

Feature

Bedding
Foliation
Fragment
size & shape



Shearing
Fault
Vein



Mineralization

Trace 1-5%
Common 5-15%
Abundant 15-60%
Massive > 60%

| CORE REC'D | DEPTH m | GEOLOGY | VISUAL LOG | TRACE | COMMON | ABUNDANT | MASSIVE | DEPTH m | MINERALIZATION |
|------------|---------|---|------------|-------|--------|----------|---------|---------|----------------|
| | | | | | | | | | |
| | | No core - HW Non-coring bit used. | | | | | | | |
| | ~2m | ----- <u>OLD MINE WORKINGS</u> - 4 m of open space. | | | | | | | |
| | 5 | | | | | | | 5 | |
| HW | 0.2 | | | | | | | 6.0 | |
| HQ | | <u>Lt. grey f.g. massive quartzite</u> - numerous fine soln. cavities. Core badly broken. | | | | | | 7.0 | |
| | 2.0 | <u>Dk. grey to black carbonaceous shale w. fragments & (contorted) interbeds of lt. grey f.g. (micaceous) quartzite. QS.</u> Rock consists of all variations between two end members. 1) Black carbonaceous conglomeratic shale - ess. shale matrix w frag. of lt. grey (micaceous) quartzite <1mm to >20cm. Fragments - angular to rounded (gen. subrounded); often flattened? or oriented in cleavage plane.; form 20-40% of rock. 2) Well bedded interlaminated dk. grey to black shale & lt. grey f.g. quartzite. Interlaminated on scale of mm to ~m. Laminations may be strongly to uncontorted; & often show soft sed. def eg. rafting. | | | | | | | |
| HQ | 1.0 | | | | | | | 10 | |
| HQ | .4 | | | | | | | | |
| | .5 | | | | | | | | |
| | .6 | | | | | | | | |
| | .7 | | | | | | | 15 | |
| | 1.4 | | | | | | | | |
| | 1.3 | | | | | | | | |
| | .9 | | | | | | | 18.7 | |
| | 1.4 | | | | | | | 20 | |
| | .7 | | | | | | | | |
| | 1.9 | | | | | | | | |
| | 2.5 | | | | | | | 25 | |

FAULT - Pug, Shearing
10°? to C.A.

FAULT - Pug 15°? to C.A.

2m open ?° to C.A.

Feature

- | | | | |
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| | | | c carbonate q quartz |

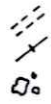
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| 1-7 | | QS lithology as previously described - contorted shale with quartzite fragments and layers. 51.2m FAULT Pug, broken core ?° CA | | | | | | | |
| 1-3 | | FAULT ZONE. pug, shearing and badly broken core subparallel to C.A? 53.5m FAULT Pug, broken core 60° to C.A | | | | | | | |
| 0-6 | 55 | contorted shale and quartzite. Occasional quartzite fragments to 10cm. Bedding. 51.1m - 45° to C.A (isoclinal fold on mm. scale.) 57.9m - 15° to C.A (cleavage parallel to S ₀) 60.2m - 50° to C.A | | | | | | | |
| 2-2 | 60 | Note: The extent of contortion of bedding laminations appears directly proportional to the relative abundance of resistant quartzite layers. The massive qtzite has probably caused disruption during folding due to the competency contrast between fissile shales, and quartzite. 60.6m FAULT Broken core ?° to C.A. | | | | | | | |
| 1-5 | | 61.8m FAULT - pug. ?° to C.A | | | | | | | |
| 0-7 | | | | | | | | | |
| 0-6 | 63.5 | From 63.5m onwards shale is blacker and noticeably more graphitic. Considerable quartz/carbonate veining (<1cm) subparallel to bedding. | | | | | | | |
| 1-0 | 65 | | | | | | | 65 | Py3 over 5cm as fine veinlets. |
| 1-7 | | | | | | | | | |
| 1-0 | | 67.3m FAULT - pug, broken core ?° CA FAULT ZONE. pug and badly broken core ?° to C.A. | | | | | | 67.5 | |
| 1-4 | 70 | Lithology as above. FAULT ZONE. very puggy, badly broken core for large interval. ?° to C.A. | | | | | | 69.3 | |
| 1-2 | | | | | | | | | |
| 1-2 | | Lithology as above: contorted grey-black graphitic shales and interbedded grey quartzite. 72.4m FAULT - pug. 70° to C.A brecciation surrounding puggy zone. | | | | | | | |
| | 75 | | | | | | | | |

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| 1.7 | 75.6 | | | | | | | | |
| 2.4 | | | | | | | | | |
| 1.2 | | | | | | | | | |
| 2.9 | 80 | | | | | | | | |
| | | 81.6m FAULT - pug, broken core c. 45°? c.A | | | | | | | |
| 2.8 | 85 | | | | | | | | |
| | 85.6 | FAULT ZONE. | | | | | | | |
| 0.9 | | pug, badly broken core, very poor core recovery. 45° to c.A | | | | | | | |
| | 87.2 | | | | | | | | |
| 0.6 | | | | | | | | | |
| 1.2 | 90 | | | | | | | | |
| | | 89.9m FAULT pug, broken core ?° to c.A | | | | | | | |
| 1.1 | | | | | | | | | |
| | | 90.6m FAULT, pug. 40° to c.A | | | | | | | |
| 1.5 | | | | | | | | | |
| 1.1 | 95 | | | | | | | | |
| | 95.8 | FAULT ZONE | | | | | | | |
| 1.1 | | very puggy core, broken core. 45° to c.A. | | | | | | | |
| | 96.8 | | | | | | | | |
| 0.8 | | | | | | | | | |
| | | 97.6m FAULT. pug. ?° to c.A | | | | | | | |
| 1.0 | | | | | | | | | |
| 0.4 | | | | | | | | | |
| | 100 | | | | | | | | |
| | | 99.8m FAULT. pug over 2cm 60°? to c.A | | | | | | | |

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| | 1.8 | Lithology - as above - med grey to black shale w. fragments rfts + interbeds of lt. grey (mica ceous) f.g. to m.g. quartzite. (contorted). | | | | | | | |
| | 2.5 | | | | | | | | |
| | 105 | | | | | | | | |
| | 2.0 | | | | | | | | |
| | .6 | FAULT - Pug 45° to c.A. | | | | | | 107.0 | |
| | .4 | | | | | | | | py rare. |
| | 1.7 | | | | | | | | |
| | 110 | | | | | | | | |
| | 1.0 | | | | | | | | |
| | 3.0 | FAULT - Pug 45° to c.A. FAULT - Pug 8 q/c vein 45° c.A. FAULT - Pug 40° to c.A. | | | | | | 114.4 114.8 115 116.3 | |
| | 115 | | | | | | | | |
| | 2.0 | FAULT - 10 cm pug 30° c.A. FAULT - Pug 45° to c.A. | | | | | | 116.3 117.2 | |
| | 2.8 | | | | | | | 118.2 | 2mm py 60 sid vein 60° to c.A. |
| | 120 120.2 120.5 | FAULT ZONE - Pug 7° to c.A. | | | | | | 120 | |
| | 1.0 | | | | | | | | |
| | 3.0 | 1cm sid. vein 50° c.A. 5mm sid. healed fault. braccia 55° c.A. | | | | | | 123.2 124.0 124.2 | py 5-7 veinlets at 25-30° to c.A. |
| | 125 | | | | | | | 125 | |

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| 2.0 | | Lithology - as above - lt. grey to black (carbonaceous) shale w. frag.rafts & interbeds of lt. grey f.g. to m.g. (micaceous) quartzite. (contorted). | | | | | | | |
| .6 | | | | | | | | | |
| 3.0 | | | | | | | | | |
| | 130 | | | | | | | | |
| 3.0 | | | | | | | | | |
| | 135 | <u>FAULT ZONE</u> - Broken core & pug; ?° to c.A. | | | | | | | |
| 2.5 | 134.9 135 135.5 | | | | | | | | |
| 3.0 | | S1/50 10°-0° to c.A 135-140 m. | | | | | | | |
| | 140 | | | | | | | | |
| 3.0 | | | | | | | | | |
| | 145 | | | | | | | | |
| 3.0 | | | | | | | | | |
| | 150 | | | | | | | | |

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|-----------|---------|--|--|-------|--------|----------|---------|---|----------------|--|--|--|--|--|
| | 3.0 | <p>At about 149 m. the rock becomes lighter in colour due to the increase in volume of f.g. quartzite laminae fragments & rafts. The darker shale matrix is decreased in vol. locally quartzite interbeds may exceed 30 cm.</p> <p>This marks a general change in character of the rock.</p> |  | | | | | | | | | | | |
| | 2.5 | | | | | | | | | | | | | |
| | 155 | | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | | |
| | 160 | | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | | |
| | 165 | | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | | |
| | 167.9 | | | | | | | <p>Lt. grey f.g. silty quartzite gen massive brecciated in situ. - soft sed. local bedding 55° c.A.</p> | | | | | | |
| | 169.2 | | | | | | | <p>Typical Qs.</p> | | | | | | |
| | 169.9 | <p>Lt. grey f.g. mucaceous quartzite. - massive quartzite. ess. lge. interbed in Qs.</p> | | | | | | | | | | | | |
| | 170 | <p>Typical Qs as above.</p> | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | | |
| | 175 | | | | | | | | | | | | | |

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|-----------|---------|--|------------|-------------------------------|--|---|
| | 3.0 | Lithology - lt. grey to black shale w. fragments salts & interbeds of lt. grey f.g. (micaceous) quartzite. QS as above. 50-176m 25° to c.A. | | | 176.6 | 10cm Py 15 q vein 40°? to c.A. |
| | 3.0 | | | | 180 | |
| | 2.9 | FAULT - Broken core ?° to c.A. 5cm q vein 85° to c.A. FAULT - Pug ?° to c.A. FAULT - Pug - 60°? to c.A. | | | 181.3 182.8 183.6 183.9 184.2 | |
| | 184.5 | Py. Qtz Lode - py 40 c.g. veinlike agg. w. white veinlike qtz cont. wisps & fragments of black shale 55° to c.A. | | | 184.5 | Py 1-2 veinlet - unoriented |
| | 185 | Silicified py. cemented QS. | | | 185 | Py 40 c.g. vein assoc. w. qtz. |
| | 185.2 | Py vein - 5% qtz & siderite. 60° to c.A. | | | 185.2 | Py 25 stockwork veinlet & f.g. |
| | 3.0 | Typical QS as above. | | | 185.55 186.4 | Py 95 c.g. 5% qtz & siderite. 2cm Py vein 60° to c.A. Py 10-15 f.g. to c.g. & veinlet |
| | 3.0 | Possible tuff fragment 188.8m. | | | 188.5 | 1cm py to sid vein 40° to c.A. |
| | 3.0 | | | | 190 190.3 190.7 190.9 191-192 191.5 | Py 10-15 stockwork veinlet. Py trace to (2-3) sid vein 45° to c.A. 1cm py 60 sid, set vein 45° to c.A. Py 7-10 f.g. & veinlet (no. p.o.) |
| | 3.0 | FAULT? - qtz healed breccia 60° c.A. | | | 193.9 | |
| | 3.0 | | | | 195 | |
| | 3.0 | | | | 197.1 197.2 | 2cm Py 25 q vein 30° to c.A. 2cm Py " " " " " " |
| | 200 | | | | 200 | |

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


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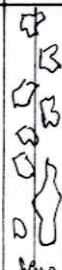







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| 3.0 | | | | | | | | | |
| 3.0 | 205 | | | | | | | 205 | |
| 3.0 | | FAULT - 5cm. c. healed fault breccia 20° to c.A. | | | | | | 207.7 | |
| 2.9 | 209.6 210 211.0 | FAULT ZONE - Broken core, pug & Qtz ± Py ± c veins only evidence of shearing - pug & fracture plane - ⇒ Zone high & to c.A. × 60-80° | | | | | | 210 | |
| 3.0 | | FAULT - Pug 30° to c.A. | | | | | | 213.0 | |
| 2.5 | 215 | | | | | | | 215 215.3 | 3cm Py to, sid vein 60° to c.A. |
| 3.0 | 216.3 217.2 | FAULT Fracture surfaces w. pug at very low angle to c.A. 10-0° | | | | | | | |
| 2.9 | | FAULT - Broken core | | | | | | 219.1 | |
| 3.0 | 220 | | | | | | | 220 | |
| 2.2 | 224.2 | FAULT - Pug 65° to c.A. | | | | | | 224.3 | |
| 2.25 | | Siderite - pyrite - Qtz lode - Fine to very coarse xtal. Sid. w. a later overprinting Qtz stock work. (unoriented). Rare sulphide | | | | | | 225 | Py to 5-10 cm 30-45° assoc. w. fault pug Py 1-5 Pg. cr. cpy flecks & tr sm. as blebs. |

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| | 3.0 | Lithology - as above - lt. grey green sericitic lithic tuff w. minor agglomerate. |  | | | | | | Py rare |
| | 263.7 | <u>Lt. grey siltstone.</u> A well bedded micaceous locally v. weakly pyritic siltstone. colour is gen. lt. grey but locally may be dk. grey. Bedding defined by slight colour variations. So varies from 0-35° to c.A. av. 20°. |  | | | | | 255 256.2 | 10 cm ¹⁰ 15 ⁸⁰ 20 ⁸⁰ sid qtz vein. 20° c.A. 2 cm py 15 qtz vein. 20° c.A. |
| | 3.0 | | | | | | | 260 | |
| | 260 | | | | | | | 260 | |
| | 3.0 | | | | | | | 263.0 | |
| | 263.1 | FAULT - broken core - 70° to c.A. |  | | | | | 263.0 | |
| | 3.0 | <u>Grey green sericitic lava agglomerate</u> med to coarsely vesicular grey green sericitic lava fragments, blocks or possibly flows? w. bedded siltstone or c.g. tuff interstices. |  | | | | | 265 265.6 266.5 | 10 cm py 90 veins 40° to c.A. |
| | 265 | | | | | | | 265 | |
| | 3.0 | 1 cm sid vein 10° to c.A. | | | | | | 266.5 | |
| | 268.2 | | | | | | | 268.2 | |
| | 3.0 | Interbedded lt. grey to black mudstone & lt. grey f.g. micaceous siltstone - quartzite w. lt. grey green vesicular lava fragments diss. in unit s. sed. Wecc. assoc. w. frag. |  | | | | | 270 | |
| | 269.6 | | | | | | | 270 | |
| | 3.0 | Interbedded lt. grey to black mudstone & lt. grey f.g. micaceous siltstone - quartzite. A very well laminated gen. showing only weak s. sed. def. such as rafting & contorted beds but locally these effects are more severe. Interbedding is on the scale of 1-2 cms. av. |  | | | | | 273.7 | |
| | 270 | | | | | | | 270 | |
| | 3.0 | Bedding varies from 0-70° to c.A. av. 40° 1 cm carb. vein 40° to c.A. |  | | | | | 273.7 | |
| | 275 | | | | | | | 274.6 | |
| | | FAULT - c. healed recia 60° |  | | | | | 275 | |

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| | 3.0 | Lithology - as above - lt. grey to black mudstone - shale interbedded w. lt. grey f.g. micaceous quartzite - siltstone. | | | | | | | |
| | 3.0 | | | | | | | | |
| | 280 | | | | | | | 280 | |
| | 280.55 | | | | | | | | |
| | 281.65 | lt. grey green sericitic lava - Description; see below. Upper conformable lower non-conformable contact. <u>poss. dyke?</u> | | | | | | | |
| | 3.0 | Dk. grey lithic tuff w minor fine agglomerate Grey tuffaceous groundmass cont. carb. altered vesic. frag. av. 1cm. Rare agg. frag > 10cm. | | | | | | | |
| | 283.1 | | | | | | | | |
| | 3.0 | lt. grey green sericitic lava - A very f.g. rock locally containing fine to gen. coarse vesicles now infilled w. carbonate. No fabric. Conf. lower contact nonconformable upper. | | | | | | 284.5 | |
| | 285 | | | | | | | 285 | |
| | | 2cm c vein 25° to c.A. | | | | | | | |
| | | 10cm QS 45° to c.A. → | | | | | | 286.3 | |
| | 286.8 | | | | | | | | |
| | 3.0 | Interbedded lt. grey to black shale & lt. grey f.g. micaceous quartzite w. interbeds of lt. grey green f.g. tuff. | | | | | | | |
| | | A very well laminated interval composed of interbeds of lt. grey micaceous f.g. qtzite 1mm to 5mm thick & lt. grey to black shale 1mm to 5mm thick. Soft sed defm. is rare & occurs as rafted quartzite beds. | | | | | | | |
| | 290 | Bands of lt. grey green f.g. tuff, tuffaceous quartzite & an interval of lt. green (vesiculat) Volc. fragments in a tuffaceous shale matrix occur. The latter being from 289.6-290.2m. The tuff bands often show grading indicating younging uphole. | | | | | | 290 | |
| | 3.0 | Bedding in the upper part of the interval av. 15-50° to c.A. but below ≈ 291m av. 0-10° to c.A. | | | | | | 290.4 | |
| | | | | | | | | 290.5 | 2cm py 50 sid. vein 35° to c.A. 1cm/11 50 sid vein 40° to c.A. |
| | 3.0 | FAULT - c. healed fault breccia 55° to c.A. | | | | | | 293.7 | |
| | 295.0 | | | | | | | 295.0 | |
| | 296.0 | med-grey tuffaceous sandstone - interval cont. numerous c.g. shale fragments. QS interbeds present. at v. low angle to c.A. Scouring or slump contacts present. | | | | | | | |
| | 3.0 | Slump ped interbedded lt grey to dk. grey shale & minor lt. grey micaceous quartzite. | | | | | | | |
| | | Interval shows much contortion of beds due to plastic deformation - soft sed - much rafting of beds esp. quartzite. | | | | | | | |
| | | Two lava fragments occur - at 297.5 & 297.9m. 30 x 20cm lge respectively. | | | | | | | |
| | | Bedding 0-30° to c.A. | | | | | | | |
| | 299.5 | | | | | | | | |
| | 300 | Lithology - as below. | | | | | | 300 | |

↑
outgoing
wading

