Basal contact abrupt, approx 55–70°/LCA, cuts across frag attitude below.

**Mineralization:** 2% fine dissem py.

**750.85 – 815.1m: VOLCANIC BRECCIO-CONGLOMERATE**

**Lithology:** Grey with creamy-green patches.

Similar to above 732m. A variable unit of polymict, reworked, open-framework debris flow pulses, mixed with mafic quench breccias.

Frags/clasts to 500mm, most <100mm. Incl: finely feld-phyric andesite, amygdaloidal & non-amygdaloidal basalt, flow-banded silif-bleached feld-phyric dacite (±hornblende). Rare small lumps of shale & sst.

Matrix: silif, fine sand & grey/black shale.

At 763–770m & 777–781m, monomict lumps (some with jig-saw fit) of sparsely feld-phyric basalt in silif (baked?) shale: poss sills/dykes intruded into the unlith wet sediments.

**Alteration:** Strong carbonate-chlorite>sil (sil strongest 755–762m & assoc with best sulphides).

Strong sericite-fuchsite (± pink calcite) assoc with faults as follows:

765–781m, (centred on faults @ 768m & 778m); & below 795m, increasing towards basal fault.

**Structure:** Crudely layered, with weak 1° orientation of clasts.

Unit finest above 764m, coarsest below 793m.

Bedding: 35°/LCA @ 754.3m; 25°/LCA @ 762.4m (dips 53° to 145° AMG), 775m & 788.2m (dips 57° to 122° AMG); 15°/LCA @ 797.5m.

Strong carb-cemented fault 15°/LCA @ 767.5–768.25m.

Faults 8°/LCA @ 778–778.5m & 20°/LCA @ 795.1m.

Strong fault at base: 15–30°/LCA, calcite-cemented cataclasite with sericite-fuchsite alt basalt frags.

**Mineralization:** Best sp (pale brown) replaces small altered clasts in more-reworked debris flow pulses. Py conc in matrix, with minor assoc cp.

750.85-754.8m: 1% dissem py. Trace sp.

754.8-762.5m: 5% sp>>py, rare cp, dissem. 3mm massive py clast @ 761m. Rare highly pyritic amyg basalt clasts (pyritised prior to incorp in unit). 756.2m: 60mm ripped-up lump of bedded pyritic sst.

762.5-771m: Minor to 1% dissem py.

771-790m: 2% dissem py. V patchy- locally 3-5%.

790-793.2m: 5% sp>py, trace cp.

793.2-815.1m: 1-3% py, v minor sp-cp. Sulphs decrease to minor at base.

## 815.1 - 899.6m: QUE-HELLYER FOOTWALL VOLCANICS

### 815.1 - 881m: PARTLY-BRECCIATED AMYGDALOIDAL BASALTS

**Lithology:** Dark green. Fi-med gr.

Highly amygdaloidal (calcite) olivine basalt with characteristic variolitic texture. Rarely perlitic. Sparse small feld phenos below 869m.

Partly quench-brecciated (esp below 855m), with net-vein-like matrix of baked grey shale or fi gr volc material (often replaced by calcite & silica).

**Alteration:** V strong carbonate>chlorite. Mod sil below 867m.

856-869m: zone of strong bleaching-sericite (epidote?) >sil-fuchsite, assoc with strongest sulphide mineralization.

Strong sericite-fuchsite-carbonate(±pink calcite) assoc with faults (to 817m & around 823m).

**Veining:** Abund irreg calcite veins & veinlets, also regular thin comb-structured qtz-calcite veinlets. Vein of asbestos @ 864.4m.

**Structure:** Highly fuchsitic faults 10°/LCA @ 816m & 823m.

Fault 852.7m, 20-40°/LCA. Strong brittle fault with pug, 870.4-870.9m, 30°/LCA. Gradational change at base.

**Mineralization:** 815.1-834.6m: Trace dissem py.

834.6-853.5m: Minor sp, dissem, best in brecciated intervals.

853.5-856.5m: 5% sp>py, trace gn-cp. Dissem, stringers & calcite veins.

856.5-860.2m: 3-4% py>>sp. Dissem & stringers, predom in bx matrix.

860.2–863m: 1–2% sp>>py. Dissem, some sp filling amygdales.

863–868.8m: V minor py,sp,cp, mainly in amygdales.

868.8–881m: 1–3% py>sp, dec with depth, dissem, esp in shale matrix.

**881 – 899.6m: BASALT HYALOCLASTITE BRECCIA**

**Lithology:** Dark green.

V angular frags (to 150mm) of quench–brecciated fi gr amygdaloidal basalt in fi gr volc matrix (baked in places).

Basalt non feld–phyric, finer gr & less amygdaloidal than unit above.

Breccia varies from open–framework to frags with jig–saw fit.

**Alteration:** Strong carbonate–chlorite of basalt frags, matrix carbonatised only (silif in upper 2m).

Mild sericitisation assoc with faulting.

**Veining:** Abund calcite±qtz veinlets.

**Structure:** Strongly brittle faulted & broken below 889.4m (<20°/LCA), centred in strong ductile deformed zone 15–35°/LCA @ 896.5–898.5m.

Basal contact brittle fault 25°/LCA.

**Mineralization:** 881–883m: 2% dissem py>sp.

883–899.6m: Trace py>sp.

**899.6 – 1013.0m: "ANIMAL CREEK GREYWACKE"**

**899.6 – 902.15m: MAJOR FAULT IN SANDSTONE & BLACK SHALE**

Grey fine calcareous qtzose sst & lesser black shale, badly deformed & broken by major fault. Strong ductile deformation 40°/LCA overprinted by brittle zones of cataclasite & pug 20°/LCA (same sense).

Abund calcite veinlets filling microfracts.

Rare py.

Sharp contact at base – fault plane 50°/LCA.

**902.15 – 906.4m: AMYGDALOIDAL MAFIC VOLCANIC**

**Lithology:** Green massive mafic volc with abund calcite flecks 1–5mm, (mostly amygdales, but some lath–shaped & poss feldspar phenos).

Variolitic texture @ 905.4m.

**Alteration:** Strong carbonate>chlorite.

**Veining:** Common calcite veinlets.

**Structure:** Mod broken, esp at top & bottom of unit.

Basal contact sharp, 15°/LCA.

**Mineralization:** Rare py.

**906.4 – 912.25m: FAULTED CARBONACEOUS SANDSTONE**

**Lithology:** Grey & black. Fine carbonaceous calcareous qtzose sst. Irreg laminae, lenses & frags of black shale.

**Alteration:** Patchy silif.

**Veining:** Abund irreg calcite(±qtz) veinlets & veins.

**Structure:** Bedding 65°/LCA @ 907.2m. Sst fines uphole 908.5 to 907m.

Bedding gen disrupted (soft sed?). Abund microfracturing of sst.

Badly broken & zones of pug, due to strong fault 5–10°/LCA, centred 907.7–910m & 911.3–912.25m.

**Mineralization:** Rare py.

**912.25 – 969.60m: INTERCALATED BASALT & SANDSTONE/SHALE**

**Lithology:** Green & grey/black.

Basalt bands, fine carbonaceous qtzose sst, minor black shale.

Volc bands av >3m, seds av <3m (2:1). Chilled margin on mafic @ 936.3m & highly amygdaloidal mafic margin @ 943m, suggest volc bands could be dykes.

Basalt sparsely amygdaloidal. Sub–ophitic in places. Variolitic 945–950m.

Minor zones with poss feld phenos (eg: 943m), as in mafic @ 902–906m.

**Alteration:** Basalt: mod–strong chlorite > sericite, weak fuchsite. Sericite (& assoc fuchsite) strong around faults, eg: 931.5m.

Strong carbonatisation of all rock types below 940m.

**Veining:** Abund irreg calcite±qtz veins/veinlets, also as fault cement.

**Structure:** Extensively deformed & broken by strong ductile/brittle faulting.

Volc/sed contacts all abrupt, gen brittle faulted. Preserved 1° contacts //cleav.

Strongest brittle faults (all with pug & cataclasite):

914–915m: 20°/LCA; 920–920.4m: 40°/LCA; 932.3–934.4m: (v strong) 25°/LCA; 937.2–938.3m: 15°/LCA.

Cleav (bedding–//): 25°/LCA @ 941m; 35°/LCA @ 951m; 20°/LCA @ 968m.

Basal contact a v strong ductile shear, 5°/LCA.

**Mineralization:** V minor dissem py.

**969.6 – 982.2m: MAJOR FAULT IN SANDSTONE & BLACK SHALE**

**Lithology:** Grey–black. Sl broken.

Fine calcareous carbonaceous qtzose sst & black shale, strongly tectonically deformed to augen schist cataclasite with dismembered frags & augen of sst in foliated shale.

Minor small deformed frags of sericitised basalt (same as above unit).

**Veining:** Common irreg veinlets & augen of calcite–qtz.

**Structure:** A major zone of ductile & brittle faulting, with bedding deformed into fault–induced cleavage.

Cleav: 55°/LCA @ 979.6m (dips 27° to 081° AMG).

Basal contact abrupt, 40°/LCA (//cleav).

**Mineralization:** V minor dissem py. Rare cp.

**982.2 – 991.2m: DEFORMED MAFIC VOLCANIC**

**Lithology:** Green with white flecks. Fi gr. Massive.

Same mafic as above 970m. 1° texture largely obliterated.

Small qtz & calcite amygdales visible below 986m.

Minor tectonically–incorp silif black shale & sst.

**Alteration:** Mod–strong sericite–chlorite–carbonate (sericite strongest in upper part of unit where deformation worst).

**Veining:** Abund veinlets of calcite(±qtz), commonly dismembered.

**Structure:** Strongly foliated, brecciated & micro–fractured. Cleav 45°/LCA.

Strong fault, 15°/LCA (sub//cleav), centred 983m.

Basal contact step–faulted along cleav, 40°/LCA.

**Mineralization:** 1% dissem py, trace cp.

**991.2 – 1013.0m PARTLY DEFORMED SANDSTONE & BLACK SHALE**

**Lithology:** Fine qtzose & micaceous (musc) sst with minor carbonaceous material. Lesser black shale. Sst strongly calcareous in places.

**Veining:** Calcite(±qtz & chlor) veinlets & veins.

Below 1009m, veinlets of chlorite–fuchsite.

**Structure:** To 1007m sst gen undeformed but shale intervals strongly foliated.

Below 1007m highly deformed (but unbroken) major ductile fault zone assoc with basal contact, with frags/augen of silif sst & sericitised pyritic mafics, in foliated black shale

(as at 969–982m). Cleav @ 1006.7m gives angle of this fault zone: 20°/LCA (dips 70° to 060° AMG).

Bedding: 40°/LCA @ 1002m. Sst bed fines uphole @ 1003m.

Cleav: 53°/LCA @ 991.9m (dips 55° to 017° AMG); Brittle fault centred 992m, 40–60°/LCA (// cleav).

Basal contact abrupt, qtz–annealed fault, 15°/LCA.

**Mineralization:** V minor dissem py, trace cp (1–2% py to 992m).

## 1013.0 – 1060.9m: CENTRAL VOLCANIC COMPLEX

### 1013.0 – 1060.9m: STRONGLY DEFORMED FELSIC VOLCANICS

**Lithology:** Yellowish–khaki. Med gr. Largely unbroken.

Highly foliated, heterogeneous feldspar–phyric volcs. Feld phenos to 3mm.

Prob a coarse volc breccia sequence.

Bands & threads of foliated sericitic material with visible fine pumice in places, interpersed with zones & frags of more–massive silic volcs that are either non–porph or have abund unoriented feld phenos.

Rare small qtz xyls. Leucoxenised mica flakes.

Common augen, lumps & bands (to 200mm) of deformed amygdaloidal mafic volcs (all in the foliated sericitic zones). No chilled margins noted.

**Alteration:** Strong sericite, lesser sil–chlor–carb (silif locally strong).

Mafics bleach–sil–fuchsitic or chlor–carb.

**Veining:** Abund fine chlor veinlets, increasing with depth.

Minor calcite veinlets (often dismembered, rarely pink), & comb–structured qtz–calcite veins to 200mm.

**Structure:** V strong to intensely foliated. Extensive tectonic brecciation.

Cleav: 20°/LCA @ 1019m (dips 70° to 080° AMG); 25°/LCA @ 1027m; 20°/LCA @ 1037m (dips 72° to 087° AMG); 15°/LCA @ 1052m.

Brittle fault 20–30°/LCA @ 1023m.

**Mineralization:** 1013–1015m: 1% py, dissem & in thin bands in cleav.

1015–1045.9m & 1047–1060.9m: Minor dissem py.

1045.9–1047m: 2–3% py, dissem in stringer–like zones of grey silica in bx matrix.

**END OF HOLE**

770060

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (mud, 0.5, 2, 8, 32, mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 0 | | | | NO CORE | |
| 2 | | | | | |
| 4 | | | | | |
| 6 | | | | | |
| 8 | | | | sst with black shale matrix | |
| 10 | | Broken | | sst with sericitic matrix after glass | |
| 12 | | B: 65° | py | fine sst | |
| 14 | | | py | coarse sst | |
| 16 | | | | fine bx | |
| 18 | | | cp-sp qtz-carb clast | Black shale matrix | |
| 20 | | | | | |
| 22 | | | | | |
| 24 | | | | | |
| 26 | | | | | |
| 28 | | B: 50° (dips 33° to 122°AMG) Broken | | shale matrix | |
| 30 | | B: 60° | py py | siltstone sst with shale matrix Bedded silt/fine sst | |
| 32 | | | | shale lumps sst with shale matrix | |
| 34 | | | | | |
| 36 | | | | sst | |
| 38 | | | sp veinlets dissem sp | sst with occasional frags in black shale matrix | |
| 40 | | B: 65° | | siltstone | |
| 42 | | | | sst with shale lumps | |
| 44 | | | | sst | |
| 46 | | | | fine bx | |
| 48 | | | | | |
| 50 | | | | 100mm rhyodacite clast | |

8.4 – 70.6m.
CRYSTAL-LITHIC SANDSTONE / BRECCIA WITH BANDS AND INTERMIXED BLACK SHALE

770061

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Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding, f = cleavage, f = fault, Angles to LCA | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 50 | | | shale | Fine Bx | |
| 52 | | | py | sst | |
| 54 | | | | Fine Bx with shale lumps + matrix | |
| 56 | | B: 43° (Dips 41° to 070° AMS) | | sst with qtz shale matrix | |
| 58 | | | | Shale/siltstone sst (in shale) Fine Bx shale Bx Siltstone/shale | |
| 60 | | | py | Bx ± shale lumps + matrix Shale | |
| 62 | | | py | fine bx ± shale matrix Shale | |
| 64 | | | | sst ± shale matrix | |
| 66 | | | | sst ± shale matrix Fine bx ± shale Fine bx ± shale matrix | |
| 68 | | B: 62° | | shale/siltstone Beando of fine bx in shale | |
| 70 | | 150mm flow-banded rhyodacite clast | | Fine bx ± shale matrix | 70.6m |
| 72 | | Fault 15° Fold s Broken | py | siltstone/shale | |
| 74 | | | | Xyl sst in shale sst | |
| 76 | | | | | |
| 78 | | Fracts 10-20° | Broken | Fine sst | |
| 80 | | | | Shale | |
| 82 | | | | | |
| 84 | | B: 72° (Dips 9° to 112° AMS) | | sst | |
| 86 | | | | BLACK SHALE | |
| 88 | | B: 68° | | | |
| 90 | | calcite veins | py | shale/siltstone | |
| 92 | | | | | |
| 94 | | | | | |
| 96 | | B: 63° | | | |
| 98 | | | | | |

770062

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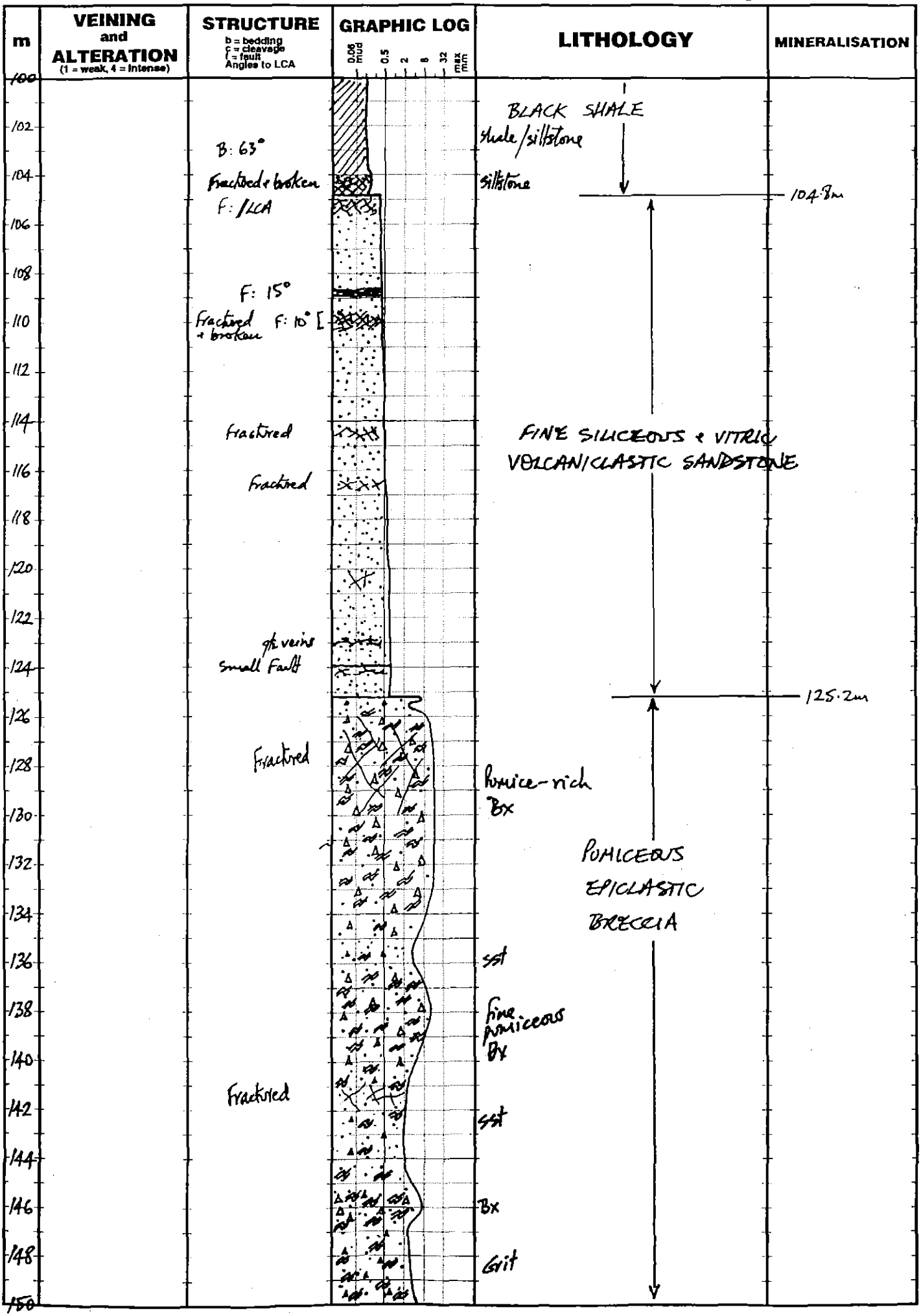
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6





770063

Project : HIGH POINT
Logged by: J.G. PORVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 150 | | | | PUMICEOUS BRECCIO – CONGLOMERATE | |
| 152 | | | | | |
| 154 | | | | | |
| 156 | | | | | |
| 158 | | | | | |
| 160 | | | | Fine bx-cong | |
| 162 | | | | | |
| 164 | | Fracture // LCA | | | |
| 166 | | | | | |
| 168 | | | | | |
| 170 | | Fractures | | | |
| 172 | | | | Medium bx-cong | |
| 174 | | | | | |
| 176 | | | | | |
| 178 | | | | | |
| 180 | | | | | |
| 182 | | | | | |
| 184 | | | | | |
| 186 | | 300mm black shale clasts | | clasts to 100mm | |
| 188 | | | | | |
| 190 | | | | | |
| 192 | | | | | |
| 194 | | | | Fine bx-cong | |
| 196 | | | | | |
| 198 | | | | Fyclastic mafic clasts; Coarse bx-cong. clasts to 400mm | several massive py clasts to 20x10mm |
| 200 | | | | | |

770064

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Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 200 | | | | Amygdaloidal basalt clasts to 500mm. | |
| 202 | | | | Boulders to 1.8m. (flow-banded dacite/andesite) | |
| 204 | | | | PUMICEOUS BRECCIO – CONGLOMERATE | |
| 206 | | | | | |
| 208 | | | | clasts to 30mm | |
| 210 | | py | | clasts to 250mm | |
| | | Irregular abrupt contact shear 60° | | | 211m |
| 212 | | | | Black shale | |
| 214 | | py | | silty bands | |
| | | ↑ | | fine sst | |
| 216 | | py | | silty shale | |
| | | ↑ | | silty band | |
| 218 | | py | | Black shale | |
| 220 | | | | silty bands | |
| 222 | | | | QUE RIVER SHALE | |
| 224 | | py | | Black shale | |
| 226 | | 50mm sst ↑ | | | |
| 228 | | | | silty bands | |
| 230 | | | | | |
| 232 | | | | Black shale | |
| 234 | | py | | | |
| 236 | | | | | |
| 238 | | 40mm sst ↑ | | | |
| 240 | | | | silty bands | |
| 242 | | carb veinlets | | | |
| 244 | | | | Black shale | |
| 246 | | | | | |
| 248 | | py | | Silty bands | |
| 250 | | py ↑ 40mm sst | | Black shale | |

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Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 250 | | | | | |
| 252 | | py | Black Shale | | |
| 254 | | py | | | |
| 256 | | | | | |
| 258 | | 40mm sst bed ↑ | | | |
| 260 | | py | silty | | |
| 262 | | py | | | |
| 264 | | Fault 35-50° py Fault 35° broken | | | |
| 266 | | calcite veins | Black Shale 10mm py vein 40° (opp sense to bedding) | QUE | |
| 268 | | | | | |
| 270 | | py ↑ | silty | | |
| 272 | | py ↑ | Fine sedimentary bx. | RIVER | |
| 274 | | py | silty | SHALE | |
| 276 | | | Black Shale | | |
| 278 | | Calcareous | silty | | |
| 280 | | fracts | | | |
| 282 | | py ↑ | fine bx/grit. silty | | |
| 284 | | py ↑ | fine bx | | |
| 286 | | fracts py | silty | | |
| 288 | | py ↑ more carbonaceous | Bx | | |
| 290 | | | Black Shale | | |
| 292 | | | | | |
| 294 | | Fault Zone 45° broken. | | | |
| 296 | | Shear | | | |
| 298 | | Fault 35° | | | |
| 300 | | Increasing calcite veining | | | |

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



BHD6

| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 300 | | Calcite veining | | | |
| 302 | | | Black Shale | | |
| 304 | | Fracts // LCA | | | |
| 306 | | | | | |
| 308 | | | | | |
| 310 | | | | | |
| 312 | | Strong fault zone | V broken cataclasite | | |
| 314 | | | Highly calcite veined | | |
| 316 | | Broken by fracts // LCA | Black Shale | QUE RIVER SHALE | |
| 318 | | | | | |
| 320 | | Deformed calcite-veined zones | | | |
| 322 | | | | | |
| 324 | | Fracts py | Black Shale | | |
| 326 | | Fracts | calcite veins | | |
| 328 | | MAJOR FAULT ZONE 5-20° | | | |
| 330 | | MAIN FAULT | massive calcite veins; cataclasite | | |
| 332 | | | Fractured calcite veined Black Shale | | |
| 334 | | | | | |
| 336 | | shears; 30° | mafic volc sliver; qtz-carb vein | 336.6m | |
| 338 | | Fault mod broken py | qtz-carb veins | shale + sst matrix in mafic bx. | |
| 340 | | py | Andesite frags to 60mm common. | QUE - HELLYER HANGING WALL VOLCANICS | |
| 342 | | small fault 30° | MAFIC BRECCIAS (Mixed basalt/andesite provenance, in 30% sst-shale matrix) | | |
| 344 | | | | | |
| 346 | | | | | |
| 348 | | | | | |
| 350 | | py | | | |

Project : MIDAS JOINT

Logged by: J.G. PURVIS

Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 350 | | | | | |
| 352 | Blc, sil clasts, to 30mm | py, small fault // LCA | | possible epiclastic horizon — QUE-HELLYER HANGINGWALL VOLCANICS | |
| 354 | | | | blc/sil sub-angular mafic clasts | |
| 356 | | | | | |
| 358 | | sil | | MAFIC LAVA BRECCIAS | |
| 360 | | | | | |
| 362 | | py | | | |
| 364 | | sil py py | | coarser + more closed-framework. | |
| 366 | | Broken by fracts almost // LCA. | | | |
| 368 | | some blackshale matrix py | | 367.3m — MIXED MAFIC LAVA BRECCIAS | |
| 370 | | fracts py | | crushed | |
| 372 | | STRONG FAULT 15° py | | | |
| 374 | | py | | | |
| 376 | | | | | |
| 378 | | | | | |
| 380 | | | | | |
| 382 | | ser | | | |
| 384 | | py | | | |
| 386 | | py py | | Partly-brecciated feldspar-phyric lava. (same composition as clasts in breccia) | |
| 388 | | some black shale matrix | | 388m — Gradational arbitrary contact. | |
| 390 | | py | | QUARTZ-PHYRIC MAFIC LAVA BRECCIAS + BRECCIATED LAVAS | |
| 392 | | Minor black shale in matrix | | | |
| 394 | | py | | | |
| 396 | | | | | |
| 398 | | Partly-brecciated lava | | | |
| 400 | | | | | |

Project : HIGH TONI
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 400 | | | | PARTLY - BRECCIATED QUARTZ - PHYRIC AMYGDALOIDAL MAFIC LAVA | |
| 402 | | py | | | |
| 404 | | py | | | |
| 406 | | | | | |
| 408 | | sl in 10mm qtz-carb vein → | | | |
| 410 | | | | | |
| 412 | | | | | |
| 414 | | | | | |
| 416 | | chalcedonic silica | | Bx | |
| 418 | | | | | |
| 420 | | | | QUARTZ - PHYRIC MAFIC LAVA BRECCIAS | |
| 422 | | Trace black shale in matrix | | | |
| 424 | | | | | |
| 426 | | fault 10° | | | |
| 428 | | | | | |
| 430 | | | | | |
| 432 | | | | | |
| 434 | | | | | |
| 436 | | | | | |
| 438 | | fracture set 5-20° | | sl broken | |
| 440 | | | | | |
| 442 | | | | | |
| 444 | | 95% of frags < 50mm | | | |
| 446 | | | | | |
| 448 | | | | | |
| 450 | | Trace black shale in matrix → | | | |

Project : HIGH TONI
Logged by: J. G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 450 | | | | Traces of sp | |
| 452 | | bleached & silicified matrix zones ± sp | | QUARTZ - PHYRIC MAFIC LAVA BRECCIAS | |
| 454 | | | | | |
| 456 | | Trace black shale in matrix | | less qtz-phyric | |
| 458 | | | | | |
| 460 | | | | | |
| 462 | | Black shale in matrix | | | |
| 464 | | | | | |
| 466 | | | | | |
| 468 | | py, sp, cp | | silicified lava intervals | |
| 470 | "veins" ? sericite | | | | |
| 472 | | | | | |
| 474 | | | | | |
| 476 | | Puggy fault 10° | | | |
| 478 | | Massive lava zones to 0.5m | | | |
| 480 | | | | | |
| 482 | | bleached & silicified zones in & around matrix | | qtz / no qtz | |
| 484 | | | | FELDSPAR-PHYRIC MAFIC LAVA HYALOCLASTITE BRECCIAS | |
| 486 | | | | | |
| 488 | | | | | |
| 490 | | | | | |
| 492 | | | | | |
| 494 | | | | | |
| 496 | | | | | |
| 498 | | | | | |
| 500 | | | | | |

770069

Project : HIGH TONN

Logged by: J.G. PURVIS

Date : NOVEMBER 1995

# PASMINCO EXPLORATION DIAMOND DRILL LOG

**HOLE No.** BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 500 | | | | FELDSPAR-PHYRIC ANDESITE HYALOCLASTITE BRECCIAS | |
| 502 | | | | | |
| 504 | | | | | |
| 506 | | Cataclasite Fault 0-10° py | | | |
| 508 | | py | | | |
| 510 | | Cataclasite Fault 0-10° | | ser | |
| 512 | | Fault 0-10° | | ser-chl | |
| 514 | | | | | |
| 516 | | | | | |
| 518 | | | | Net-vein brecciated lava | |
| 520 | | | | | |
| 522 | | small fault 20° | | chl | |
| 524 | | | | | |
| 526 | | | | Brecciated lava | |
| 528 | | | | ser | |
| 530 | | | | Breccia + brecciated lava | |
| 532 | | Fault 20° | | 532m ANDESITE PEPERITE BRECCIA | |
| 534 | Rare 9% xyls | Fault 5-10° | | Minor black shale matrix Broken 534.85m | |
| 536 | | small fault 15° | | | |
| 538 | | small fault 20° | bx | MASSIVE ANDESITE | |
| 540 | | | | | |
| 542 | | | | ser | |
| 544 | | small fault 30° | fracts | | |
| 546 | | | | | |
| 548 | | strongly fingated with black shale matrix | | 546.9m PARTLY-BRECCIATED ANDESITE | |
| 550 | | | | | |

Project : HIGH TONI
Logged by: J. G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 550 | | Black shale matrix | | PARTLY-BRECCIATED Hyaloclastite ANDESITE | |
| 552 | | | | | |
| 554 | | | | | |
| 556 | | Black shale matrix | | Partly-bx lava | |
| 558 | | Fault 5° | | | |
| 560 | | | | Peperite with black shale matrix | |
| 562 | | Fault 15° | | Partly-bx lava Hyaloclastite. | |
| 564 | | | | Peperite | |
| 566 | | | | | |
| 568 | | Fault 30° | | Partly-bx andesite (most bx matrix is black shale) | |
| 570 | | | | | |
| 572 | | Fault 25° | | | |
| 574 | | STRONG FAULT 5-20° | | Partly-epiclastic bx with black shale matrix — 574.3m | |
| 576 | | | | | |
| 578 | | | | MIXED Hyaloclastite ↕ bx lava ANDESITE | |
| 580 | | | | ↓ Peperite | |
| 582 | | | | BRECCIAS (QUARTZ-PHYRIC) | |
| 584 | | Strong Fault 10° | | Epiclastic bx with black shale matrix | |
| 586 | | series of small faults 15-30° | | ↕ ↓ Peperite | |
| 588 | | | | | |
| 590 | | | | | |
| 592 | | | | Brecciated lava | |
| 594 | | Fault 5-15° | | peperite & clastsite Peperite | |
| 596 | | STRONG FAULT 10° | | | |
| 598 | | | | Mainly Hyaloclastite | |
| 600 | | | | Black shale | |

770071

Project : HIGH POINT

Logged by: J.G. PURVIS

Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32 max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 600 | | Black shale ± lumps of fuchsitic veins. | | | |
| 602 | | | | Hyaloclastite | MIXED ANDESITIC BRECCIAS |
| 604 | | | | | |
| 606 | | | | | |
| 608 | | lineated shale lumps | | Mainly Hyaloclastite | |
| 610 | | small fault 20° (sl fuchsitic) | | tectonic bx | |
| 612 | | | | Peperite/epiclastic bx ± black shale matrix | |
| 614 | | Fault, minor fuc | | Tectonic bx? Minor black shale matrix — 614.8m | |
| 616 | | STRONG FAULT 15° (in black shale) | | shale | |
| 618 | | | | sst | SANDSTONE |
| 620 | | fractures | | | |
| 622 | | Black shale ± perlitic mafics | | epiclastic bx; Mafic Dyke — 622.4m | |
| 624 | | | | Perlitic ANDESITIC HYALOCLASTITE BRECCIAS | |
| 626 | | | | | |
| 628 | | py | | | |
| 630 | | | | ser | |
| 632 | | more matrix | | | |
| 634 | | Black shale matrix | | | |
| 636 | | | | | |
| 638 | | | | | |
| 640 | | | | | |
| 642 | | | | ser | |
| 644 | | some black shale matrix | | Black Shale band | |
| 646 | | sp | | minor black shale matrix | |
| 648 | | sp | | minor baked shale matrix | |
| 650 | | sp | | | |

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG 0.06 mud 0.5 2 8 32 max mm | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 650 | | | | | |
| 652 | | Fault // LCA | | | |
| 654 | | | | Minor black shale matrix | |
| 656 | | | | ser | |
| 658 | | | | ↓ Very open framework | ANDESITIC HYALOCLASTITE BRECCIAS |
| 660 | | | | | |
| 662 | | sp | | | |
| 664 | | | | bleached + altered smaller fragl c sp, + minor silif grey shale matrix | |
| 666 | | | | | |
| 668 | | | | | |
| 670 | | | | | |
| 672 | | sp | | | |
| 674 | | sp | | Finer fragl (some silif + bleached c sp) + minor black shale matrix | |
| 676 | | sp | | Perlitic | |
| 678 | | 25° sp | | small massive py clasts — 676.8m | |
| 680 | | sp amygdaloidal basalt clasts | | VOLCANIC BRECCIO-CONGLOMERATE IN BLACK SHALE | MIXED |
| 682 | | sp | | Dacite clasts — 682.15m | |
| 684 | sp | small fault 35° Minor black shale matrix | | ser Bedding 20° | SEQUENCE |
| 686 | | Mainly hyaloclastite & some pebbles | | Large lumps of amygdaloidal basalt to 500mm. | |
| 688 | | | | VOLCANIC BRECCIO-CONGLOMERATE | |
| 690 | | | | | |
| 692 | | | | | |
| 694 | | | | | |
| 696 | | | | | |
| 698 | | | | | |
| 700 | | | | | |

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER 1995

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 700 | | | | | |
| 702 | | | | | |
| 704 | | | | | |
| 706 | | | | | |
| 708 | | | | VOLCANIC BRECCIO-CONGLOMERATE | |
| 710 | | | | | |
| 712 | | | | Flow-banded dacite clasts | |
| 714 | | | | | |
| 716 | | | | | |
| 718 | | sp | | | |
| 720 | | sp | | | |
| 722 | | | | | |
| 724 | | sp | | | |
| 726 | | sp | | | |
| 728 | | fault 30° sp | | | |
| 730 | | sp | | | |
| 732 | | sp | | 732m Gradational contact | |
| 734 | | py-sp | | MINERALIZED DACITIC/ANDESITIC BRECCIA | |
| 736 | | qtz-carb veins py-sp | | | |
| 738 | | py-sp | | 738m | |
| 740 | | sp | | VOLCANIC EPICLASTIC BRECCIA | |
| 742 | | py | | | |
| 744 | | fault 20° | | ser, fuc | |
| 746 | | | | | |
| 748 | | 35-50° | | 747.85m FINE QUARTZO SANDSTONE | |
| 750 | | | | | |

770074

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (0.06 mud … max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 750 | | | | | |
| 752 | | 55–70° | | 750.85m SANDSTONE | |
| 754 | | | | Bx with minor baked cr silt shale matrix | |
| 756 | | ↓ sp | | | |
| 758 | sp replaces smaller frags | Main sp Zn sp Zone sp | | finer reworked bx-cong. Minor fine sst/siltst matrix | |
| 760 | | sp | | VOLCANIC | |
| 762 | | ↑ sp | | BRECCIO – | |
| 764 | | | | CONGLOMERATE | |
| 766 | | | | Largely monomict basalt bxgs (ser-ble-fuc altered), some with jig-saw fit, in grey shale matrix. | |
| 768 | | carb-cemented Fault 15° | | | |
| 770 | | | | | |
| 772 | | | | Bx-cong c fine sandy matrix | |
| 774 | | | | | |
| 776 | | Altered Zone pink calcite, fuchsite, sericite bleaching | | sst matrix | |
| 778 | | andesite clasts | | Fault 8°, c fuchsite shale matrix | |
| 780 | | | | | |
| 782 | | | | | |
| 784 | | | | Reworked breccio-cong with fine sandy matrix + v minor shale. | |
| 786 | | py | | | |
| 788 | | py | | | |
| 790 | | py | | | |
| 792 | | LOWER ↓ Zn ZONE sp sp | | | |
| 794 | | | | | |
| 796 | | Fault 20° c talc | | Large amygdaloidal basalt clasts (some fuchsitic) | |
| 798 | | | | | |
| 800 | | | | | |

27005

Project : HIGH POINT
Logged by: J. G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 800 | | py | some black shale matrix | VOLCANIC BRECCIA – CONGLOMERATE Fine sandy to shaley matrix | |
| 802 | | py | | | |
| 804 | | py | | | |
| 806 | | | | | |
| 808 | | | | | |
| 810 | | ser-fuc alteration | Minor black shale matrix | | |
| 812 | | | | | |
| 814 | | 20° 30° Fault | ser-fuc breccia & cataclasite | 814.3m STRONG FAULT 15-30° | |
| 816 | | | fuc | PARTLY BRECCIATED AMYGDALOIDAL BASALTS Variolitic | |
| 818 | | | fuc | | |
| 820 | | | | | |
| 822 | | fault 10° | fuc | | |
| 824 | | | | | |
| 826 | | | | | |
| 828 | | | calcite matrix | | |
| 830 | | | | | |
| 832 | | | Baked shale matrix | | |
| 834 | | | | | |
| 836 | | | | | |
| 838 | | | | | |
| 840 | | | | | |
| 842 | | | | | |
| 844 | | | | | |
| 846 | | | | | |
| 848 | | | | | |
| 850 | | | | | |

Project : HIGH POINT
Logged by: J. G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD 6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 850 | | | | | |
| 852 | | Faulted Zone 20-40° | | | |
| 854 | | | | limit of variolitic texture | |
| 856 | | sp | | | |
| 858 | | sp | Altered + mineralized hi-Fe amygdaloidal basalt lavas in minor shale matrix | ALTERED + MINERALIZED (BRECCIATED) ZONE | |
| 860 | | py | | PARTLY AMYGDALOIDAL BASALTS | |
| 862 | | py | | | |
| 864 | | | | | |
| 866 | | | | | |
| 868 | | | | | |
| 870 | | sp py | Fault 30° | | |
| | | STRONG FAULT 30° | | Very sparsely feldspar-phyric | |
| 872 | | py | | | |
| 874 | | sp py | Matrix: fine vole material + shale | | |
| 876 | | | | | |
| 878 | | | | | |
| 880 | | | | gradational 881m | |
| 882 | | | | BASALT HYALOCLASTITE BRECCIA | |
| 884 | | | | | |
| 886 | | | | | |
| 888 | | | | | |
| 890 | | Fault | | Faulted + broken | |
| 892 | | Fault | | | |
| 894 | | Fault (almost // LCA) | | | |
| 896 | | Fault | | | |
| 898 | | STRONG DUCTILE ZONE 15-35 | | | |
| 900 | | Fault 25° | | 899.6m sst/shale Base of | FOOTWALL VOLCANICS |

27007

Project : HIGH POINT
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

**HOLE No.** BHD 6



77078

| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32 max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 900 | | 20°/40° | sst/sh cataclasite, pug, schist | FAULT ZONE IN SANDSTONE + BLACK SHALE | |
| 902 | | 50° | | 902.15m AMYGDALOIDAL MAFIC VOLCANIC | |
| 904 | | | | | |
| 906 | | 15° | black shale | 906.4m | ANIMAL CREEK GREYWACKE |
| 908 | | B: 65° STRONG FAULT 5-10° | | FAULTED CARBONACEOUS QUARTZOSE SANDSTONE | |
| 910 | | | | | |
| 912 | | Fault 5° | | 912.25m | |
| | | Deformed | shale bags | INTERCALATED BASALT DYKES AND SANDSTONE/SHALE | |
| 914 | | | Fault Zone 10-30° | | |
| 916 | | | shale bags | | |
| 918 | | Fault 20° | shale laamd | | |
| 920 | | Fracts Fault 40° | | | |
| 922 | | Ductile deformed zone // LCA | fuc black shale fuc | | |
| 924 | | | | | |
| 926 | | | | | |
| 928 | | | | | |
| 930 | | ser/fuc | | | |
| 932 | | ser/fuc | sst/sh | | |
| 934 | | VERY STRONG FAULT 20-25° | Calcite-cemented cataclasite; Pug + cataclasite in fine sst/sh | | |
| 936 | | Fracts | chilled margin sst | | |
| 938 | | STRONG FAULT 10-20° | Pug + cataclasite in sst | | |
| 940 | | Tectonic zone 30° → | sst Mafic | | |
| 942 | | Fault 20° 25° | sst shale laminae fuc + highly amygdaloidal | Mafic Volc | |
| 944 | | | | | |
| 946 | | Fault 50° | variolitic | | |
| 948 | | Faulted Zone 20-25° (broken) | black shale band | | |
| 950 | | | variolitic | | |

Project : HIGH RUN 1
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE (b = bedding, c = cleavage, f = fault, Angles to LCA) | GRAPHIC LOG (0.06 mud, 0.5, 2, ∞, 32 max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 950 | | 30° | Mafic | INTERCALATED BASALT DYKES AND SANDSTONE/SHALE | |
| 952 | | Fracts 50° | sst | | |
| 954 | | | Mafics | | |
| 956 | | Fault 15-20° | Frack | | |
| 958 | | | Fracks | | |
| 960 | | | | | |
| 962 | | Fault 40° | | | |
| 964 | | Fault 45° | broken/some pug | | |
| 966 | | Fracts | sst | | |
| 968 | | Fault 50° | | | |
| 970 | | STRONG DUCTILE SHEAR Fault 35° | Mafic - strongly cleaved | 969.6m | GREYWACKE |
| 972 | | Fault 25° Fault 55° Fault 40° | | DEFORMED SANDSTONE + BLACK SHALE | ANIMAL CREEK |
| 974 | | | | | |
| 976 | | | Minor mafic frags + thin bands | | |
| 978 | | | | | |
| 980 | | Fault 45° | | | |
| 982 | | STRONG FAULT 15° 40° | mafic + sst/shale | 982.2m | |
| 984 | | | Shear 10-20° | CLEAVED MAFIC VOLCANIC (Amygdaloidal) | |
| 986 | | Decreasing cleavage | Vamygdales | | |
| 988 | | | | | |
| 990 | | sst/sh | | | |
| 992 | | Brittle Fault Zone 40-60° | step-faulted contact 40° | 991.2m | |
| 994 | | | Undeformed sst | PARTLY DEFORMED SANDSTONE + BLACK SHALE | |
| 996 | | | | | |
| 998 | | | Deformed black shale ± sst laminae + lumps | | |
| 1000 | | | Undeformed sst/minor shale | | |

Project : HIGH PONI
Logged by: J.G. PURVIS
Date : NOVEMBER 1994

# PASMINCO EXPLORATION DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG (0.06 mud, 0.5, 2, 8, 32, max mm) | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 1000 | | | sst & minor shale<br>Double graded sst band | PARTLY-DEFORMED SANDSTONE & SHALE | ANIMAL CREEK GREYWACKE |
| 1002 | | B: 40° | sst | | |
| 1004 | | | sst/sh | | |
| 1006 | | | fine sst & shale | | |
| 1008 | | Increasing deformation | sst | | |
| 1010 | | py in mafic frags<br>chl-fuc veinlets | DUCTILE FAULT ZONE (unbroken)<br>sst & Vdc augen & lenses in shale matrix | | |
| 1012 | | Fault 15° | ser-fuc | | |
| 1014 | | | mafic bands | HIGHLY DEFORMED FELSIC VOLCANICS With Minor Mafic Volcanics | CENTRAL VOLCANIC COMPLEX |
| 1016 | | Shear 20°<br>v strong foliation | | | |
| 1018 | | | brecciated mafic band | | |
| 1020 | | | | | |
| 1022 | | | | | |
| 1024 | | Fault 20-30° | | | |
| 1026 | | Cleavage decreases, sil increases | Volcanics more massive, almost no mafics | | |
| 1028 | | | | | |
| 1030 | | Mafic lenses in highly cleaved zones | | | |
| 1032 | | | | | |
| 1034 | | | | | |
| 1036 | | | py - some mafics | | |
| 1038 | | sil decreases cleaved | abund porphyritic felds | | |
| 1040 | | Intensely deformed zone (augen schist) 25° | | | |
| 1042 | | | Banded, cleaved, felsic Vdc & dismembered mafic bands | | |
| 1044 | | ser | | | |
| 1046 | | grey sil, py | | | |
| 1048 | | | | | |
| 1050 | | | | | |

Project : MIGH IONI
Logged by: J.G. PURVIS
Date :

# PASMINCO EXPLORATION
# DIAMOND DRILL LOG

HOLE No. BHD6



| m | VEINING and ALTERATION (1 = weak, 4 = intense) | STRUCTURE b = bedding c = cleavage f = fault Angles to LCA | GRAPHIC LOG 0.06 mud, 0.5, 2, 8, 32, max mm | LITHOLOGY | MINERALISATION |
|---|---|---|---|---|---|
| 1050 | | | | ↑ DEFORMED FELSIC VOLCANICS ↓ | ↑ CENTRAL VOLCANIC COMPLEX ↓ |
| 1052 | | Highly cleaved + foliated with abund dismembered mafics | | | |
| 1054 | | Weaker cleav | Hand porphyritic feldspars | | |
| 1056 | | | | | |
| 1058 | | cleaved + brecciated | dismembered mafic bands | | |
| 1060 | | | EOH 1060.9m | | |

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