

LEADHILLS-WANLOCKHEAD orefield

Anglasite

LW

Glengonnar Sh., L

Hopeful V., L

Susanna V., L

Belton Gravel V., W.

Meadowfoot Mill, W

New Glencrieff V., W

Straitstep V., W

Aukette

LW

Brow V, L

New Glencireff V, W

Lady Anne Sh

Annabergite

LW

New Glencoeff V., W

Antimony minerals, unspec. LW

Dun Grain, L (?)

Meadowhead V, L (?)

Apatite

LW

Belton Grain V (Incl plumboan)

White's Cleuch, W.

Lordy Anne Sh (Pb-)

Aragonite

LW

Brown's V, L

Georges Roust V, L

Glengonnar Sh., L

Laverock Hall V, L

Meadowfoot Mill, W

New Glencrieff V, W

Arsenic

LW

New Glencreeff V., W. (Error?)

Asbolite

LW

Leadh/wane

Aurichalcite

LW

Susanna V., L

New Glencieff V., W

Straitstep V., W.

Azure

LW

Leadhills/Ward.

Baryte

LW

Broad Law V, L

Brow V, L

Brown's V, L

Dobbie's V, L

E. Stayvorage V, L

George's Roost V, L

Glasgow V, L

Glengonnar Sh., L

Hopeful V., L

Katystacklin V., L

Meadowhead V., L

Park's Sh., L

Straight Brae V., L

Susanna V., L

Wembley Sh., L

Wilson's V., L

Belton Grain V., W

New Glencheff V., W

Ba

Wilson's V., W

Straitstep V., W

Lady Anne Sh. (incl Pb) W

Beudantic

LW

High Pitch M., W.:

Brochantite

LW

Sear V., L

Meadowfoot Mill, W

New glencrieff V., W

Straitstep V., W

Calcute

LW

Broad Law V, L.

Brow V, L

Brown's V, L

Dobbie's V, L

George's Roust V, L

Glasgow V, L

Glengonnar Sh, L

Hopeful V., L

Humby V., L

Lady Anne Sh., L

Meadowhead V., L

Park's Sh., L

Wilson's V., L

Wool gill V., L

Belton Grain V., W

New glencrieff V., W

Straitstep V., W

Col

White's Clench, W

Calcium V-pyromorphite

LW

Belton Grain V., W

Caledonite

LW

Susanna V., L

Belton Gram V., W

Meadowfoot Mill, W

New glenciereff V., W

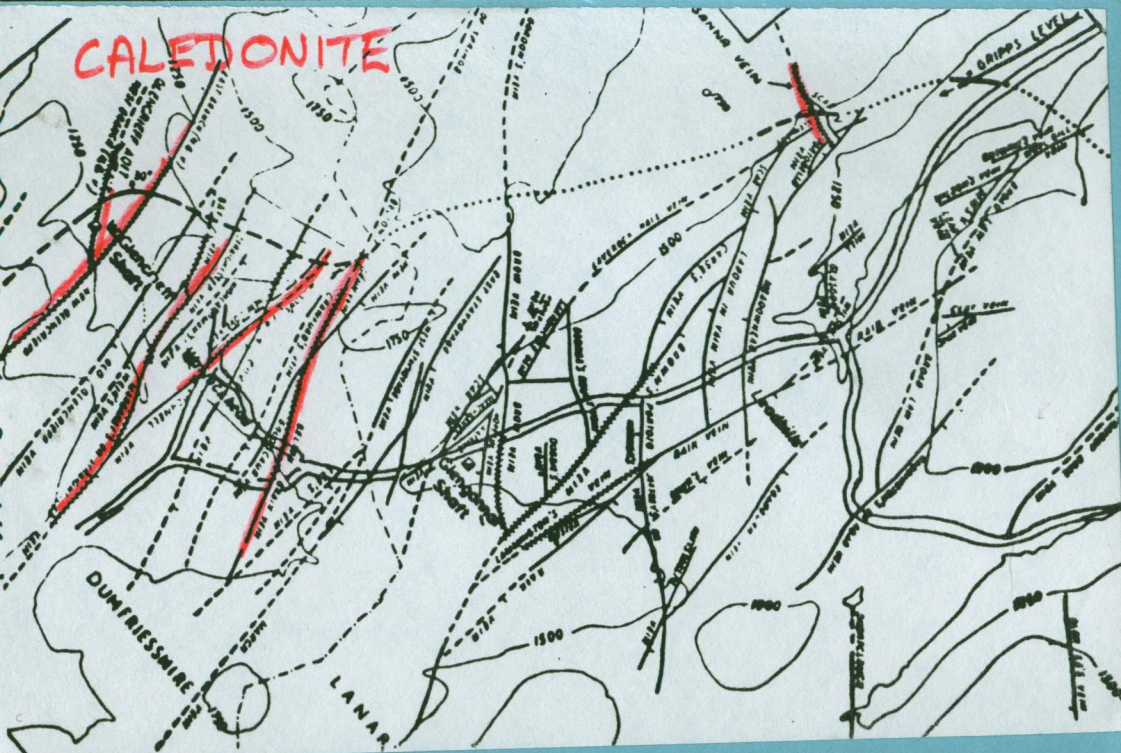
Straitstep V., W.

Wilson's V., W

Roanburn V., L

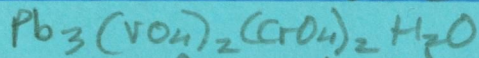
White's Clench, W

CALEDONITE



Cassedaniite

LW



High Pinn M.C.W. [or interm $\rightarrow$ embreyite]

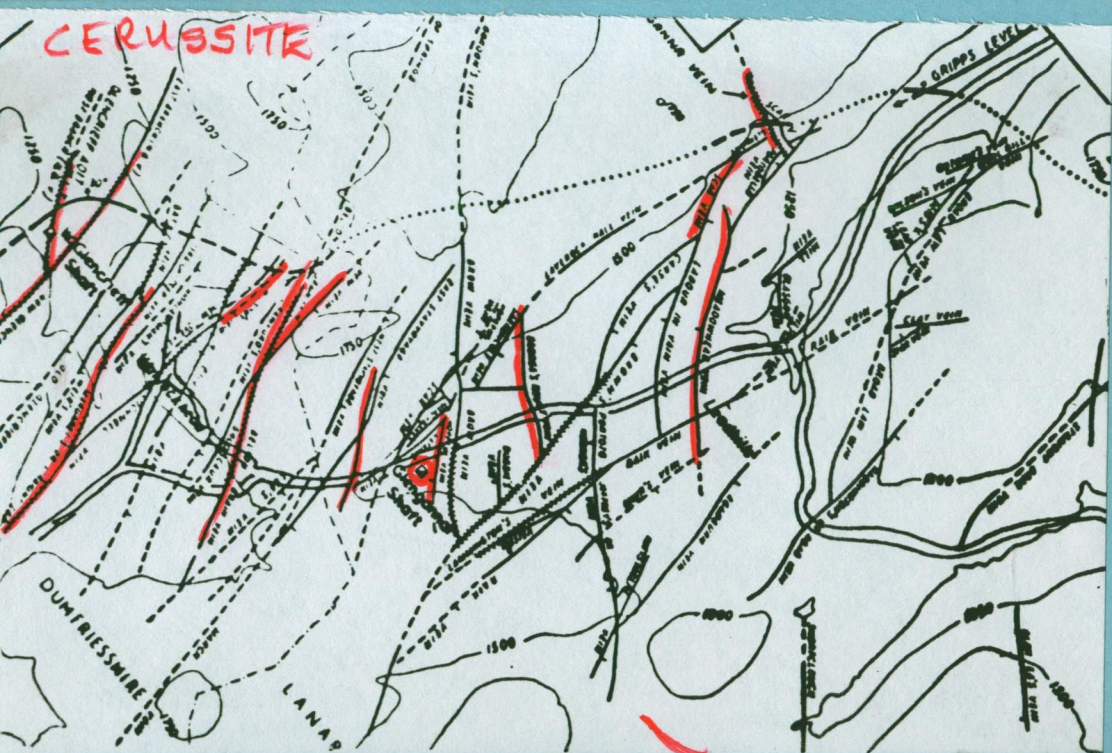
Lady Anne Sh, (L).

Cerussite (I)

LW

George's Rowst V, L	Belton Grain V, W
Glengonnar Sh., L	Meadowfoot Mill, W
Glennery Scar V, L	New Glencrieff V, W.
Hopeful V, L	New V, W
Meadowhead V, L	Straits Step V, W
Stay-the-Voyage V, L	Wilson's V, W
Susanna V, L	Horners V, L
Windgate Bean, L	Muir's V, L.
	Broad Low V, L

CERUSSITE



Censusite (II)

LW

Roanburn V L
Whit's Creek, W
Dunston Q, Craighead, Abington

Chalco cite

LW

Leadhills/Wan.

Chalcopysite

LW

Brow V, L

Brown's V, L

Dobbie's V, L

Glasgow V, L

Glengonnar Sh, L

Hopeful V, L

Humby V, L

Katystacklin V, L

Long clench V, ?L

Meadowhead V, L

Scar V, L

Belton grain V, W

New Glencrieff V, W

Straitsley V, W

Lady Anne Sh, L

[illegible]

Chenite

LW

Susanna V., L.
Meadowfoot Mill, W.

Chlorite

LW

Leadhills/Ware

Chrysocolla

LW

Brow V., L

E. Stayvoyage V., L

Glengonnar Sh., L

Hopeful V., L

Meadowhead V., L

Scar V., L

Belton Grain V., W

Kaw Glencireff V., W

New V., W

Straitsstep V., W

White's Clench, W

Wilson's V., W

[illegible]

Cobaltite

LW

New Glencoe off V; W.

Copper, native

LW

Leadh/Wane

Meadowfoot Mel, w

Cornwallite

LW

Susanna V., L ("erinite")

Belton Grain V., W ("erinite")

Cotunnite

LW

Hopeful V., L

High Pirn M., W.

Covelline

LW

Leadhills/Wam

Lady Anne Sh, L

Crocoite

LW

Hopeful V., L

Cuprite.

LW

Longclough V, ? L. ("Cuⁱⁿ pitch")
Meadowfoot Mill, W.

Descloizite

LW

New V., W. ("Dechenite")
ie arsenian

Hornes's V., L [?]

New glencreeff M, W [?]

Whites Clough, W. [?]

Devilline

LW

Meadowfoot Mill, W

Dolomite (some may be
ankerite, qv)

LW

Brow V, L

New Glencreeff V, W

Brown's V, L

Dobbie's V, L

Glasgow V, L

Glengonnar Sh, L

Hopeful V, L

Meadowhead V, L

Belton Grain V, W

Dundasite

LW

L

Elythe

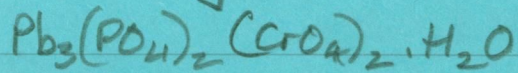
LW

Leadhills

Meadowfoot Mel, W

Embreyite

LW



High Pirn M (? intermed $\Rightarrow$ cassedaneite)

"Eosite"

LW

Hopeful V., L.

Erythrite

LW

Localities

New Glencineff V, W

Fluonite

LW

Leadhills/Wane

Galena

LW

Big Wool gill, L

Broad Law V, L

Brow V, L

Brown's V, L

Bulmer V, L

Dobbie's V, L

Dun Grain, L

Garth Drift, L

George's Roust, V, L.

Glasgow V, L

Glen Ea's V, L

Glengonnar Sh, L

Haddington's V, L

Hopeful V, L

Kadystacklin V, L

Lamington's V, L

Laverock Hall V, L

Meadowhead V, L

gal

Middle grain V., L

Park's Sh., L

Raik V., L

Scar V., L.

Shortcragh V., L. ("Pb")

Straight Brae V., L

Susanna V., L

Wilson's V., L

Windgate Burn, L ("Pb")

Wool Gill V., L.

Belton grain V., W

Lochnell V., W

Meadowfoot Mill, W

New Glencierff V., W

New V., W

Straitsstep V., W

Whites Clench, W

Roanburn V., L

Horner's V., L

Lady Arne Sh.

Goethite, "limonite"

LW

Brow V, L

Scar Burn, ?L

Scar V., L

Windgate Burn, L.

Horners' V, L

Muir's V, L

Gold

LW

Balmert's Hill ?L
Glengonnar Water, L
Gold Scaurs V, L (?)
Longclench (L & W?)
Meadowhead V., L.
Scar Burn ?L
Shortclough Burn, L, W.
Shortclough Water, L

Windgate Burn, L
Duneaton Water,
Crawfordjohn
Glendorch Burn,
Crawfordjohn
Glenkip Burn,
Crawfordjohn
Glenclach Burn, W
Mennock Water, W
Straitstep V., W

Ave

Wanlock Water, W

Goslante

LW

Leadhills / want.

Graphite

LW

Big Wool Gill, L. (?)

Dun Grain, L

Greenockite

LW

Lead Chloride

Bay Sh., W

New Glencrieff V., W

Gypsum

LW

Meadowfoot Mill, W
New Glencrieff V, W

Haematite

LW

Brow V, L

Wilson's V, W

E. Stayvoyage V, L

White's Church, W

Glasgow V, L

Stay-the-voyage V, L

Belton Gram V, W

Lee's V, W

New Glencrieff V, W

Straitstep V, W

Hemimorphite

LW

Big Wool gill, L (?)

Wool gill V, L (?)

Bay Sh., W

Betton Grain V, W.

New Glencrieff V, W

Stratstep V, W

Broad Low V, L

White's Cleuch, W

Rack V, L

Mine Hill

Hydrocerussite

LW

Belton Grain V., W

Leadhills

Meadowfoot Mill, W

New glencrieff V., W

High Pirn M., W

Hydrozincite

Leadhills

LW

Jamesonite

L-W

New Glencineff V., W

Jarosite

LW

Glengonnar Sh., L. (?)

Kegelite

LW

New glencrieff, W

Lanarkite

LW

Hopeful V., L

Susanna V., L

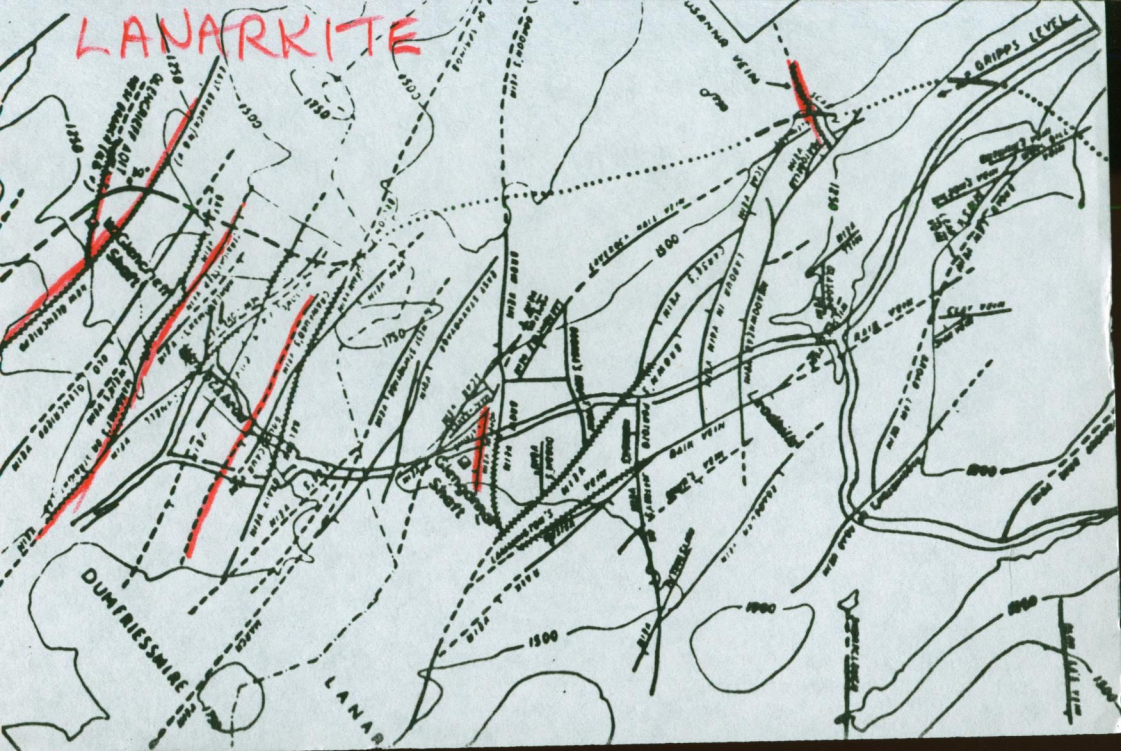
Crawford's V., W

Meadowfoot Mill, W

New Glendrieff V., W

Straitsstep V., W

LANARKITE



Laumontite

LW

Leadhills/Ware

Laurionite

LW

Meadowfor Mill (?)

Lead, native

LW

Lady Anne Sh., L
Meadowfoot Mill, W

"Lead hydroxyapatite"
(Prob = Mattheidite)

LW

Lead hydroxyapatite

Whites Clench, W

Langite

LW

Meadowfoot Mill, W

Laurentthalite

LW

Meadowfoot Mill, W

Leadhillite

LW

Glengonnar Sh., L

Hopeful V., L

(including Chromian)

Lady Anne Sh., L

Susanna V., L

Crawford's V., W.

Meadowfoot Mill, W

New Glencrieff V., W

Straitstep V., W

Roanburn V., L

White's Clench, W

Horner's V., L

A detailed geological map of the Leadhill area. The map features several prominent veins highlighted in red, including the 'Whitewing vein', 'Cassidy vein', and 'Griggs level'. Other labeled veins include 'Lambert vein', 'Baird vein', 'Cassidy vein', and 'Griggs level'. The map also shows contour lines with elevations such as 1500, 1750, and 2000. Key locations marked include 'DUMFRIESMIRE' and 'LANAR'. The title 'LEADHILLITE' is written in large red letters at the top left. The map is a complex network of lines representing geological features and topography.

Linnate

LW

E. Stayvoyage V, L

Glengonnar Sh., L

Hopeful V., L

Scar V., L

Susanna V., L

Belton Gram V., W

Meadowfoot Mill, W

New Glencineff V., W

Straitstep V., W

Horner's V., L

Roanburn V., L

White's Clench, W

Litharge

LW

Leadhills

Meadowfoot Mill, W.

Macphersonite

LW

Leadhills 1

Magnesite

LW

Leadhill, Mass.

New glencroft V, W.

Magnetite

LW

White's Clench

Malachite

LW

Brow V, L

E. Stayvoyage V, L

Katystacklin V, L

Longclench V, ?L

Scar V, L

Stay-the-voyage V, L

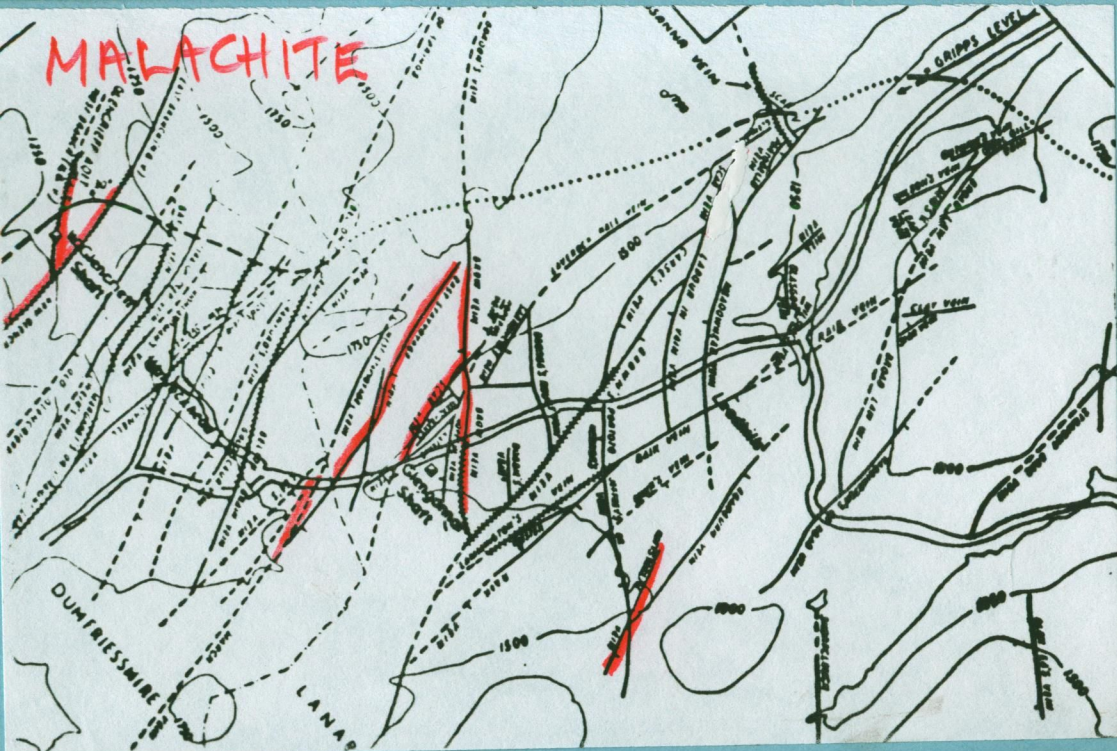
Meadowfoot Mill, W

New Glenrieff V, W

Straitstep V, W

Horner's V, L

MALACHITE



Marcasite

LW

New Glencreeff V, W

Massi cor

LW

Leadhills

Mattheddleite

LW

Leadhills

Susanna V.

Melacombe

LW

Leadhills/Ware

Mimetite

LW

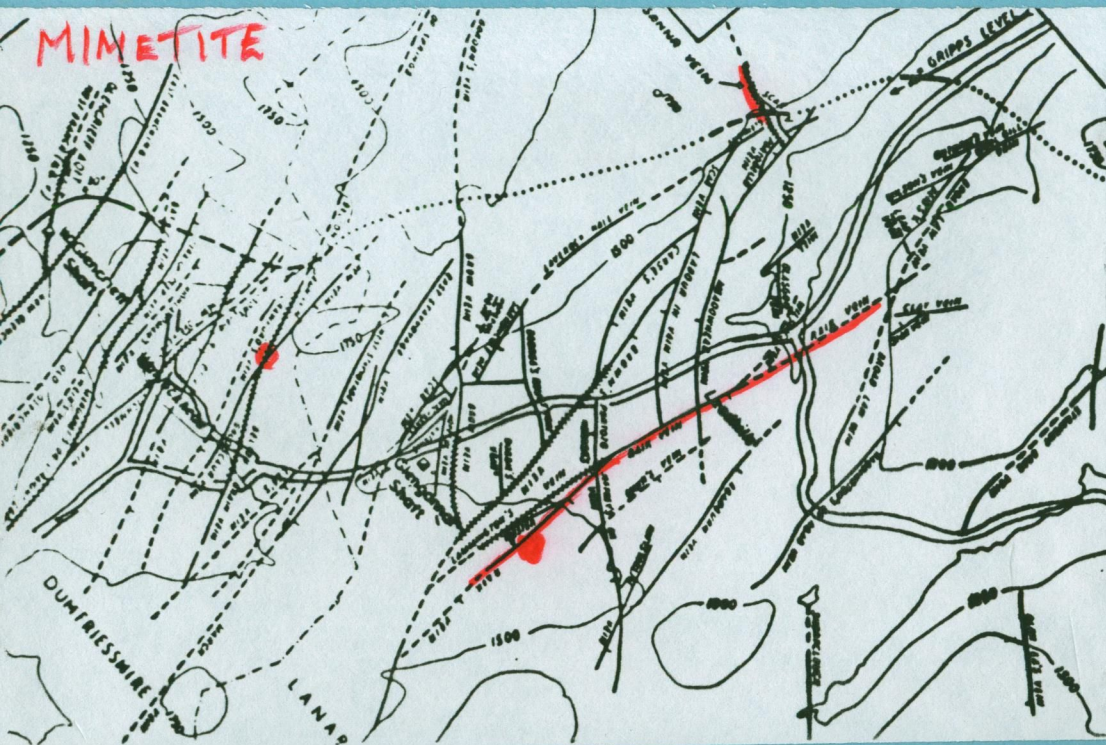
Mine Hill Shy, L.

Raik V., L

Susanna V., L

High Pirn M., W

MINETITE



Minium

LW

Susanna V., L.

Monohydrocalcite

LW

Meadowfoot Mill, W

Motttramite

LW

Hopeful V., L

Scar V., L.

Belton Grain V., W

New glencrieff V., W

New V., W

Horner's V., L.

High Pinn M., W

Lady Anne Sh

"Mountain leather" (?Palygorskite_{qv}) LW

Leontine

New glencreeff V, W.

Nickeline ("niccolite")

LW

Longcleugh (Cu vein), (L or W?)
New glencreeff V., W

Olivemite

LW

Glengonnar Sh., L

Olive

LW

Meadowfoot Mill, W

Palygorskite

LW

(cf "Mountain leather" q.v.)

Leadh/Wane

Paralauntonite

LW

Meadowfoot Mill, W

Pentlandite

LW

New Glencreeff V., W

Phoenicochroite

LW

Hopeful V., L

Phosgenite

LW

Meadowfoot Mill, W (?)

Phosphohedyphane LW
(= "ab-pyromorphite")

~~Dun~~ ^{Dun} ~~eat~~ ^{eat} ~~on~~ ^{on}
(Craighead) Q, Abington (RSWB & GR
28/7/62. GR IR = "ab-pyrom") (?)

Whites Clench, W.

Plattnerite

LW

Hopeful V., L

Raik V., L

Susanna V., L

Belton Grain V., W

Meadowfoot Mill, W

Plumboaragonite

LW

Leadhills/Wanl.

Plumbocalcite

LW

Bay Sh., W.

Belton Gran V., W

Plumbogummite

LW

Raik V., L

High Pirn M., W

Plumbonacrite

LW

L

Posnjakule

LW

Meadowfoot Mill, W. (?)

"Psilomelane" (? Romanechute)

LW

E. Stayvoyage V, L

Pyrite

LW

Brow V, L

Straitstep V, W

Brown's V, L

Lady Anne Sh, L

Dobbie's V, L

Glasgow V, L

Glengonnar Sh, L

Scar V., L. (Pseudo to goodkyle)

Belton Grain V, W

New Glencineff V, W

Pyrolusite, "wad"

LW

Leads, small

New glencrieff V, W

Pyromorphite
see also phosphohedyphane

LW

Broad Law V., L	Lady Anne Sh., L
Bulmer V., L	Lavender Hall V., L
Dun Gram, L	Meadowhead V., L
E. Stay voyage V., L	Middle Grain V., L
George's Roost V., L	Park's Sh., L
Glengonnar Sh., L	Sarrowcole V., L
Glennery Scar V., L	Scar V., L
Haddington's V., L	Stay-the-Voyage V., L
Hopeful V., L	Straight Brae V., L
	Susanna V., L

Pyrom.

Wilson's V., L

Windgate Burn, L.

Wool Gill V., L

Belton Grain V., W

High Pirn M., W

New Glencrieff V., W.

New V., W.

Whites Leuch, W (Incl. calcian ["polysphaerite"]
or phospho heady phone

Wilson's V., W.

Hornet's V., L.

Raik V., L. (?)

Roanburn V., L.

Mine Hill

Pyrrhokite

LW

New Glenciereff V, W.

Quartz

LW

Big Wool Gull L

Broad Law V, L

Brow V, L

Brown's V, L

Bulmer's Hill, ?L

Charteris's Drift, L

Dobbie's V, L

Dun Grain, L

E. Stayvoyage V, L

George's Roust V, L

Glasgow V, L

Glen Franka Burn, L

Glengonnar Sh., L

Glennery Scar V., L

Hopeful V., L

Humby V., L

Laverock Hall V., L

Q12

Meadowhead V., L

Park's Sh., L.

Sarrowcole V., L

Scar V., L

Shortclough Burn L, W

Shortclough Water, L

Susanna V., L

Wilson's V., L

Windgate Burn, L.

Wool Gill V., L

Belton Grain V., W

New Glencrieff V., W

New V., W.

Straits Top V., W.

White's Cleuch, W

Wilson's V., W.

Lady Anne Sh., L

Queitite

LW

Roanburn V, L.

Rammelsbergite

LW

New Glencroft v. w.

Romeite

LW

gængaber ("Meadowfoot") mæl (slag)

Schmiederite

LW

^{Glengaber}
(Meadowfoot) Mill, W (?) (slag)

Scotlandite

LW

Susanna V., L

Serpiente

LW

Meadowfoot Mill, W

Sidente

LW

Brow V, L.

Smithsonite

LW

Big Wool gill L(?)

Wool gill V., L(?)

New Glencreeff V., W

New V., W

Straitstep V., W. (?)

Sphalerite

LW

Big Wool gill L

Broad Law V, L

Brow V, L

Brown's V, L

Dobbie's V, L

Glasgow V, L

Glengonnar Sh., L

Horne-Muir V., ?L.

Lady Anne Sh., L

Lammington's V., L

Mine Hill Sh., L.

Moffat Sh., L

Park's Sh., L

Raik V., L

Susanna V., L

Wembley Sh., L

Wilson's V., L

Wool gill V., L

Sphal.

Gordon's V., Crawfordjohn

Lochnell V., W.

New Glencierff V., W

Straitstep V., W

Steverustite

LW

Horner's V
Lady Anne Sh.
Suzanna M

Strontianite

LW

Leadhills / Waul

Susannite

LW

Glengonnar Sh., L

Hopeful V., L

Lady Anne Sh., L.

Susanna V., L

Horner's V., L. (??)

Titamite ("sphere")

LW

Leadh/waml.

Vanadinite

LW

Hopeful V., L

Lady Anne Sh.

Susanna V., L.

Belton Grain V., W (Incl calcian phosphatic)

High Pirn M., W

New Glencrieff V., W

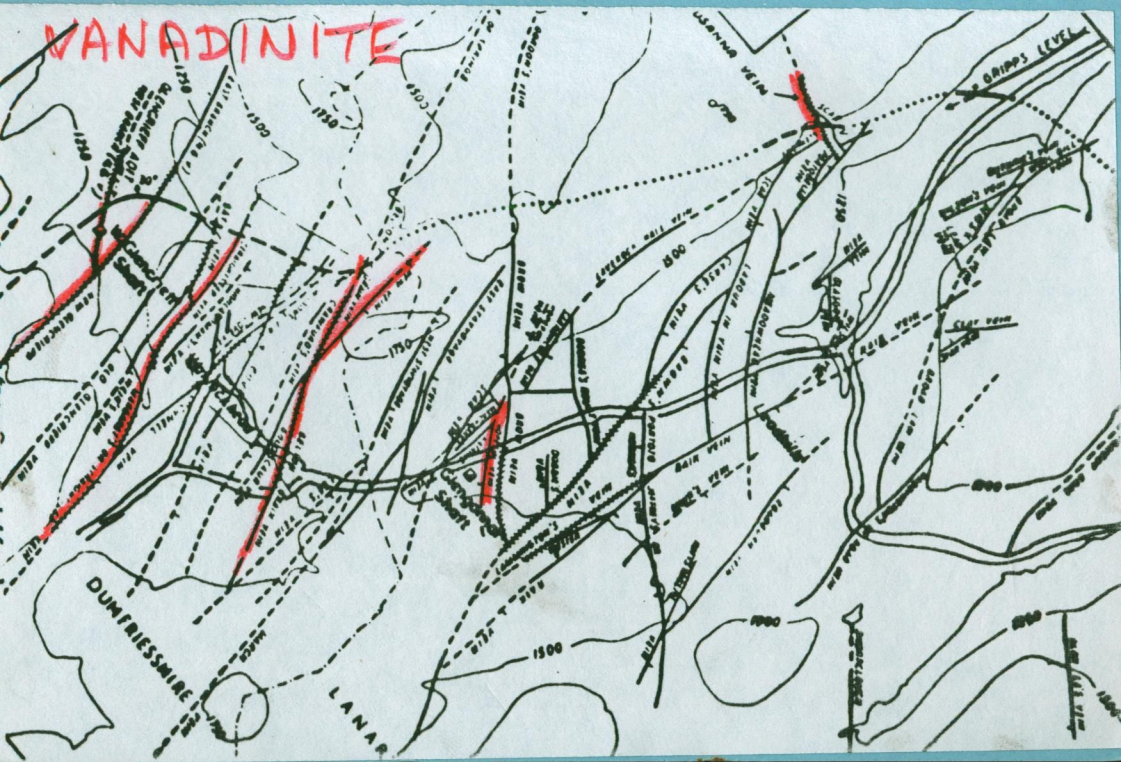
New V., W

Straitstep V., W.

Horner's V., L

White's Clench, W

VANADINITE



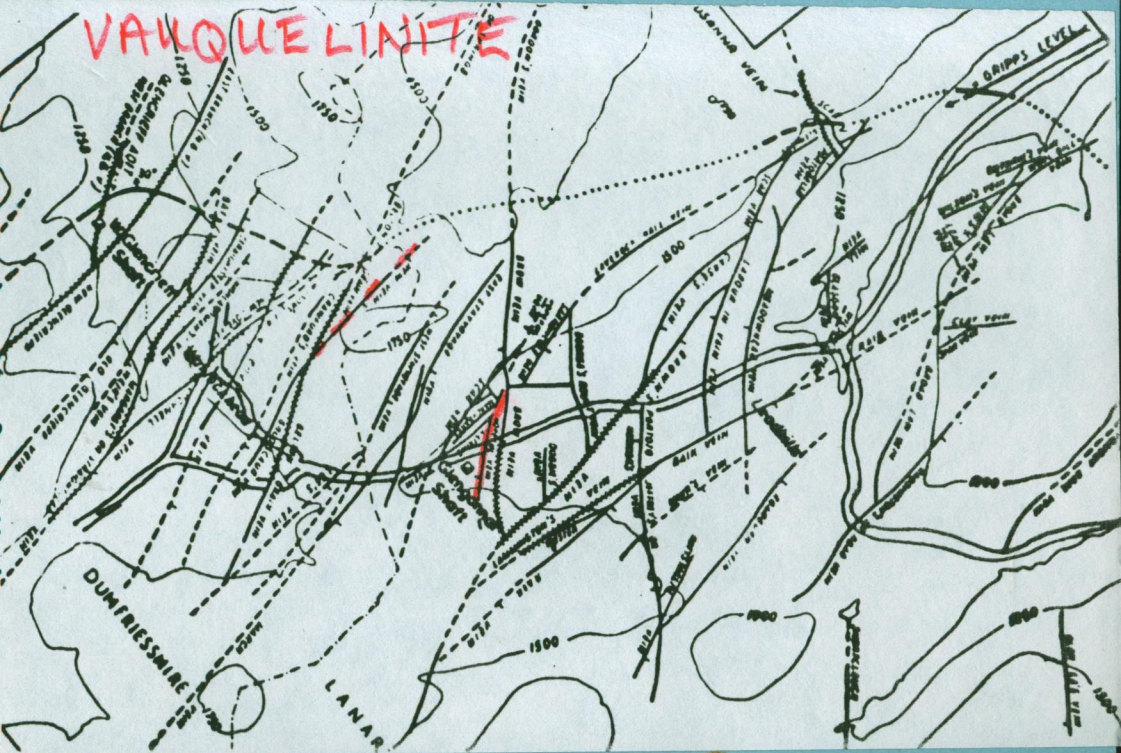
Vauquelinite

LW

Hopeful V., L

New V., W. (?)

VAUQUE LINITE



Veszelyke

LW

Straitstep V., W.

Witherite

LW

Glasgow V, L

Wembley Sh, L

New Glencrieff V, W

Wroewolfeite

LW

Meadowfoot Mill, W

Wulfenite

LW

Susanna V., L

Horners, (Jeffery's) V, L

Muir's V, L.

Straitsstep V, W.

East Stayvoyage V., L.

Hopeful V., L.

Raik V., L.

Broad Law V, L.

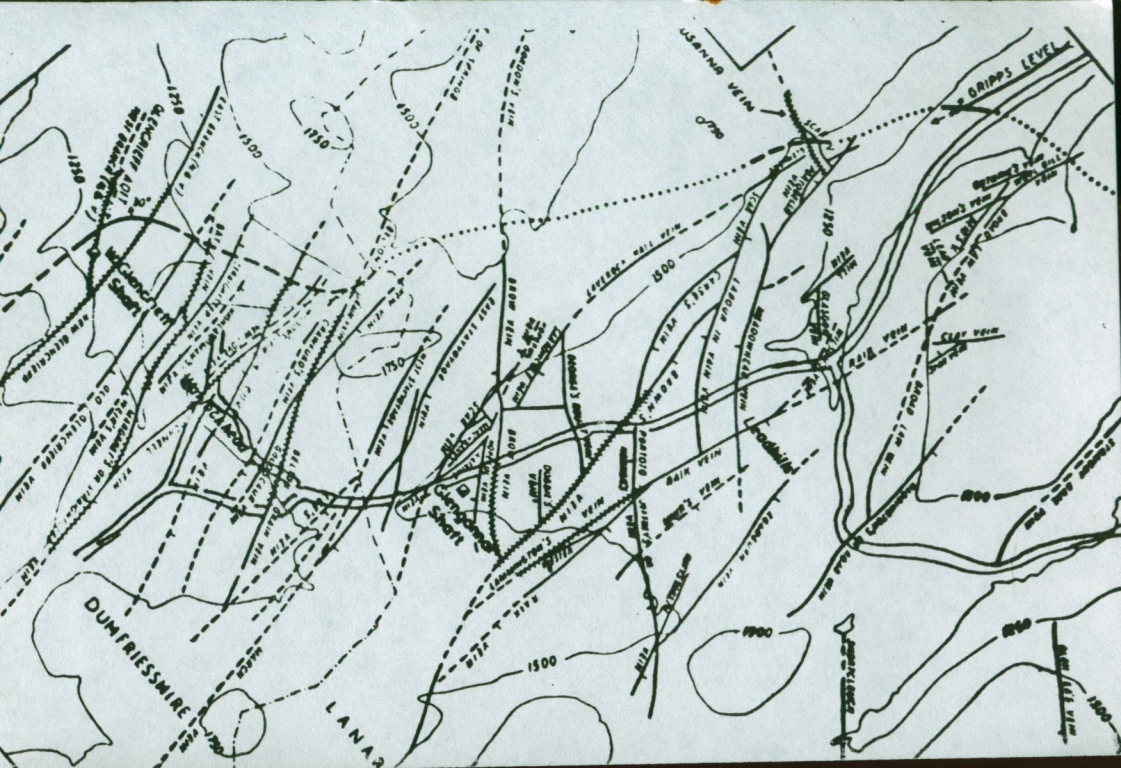
Unident

LW

greenish pentag-dodec (Pb, Sb...) (slag)
greenish ("Meadowfoot") M. l.
Lemon-yellow sphaules (vanadate)
Lady Anne Sh.
(= cased d'art?)







LEADHILLS, Lanarkshire, Scotland.

See also CRAWFORDJOHN; WANLOCKHEAD, Duff

SRMRGB 17 (1921) Wilson GV "Pb, Zn, Cu & Ni ores of Scotland".

RJG (1981) R.J. Gillanders "Famous min. locs: The Leadhills-Wanlockhead dist., Scotland".
Min. Record (1981) 235-250

AKT (1956) AK Temple. "The L'hills-Wan'd lead & zinc deposits" Trans. Roy. Soc. Edinb. (1956)
63 85-113.

- R Brown (1919) "The mines & minerals of Leadhills" Trans.
Dumf. Gall. Nat Hist Antq Soc. 6 124-137
- (1925) "More about the mines & minerals of Wanl'h'd
& L'hills". Tr. Du. Gall. N.H. An. Soc. 13 58-79
- Collie, N (1889) "On some Leadhills minerals" J. Chem Soc. 55 909
- N-F (1959): Mackay, R.A. "The L'hills-Wanl'h'd Mining
District" Sympos on future of non-ferr. min'g in GB
& Irel., Inst Min'g Met. London
- Porteous, J.M (1876) "God's Treasure-house in Scot'd" Lond
- WH Paar (1983) Lapis 8 [9] 9-15 "L'hills-Wanl'h'd".

HAZLEBRIDGE

LEAD HILLS, Lanarks. (I)

See also WANLOCKHEAD, Dumf., specific locs, etc.

SRMRGB 17 (1921). First record 1239 but probably mined much earlier. Among minerals: jamesonite
Appears to all these minerals - [doesn't say whether Leadhills or Wanlockhead], also azurite, plumbonacrite, hydrozincite, aurichalcite, limonite, minium, smithsonite, malachite, chrysocolla, pyromorphite, mimetite, anglesite, gaslarite (on timbers of upper dry old levels), leadhillite (except Belton Grain Vein [!]) susannite, caledonite, linarite, quartz, calcite, aragonite, dolomite.

R. Brown (1919) Generalising. "Pick, shovel, & hammer on top of Dod will always give cerussite, anglesite, vanadinite, pyromorphite, pyrolusite".
[L. + Wanl] → Mins. include azurite, erinite [= cornwallite], greenockite, laumontite, mimetite, native copper, fluorite, jamesonite, nat. lead, olivine, dechenite, graphite, lydian stone, strontianite, chlorite, erythrite, gypsum, niccolite, melaconite, vaughelinite. [Contd II]

R. Brown (1926) 1st record Glengonnar 1239.

AKT, TRS Edinb 63, 85 (1956). L + Wanl. non-specific list of minerals includes: plumbo calcite, up to 9.5% Pb.

LEADHILLS, Lanarkshire (II)

chalcocite, f. common in oxidised replacing chalcopyrite, with goethite & Cu minerals.

Covellite common in oxidised mixed chalcopyrite-galena ores, often pseudo. after galena.

Hydrozincite, widespread as incrust. on blende.

Brochantite, does not occur with caldonite, & occurs in oxid Cu deposits deficient in Pb.

Lin + cal when $Pb > Cu$. Lin only when $Cu > Pb$. Broch when $Cu \gg Pb$. Broch on malach on goethite.

Hydrozincite on aurichalcite on hemimorphite
greenockite on oxid- blende. Silomelane

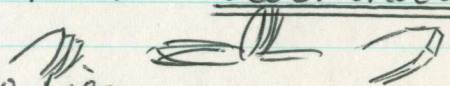
see also specific locs.

R. Brown (1919) Mineral list (Lew) cont'd: Also: aragonite,
asbolite, aurichalcite, baryte, smithsonite, calcedonite,
chalcedony, chrysocola, chalcopryite, chlorite,
siderite, copper, dolomite, galena, graphite, gold
greenockite, haematite, hemimorphite, hydrocerussite
jasper; lanarkite, leadhillite, limonite, linarite
malachite, melanconite, minium, meteoric iron,
mountain wood, mtn leather, plattnerite, pyrite
plumboaragonite, plumbocalcite, psilomelane
pyrolusite, calcium vanado-pyromorphite, quartz,
susannite, strontianite, tile ore, van wad,
witherite, zblende.

A. French MM 4 42 (1880). Peculiar scaly pasty form of silica
found in a quartz v'n while searching for gold.

LEADHILLS, Lanarkshire (General) (III)

J.S. Thomson, MM 7 143 (1886). Pb in calcite from Leadhills - Wanlockhead area. Bay mine; Belton grain vein calcites analysed. Bay mine (up to 0.91% PbCO_3); BGV (up to 3.51% PbCO_3).

W. Paar (1981) On old specimen(s?) from Leadhills, of anglesite - Traces scotlandite, new mineral. 
c'less sheaves, bow-ties.
XRD, optics - new. Eprobe: only Pb, S with $z > 8$. $\text{Pb} = \text{S}$. IR (RswB) SO_3^{2-}
first natural sulphate. Must be PbSO_3

but not = synth $PbSO_3$ ppt from v. weak to
v conc solns, excess Pb^{2+} or excess SO_3^{2-} , pH
4.5 $\rightarrow$ 12 (above pH 12 a dioxy sulphate
ppt'd) $\therefore$ scotlandite is a new
polymorph of $PbSO_3$. Also found on
an RSWB lanarkite specimen - checked (IR).
Publ. W Paar RSWB, Chen, Keller MM (1984) 48 283-288

RJG (1981) Descrip, hist, illustr., mineralogy,
Ankerite, aragonite, baryte, calcite, galena,
chalcoprynite, cobaltite, marcasite,
niccolite, pyrite, quartz, rammedsbergite,
sphalerite, witherite, anglesite, bendantite,
caledonite, cerussite, cotunnite, crocoite,
descloizite, hydrocerussite, lanarkite

L'hells + want.

LEADHILLS, Lanarkshire (general) (IV)

L
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s

lead hydroxyapatite, linarite, mimetite,
minium, phoenicochroite, plattnerite,
plumbogummite, pyromorphite,
susannite, vanadinite, vanuquelinite,
aurichalcite, goslarite, hemimorphite,
hydrozincite, azurite, brochantite,
chalcocite, chrysocolla, copper,
covellite, malachite, olivine, tenorite,
annabergite, apatite, chlorite,
erythrite, fluorite, goethite, gold,
greenockite, gypsum, haematite,
magnesite, palygorskite, psilomelane.

pyrolusite, siderite, strontianite
sphene - all from L'hills-Wanlockhead

A. Livingstone & H. G. Macpherson MM (1983) 47 99-105

"Fifth suppl. list of Brit. mins. (Scottish)"

Elyite (XRD, microprobe) sprays of lilac needles to 0.4 mm
in cavs in small 2cm sample of litharge, massicot
& cerussite from a stream bed in Leadhills.
Prob. formed naturally in what may be a dumped
blue product. Pres. to RSM in 1981 by Mrs F. Christison
[cf MEADOW FOOT MILL, Wanlockhead - in slags]
Litharge - red plates $\rightarrow$ 1 mm, (XRD). Massicot
soft cream-yell earthy (XRD).

LEADHILLS, Lanarkshire (V)

W. Paar, Riv Comm /83 sample IR'd
12/83. Chenite, new mineral
looks like calcedonite; very little
on one old specimen. $Pb_4Cu(SO_4)_2(OH)_6$,
triclinic. From "Susanna Kem", assoc
w. linarite calcedonite gal, minor cupy.
"white" :=
e "pale blue" =

A Livingstone e H Sarg MM (1984) 48 277-82
Small spec in Heddle Coll in RSM, from
"LEADHILLS DOD" [? Hopeful v ?] has new polymorph
of l'hillite e susannite, macphersonite (o/rh)

Dumbbell twins $\rightarrow 7\text{ mm!}$

v pale amber, cleaves in thin flakes  $\rightarrow$  phex
vivid yellow fluor in UV (SW & LW) - as other Pb species
Ass w. el'hill, susann, ceruss, caled, yellow
pyrom, milky white "lead-hydroxyapatite" of Temple

IR Spec of Macph/leadh & susann MM(1984) 48, 295-7
JD Russell, AR Fraser, A Livingstone

GR Priv Comm. New species Mattheddleite
 $\text{Pb}_{10}(\text{SiO}_4)_2(\text{SiO}_4\text{H})_2(\text{SO}_4)_2\text{Cl}_2(?)$ (a lead
apatite) with lanarkite. XL
morphology v. characteristic:



RSWB 74-208 Hydroceruss ("checked BM")

LEADHILLS, Lanarks. (VI)

B Jackson, Priv Comm. 18/10/96. Peter Davidson
(of NMus Scot.) has found dundasite on a
Leadhills specimen. (1st. from Scot.)

Mid E

AITKEN'S SHAFT, Leadhills, Lan

See also HADDINGTON'S VEIN

On Haddington's Vein

AITKINSON'S SHAFT, Leadhills, Lan.

Mtd N

See also REID'S VEIN.

On Reids Vein

BIG WOOL GILL, Leadhills, Lan.

Far N

According to natives, there is graphite ("plumbago") in Big Wool Gill. [Not found in 1956, but is some soft micaceous shale in upper part, which is very black when wet]

RSWB, GR (8/55) Large lump of stream galena found, with patch of blende. in mid-part of gill. Loc 14. See also 15, 16 & 53 (near head of gill). 16: galena, quartz, ~~and~~ smiths/hemi?
53: Quartz w. prism faces; black shale; ign. errati

BORLASE SHAFT, Leadhills, Lan.

See WEMBLEY. SH.

N

BROAD LAW VEIN, Leadhills, Lan.

See also WOOL GILL V., RAIK VEIN, WILSON'S V.

NNW-SSE. S continuation of Wool Gill Vein. Long. Part, near Rerds Vein is called WILLIAMSON'S VEIN crosses Raik Vein. S end near Haddington's Vein

RSWB, GR (8/55) Loc 11; overgrown. Loc 13: Blonde, in large masses of calcite, with dog-teeth in vughs.

Loc 12 Wilson's V intersect. Overgr. some baryte quartz, calcite, pyrom. Traces galena.
Much sphal. in calcite

Having had enough we moved back to Leadhills and the Broadlaw dumps. After dilligent searching the following minerals were collected: cerussite,

RSN
(1976) 28

hemimorphite, pyromorphite and wulfenite as orange acute octahedra.

After an hour we said farewell to one of our number who had to go home. The remainder returned to Sanquhar for the night.

Beryl Taylor says the dump is by the road, opposite a couple of cottages.

Mid SSW

BROW VEIN, Leadhills, Lan. (I)

NW-SE, long. NW end runs into Crawfordjohn parish, and eventually becomes GORDON'S VEIN. Crosses HOPEFUL VEIN; SCAR VEIN abuts. Intersects BROWN'S V. Shafts, etc. LADY ANNE SHAFT.

Temple (1956). Blende - Lady Anne shaft.

RSWB & GR (8/55). Loc 23, at intersect. of Brow & Hopeful veins. Much baryte in masses & weathered sheaves. Small ~~patches~~ patches chalcopryite; traces galena; quartz; calcite.

Rock is black shale with brown rock cemented by dolomite & calcite.

Loc 28 Dumps by tramway behind Glengonnar Baryte, qtz

RJG (1981) Reworked 1920's from Glengonnar Shaft.

Aver. 2.4 metres of brecciated

country rock cemented by ore-bearing calcite & ankerite w. ribs of galena

1.25-30.5 cm thick. Galena sphalerite

pyrite & chalcoppyrite were primary, secondary: limonite, hematite

a little malachite & chrysocolla

gangue calcite & ankerite with a little siderite, quartz, baryte (Wilson SRMRGB

17 (1921)

BROW VEIN, Leadhills, Lan (II)

RSWB/GR. Loc 31, dumps at top of Dod:
Black quartz, haematite, pyromorphite

^{Mtd NE}
BROWN'S SHAFT, Straight Brae Vein, Leadhills, Can.

See also STRAIGHT BRAE VEIN

On Straight Brae Vein

BROWN'S VEIN, Leadhills, Lan. ^{Near SW → Far S}

Ca. N-S. Branches from LABOUR IN VAIN VEIN, cross
HORNERS JEFFERY'S VEIN. GEORGES ROUST V,
and DOBBIES V. abut. BROW VEIN intersects at
surface, S of which LAMMINGTON'S and
RAIK V's abut.

Shafts etc. WILSON'S shaft on or near this vein.

AKT. TRSEdinb. 63 85 (1956). Aragonite

RJG (1981) Worked, w BROW V from Glengonnar

Sh. in the 1920's. Illustr: galena x/s to
4cm, sharp. RSM Coll 1878.49.14.

RSWB, GR. Loc 40, intersection w.
DOBBIE'S V. Good quartz; calcite,
baryte, sphalerite, galena cubes,
chalcopryite, pyrite, dolomite x/s

BULMER'S HILL, ? Leadhills, Lan.

Ponteous (1876). A piece of auriferous quartz found
by Griffin on Bulmer's Hill.

Bulmer vein - far NE

BULMER VEIN, Leadhills, ^{Far} NE
lan.

N-S

SRMRGB, 17: Pyromorphite & galena on dumps.

Near W

CARSE'S VEIN, Leadhills, Lan.

Ca N-S, from intersection of GLENNERY SCAR V.
and LABOUR IN VAIN VEIN. To S, becomes
HORNER'S JEFFERY'S VEIN.

GJG (1981) worked in 1920's from WEMBLEY SH

Far NE

CHARTERIES DRIFT, Leadhills, Lan

In Methven Cleuch on a thin quartz vein.

DOBBIE'S VEIN, Leadhills, Lan. ^{Mid S}

NW-SE, short. Send ~~abuts~~ against BROWN'S V.

RS108, GR Loc 40, intersec. w. BROWN'S V.

Good quartz; calcite, baryte, sphalerite,
chalcopryrite, galena cubes, pyrite,
dolomite crystals

Far SE (W map
Far NE)

DUN GRAIN, Lead hills, Lan.

SRMRGB, 17, (1921) Total on quartz vein has
some graphite and antimony minerals(?)
on dump.

RSWB, GR. Loc 50 No graphite found.
Galena, pyromorphite, quartz with
prism faces.

DUNWOODIE'S SHAFT, Leadhills, ^{Far NE} Lan.

See also GOLD SCARPS VEIN etc

On gold Scarps Vein

^{Fav SW}
EAST STAYVOYAGE VEIN, Leadhills, Lan.

NNW-SSE; from BROW VEIN, crosses STAY-THE-VOYAGE VEIN. S end becomes MARSH VEIN

SRMRGB, 17 (1921). Baryte and quartz.

R. Brown (1926). Linarite.

RSWB, GR (8/55) loc 25. Haematitic dump. Quartz, ^{some red}
some chrysocolla & fibrous malachite, &
small specular haematite xls.
Loc 26 30 yds SW of Loc 25 ? on Stay-the-Voyage V. Pyro

Locs 32, 33, near top of Dod. Haematitic dump.
good pyromorphite on quartz. One specimen
black globular psilomelane. Specular haem,
red quartz.

Loc 56 Near Katrine V; by road.

Rothwell & Mason (1992) UKJMM 1130-40 Wulfenite,
orange bipy xls w. green pyromorphite [ident
vis. K. Meikle] [NS 879 138]

ENGINE SHAFT, ^{Far N}Broad Law Vein, Leadhills, Lam.

See also BROAD LAW VEIN

Mtd NE

GARTH DRIFT, Leadhills, Lan.

S

In Ripping Cleuch

RSWB, GR. Loc 54 is just below it, just
above roadcut. Water worn galena

Near SW

GEORGE'S ROUST VEIN, Leadhills, Ian.

NW-SE, fairly short, from LAVEROCK HALL VEIN,
to BROWN'S VEIN.

SRMRGB, 17 (1921). Pyromorphite in quartz.

AKT, TRS Edinb. 63 85 (1956). Aragonite

RSWB, GR (8/55). Loc 1, dumps near road, opposite
Wet Bush: Pyrom. good quartz & calcite xls; baryte
Loc 2: dumps further up the Dod. Much

green pyromorphite; some galena & cerussite
in quartz. Much massive barite, leafy.

Loc 30. At intersection with Sarrowcole vein
Much good green pyromorphite on quartz. Cerr; Calcite
RSWB, W. Pear (9/80). Loc 30 v.v. rich in green
pyro on quartz (v. white).

Near N

GLASGOW VEIN, Leadhills, Lan.

NW-SE, short. NW end abuts against MILL VEIN.
Shafts, etc: WEMBLEY SHAFT. Bq, with, Sphal

RSWB, GR Loc 36. Wembley shaft dumps.

Good baryte; calcite, galena (incl. a
~4" cube); chalcopy xls; dolomite, a
little quartz, haematite. Some calcite
is haematitic. Big "mantle piece" calcite
scaleno w rhomb. termin's, with sheafy
baryte & sprinkled w. pyrite
Baryte xls of "witherite-indicator" habit

Glendinning mine, Westerkirk, Dumfriess.

U

Spec. Rep. Min. Res. 15(1920); 17(1921). (= Louisa mine)

Disc. 1760, worked 1793-1798 for Sb, smelted near the mine. [Willams, Min. Kingdom 2,479; Heddle, Min. Scot. vol. 1; OSAS 11, 525]. Plan and description on General Dirom's County map of Dumfriess-shire. Reopened ~1890, abandoned abruptly and 10 tons of picked ore left on dumps. Recently company formed to reopen mine.

NE vertical vein, walls horizontally slickensided 4 ft breccia + calcite + quartz, with occasional strings of ore up to 2", and pockets. Stibnite, galena, jamesonite, blende (often complex mixture); some chalcopyrite, and small quantities of quartz,

calcite, baryte; secondary kermesite, valentinite, cervantite (often soft and earthy on timbers and walls). Stalactitic crusts of calcite being formed.

Mine was worked by at least three levels connected by shafts and winzes.

Smith, Min. Mag. 18, 354 (1919). Semseyite.

Found by AR 1918. [brief description of mine given by Robert Jameson, "A Mineral Description...." 1805].

Small cavities lined with drusy layer of minute xls of semseyite, markedly darker than stibnite. With stibnite, valentinite, ankerite, calcite, blend and pyrite. All xls less than $\frac{1}{2}$ mm. Anal. and crystal measurements given. BM specimens 1918, 404 and 405.

Glendinning mine, Westerkirk, Dumfriess, contd.

Williams, Min. Kingdom 2,479(1810).

Glendinning mine, 10 mls from Langholm, is the only British Sb mine of importance..... Two veins in (chiefly greywacke.... principal ore is the sulphuret, matrix is usually quartz or lime spar, associated minerals are blende, sometimes a little galena and iron pyrites.

Hall (1868).

Antimonite, blende, calcite, cervantite, pyrite, valentinite - Glendinning, Eskdale Muir, Dumfriesshire.

Greg and Lettsom (1858).

Pyrite; antimonite, radiated variety, met with some years ago at Glendinning, 10 mls from Langholm.

Far E

GLEN EA'S VEIN, Leadhills, Lan.

Shafts etc: Nelsons Level (low); Park's Level (high).
WNW - ESE

SRMRGB 17; galena.

W map for N, mid RMS

GLEN FRANKA BURN, Leadhills, Lan.

SRMRGB 17 (1921) shows trial adit on quartz
vein in black shale.

W map; RMS

GLEN FRANKA RIG, Leadhills, Lan.

SRMRGB, 17 (1921). old trial shaft, of 1761 high
up on N face.

Far 9

GLENGONNAR SHAFT, Leadhills, Lan.

See also HOPEFUL VEIN; BROW V; BROWN'S V.

On HOPEFUL VEIN

SRMRGB, 17 (1921). At glengonnar mine, 2" pyrite
vls. in felsite dyke.

R. Brown (1926). 1st Leadhills mining record
= glengonnar, by monks of Newbattle, 1239.

AKT, TRSEdinb. 63, 85 (1956). Olivenerite

Wilson (1921) Chalcopyrite in the veins worked

from this shaft, chiefly BROW v. & BROWN'S v.
also blende.

RWB, GR (8/55) Loc 27: Large dump near shaft:
Pyrite, striated cubes, up to $\frac{1}{2}$ inch, in very
tough felsite; also dolomite xls on the felsite.
Further N on the dump, calcite & quartz
RWB, JRT, TMS (X, 25, 28-9) 4/66.

Good leadhillite, pyromorphite, galena, much
sphalerite, cerussite, aragonite ~~✱~~, quartz
chrysocolla, traces linarite; chalcopyrite,
calcite, baryte, pyrite, anglesite, ? jarosite

RJG (1981) Reopened 1920's to work Brow & Brown's V's. [qv]
Illust: galena xls (Brown's V); Susannite xls (apple green) $\rightarrow$ ~1 cm
cerussite (Hedde) RSMUS. Coll Hedde coll 734.A.9

^{N-S}
GLENGONNAR WATER, Leadhills, Lan.

Ponteous (1876) . Gold is pale

Near NW

GLENNERY SCAR VEIN, Leadhills, Lan.

NNW-SSE, short, from LAVEROCK HALL VEIN, Branch
to form LABOUR IN VAIN VEIN and CARSE'S VEIN.

RWB, GR (8/55). Lvs 5, 6: Black shale with some
quartz & yellow & green pyromorphite. One
good spec. cerussite.

See also under SUSANNA VEIN

GOLD SCALDS VEIN, Leadhills, ^{Far NE} Lan.

Shafts etc: Roans Drift, Dunwoodie's Sh.

N-S.

All, presumably?

GRIPPS LEVEL, Leadhills, Lan.
See also POUTSHEIL LEVEL

RTG (1981) Gripps drainage level,
driven 1.5 km 1770-1794 to aid
drainage of Susanna mine.

Far N

GUTHRIE'S VEIN, Leadhills, Lan.

NNE-SSW, in the plantation

Near E

HADDINGTON'S LEVEL, Leadhills, Lan

See also HADDINGTON'S VEIN

On Haddington's Vein

Near E

HADDINGTON'S, or ROAD VEIN, Leadhills, Lan.

N-S

Shafts etc. One dated 1/6/1765, Aitken's Sh, Haddingtons
level, Silverside Sh.

SRMRGB 17: Some galena and pyromorphite on dumps

Mid NW

HARRISON'S SHAFT, Leadhills, Lan.

See also SCAR VEIN

On SCAR VEIN [qv].

^{Far N}
HIGHLAND LEVEL, Leadhills, Lan.

See also WOOL GILL VEIN, WOOL LAW HEAD VEIN.

W→E along line of Big Wool Gill.

HIGH WORK VEIN, Leadhills, Lan

See RAIK VEIN

Far S

HOPEFUL VEIN, Leadhills, Lan. (I)

See also GLENGONNAR SH., LADY ANNE SH., BROW V.

NW-SE. Crosses BROW VEIN at LADY ANNE SHAFT.

KATRINE VEIN abuts, also MARCHBANK'S VEIN.

Shafts, etc. LADY ANNE SHAFT; GLENGONNAR SH.

SRMRGB, 17 (1921). Breccia, and strings of quartz
and galena. At Glengonnar mine,
2" pyrite xls. in felsite dyke.

R. Brown (1926). Good leadhillite in last few years.
Linarite on old dumps, also "cosite", found
[v. infra - S.A.W., (1974)]

on old dumps by Weir, Blackman, & Brown - minute tetrag
aurora-red xls, brownish orange-yellow streak, reaction
for Mo, V, Pb. Crocoite, 4 yrs ago, several small
spec's. with cerussite, pyro, leadhillite, on
old grassed-over heap. Vauquelinite, one
spec. had susannite, leadhillite, plattnerite,
crocoite, losite, cerussite, pyromorphite,
quartz & minute but distinct xls of
vauquelinite !! Susannite

AKT, TRS Edinb. 63, 85 (1956). Cotunnite, with
leadhillite, Phoenicochroite, rare (H. Vein
only), with pyromorphite, leadhillite, and
cerussite. Chromian leadhillite, rare,
H.V. only, with ~~cerussite, as long xls, bright red~~

HOPEFUL VEIN, Leadhills, Lan. (II)

leadhillite, lanarkite, & cotunnite, as orange to red elongated xls, 0.5% Cr. "New mineral, chromian lanarkite", elong xls, bright red, 6-15% Cr, x-ray like lanark, but bigger unit cell, H.V. only, rare, with cerussite.

Crocoite.

→ = phoenicochroite, v. infra (S.A.W., 1977)

RSWB, GR (8/55) Loc 23, at intersect'n with Brow V.

- See BROW VEIN. Calcite, baryte, chalcopry, galena, quartz, dolomite.

RSWB, JRK, TMS 4/66 (I, 25-27) Entered adit; ^{by glengonnar} much chrysocolla, a little linarite; galena; pyromorphite.

S.A. Williams (1974) Bull BM(NH) 2 377-419

"The natur. occ'g. chromates of lead"
Temple's phoenicochroite, massive, red, ass. w.
cerussite & leadhillite is confirmed, but
his "chromian lanarkite" is also
phoenicochroite. "Eosite" [See R Brown (1926)]
is doubtful - orig. material not found,
descrip v. like wulfenite but only
fragmentary chem & other data; a
spec. so labelled in BM(NH) is
phoenicochroite. RSWB 6/85 vg moltram/vanad

RSWB 22/7/83 & JIW. Dug into small grassed-over
tips near intersec. w. BROW V. One spec. has
leadhillite, anglesite, cerussite. Some orange
pyro

HOPEFUL VEIN, Leadhills, Lan. (III).

TK. Meikle (coll 1984) crocoite (XRD, RSMus)
from surface dump

Rothwell & Mason (1992) UKJMM II 30-40 Wulfenite,
orange truncated bipy. xls [Ident vis., N. Hubbard]
[NS 881 142]

8
1
23
(1988)
JMS

Monday 2 April - Hopeful Vein, Leadhills

The party spent the first part of the morning digging on the Hopeful Vein dumps (holes being carefully back-filled) whilst Jean Spence and David Green waited to contact the estate representative in Wanlockhead. Species collected were :

Pyromorphite

Cerussite

Mottramite

HORNE - MUIR VEIN, ? Lead hills, Can.

Temple (1956). Blende.

Near S
HORNER'S, ^{or} JEFFERY'S VEIN, Leadhills, Lan. (I)
[PORTO TO VEIN]

NW-SE, long. Is S continuation of CARSE'S
VEIN. Crosses BROWN'S, LAMMINGTON'S, RAIK,
MUIR and KATYSTAKLIN VEINS.

Shaft etc. MOFFAT sh, PARK'S sh.

RSWB, GR. Loc 49. PARK'S SHAFT (qv)

RPH Lamb. Priv Comm 10/90. Cerussite xls
in limonite gozzan with traces

tiny wulfenite xls [both  e  plates]

on dump at intersection of
Horners, Jeffreys or Portoto vein
and Muir's vein.

Rothwell & Mason (1992) UK JMM 11 30-40. Wulfenite
orange-red tab. w. pyromorphite and
cerussite [Ident. vis., K. Meikle]

BMSN (1989) 26, 8. Dug around a shaft collar, yellow
pyrom on galena, micros of deschloizite [?]
vanad, mottam, ceruss, malach, lin

RSN (105) 46 30. Dump @ 888143 intersec w. Muir's V. Dug →
gal. pyrom, ceruss, trace lin, poss 3rd

HORNER'S VEIN, Leadhills Lan. (II)

M. Cooper et al MM (2009) 73, 235-250
Steverustite, 5 sampler from dump

Mid NW

HUMBY VEIN, Leadhills, Lan.

NNE-SSW. Send abuts against SUSANNA VEIN.
Crosses ~~below~~ SCAR VEIN

RSWB, GR (8/55). Loc. 8: Black shale: calcite,
quartz; traces chalcopryite. Yellow quartz
N. part of upper dumps of Susanna complex,
at foot of Lady Manner's Scar

JEFFERY'S VEIN, Lead hills, Lan.

SEE HORNER'S VEIN

KATRINE VEIN, Leadhills, ^{Far SSW} Lan.

N-S, from HOPEFUL VEIN, crossing SCAR VEIN,
and abuts against STAY-THE-VOYAGE VEIN.

SRMRGB, 17 (1921). Mainly ferruginous brecciated
rock.

Far SSE

KATYSTAKLIN VEIN, Leadhills, Lan

NNW-SSE, fairly short. Crosses HORNERS JEFFERY'S V
near PARK'S and MOFFAT shafts.

SRMRGB, 17 (1921). Abandoned 1760. Some malachite
and barytes on the small dump ["Old Copper
Mine"] of OS 6" map on SE extension of HORNERS
JEFFERY'S V.

Wilson (1921). Worked mid-18th cent. Vem mostly
baryte, with malachite, but had some galena toward

the south.

RJG (1981) Chalcopyrite, a little malachite
worked in 18th Cent.

RSWB, GR. PARK'S SHAFT, q.v.

Loc 51, "Old Copper mine" of OS 6" map. on
S side of Shortcough Water. Small
fragments of baryte & malachite

Mid NE
KIRKAP'S DRIFT, Leadhills, Lan

In Rising Clench

V. Near, W.

LABOUR-IN-VAIN VEIN, Leadhills, Lan.

~ NNW → SE from ^{GLENNERY SCAR V}
~~LAVEROCK HALL V.~~ to
abut against LAMINGTONS — RAIK V system.

RJG (1981) worked from WEMBLEY SH.
in 1920's

Mid SW

LADY ANNE SHAFT, Leadhills, Lan.

(I)

At intersection of BROW and HOPEFUL VEINS [qv].

R. Brown (1919). Native lead covered with thin coat of cerussite, $1\frac{1}{4} \times \frac{1}{2} \times \frac{1}{2}$ " on heap from Lady Anne vein. Only piece of susannite [recent] from an old working on Lady Anne vein, also nice leadhillite & pyromorphite. Vein now abandoned.

Temple (1956) Blende from Lady Anne shaft, on BROW
D. Green et al (2005) J Russ Soc 8 [2] 66-70, Supergow
galena, anker, barite, qtz, pyrite, chalcopy, covellite.

RSWB & GR

Loc 23.

Calcite

RSWB 1980's. Shaft has been opened up
& capped.

T. Neall (2005) UKJMM 26, 29-30

Caesedanneite, ("1st Brit" but of HIGH

PIRM, 1999). Acute rhombic xls $\rightarrow$ 0.2 mm

thinly scatt on botry-druzy pyrom or velvet
white plumbian apatite; closely ass &

oft overgrows mottomite globs & rosettes.

Vanadinite; an unident lemon-yell vanadate
as tiny glassy spherules.

LADY ANNE SHAFT, Leadhills, Loen. (II)

M. Cooper et al (2009) MM73, 235-250

Steverustite (10 samples) from clump

Near → mid S

LAMMINGTON'S VEIN, Leadhills, Lan

ca N-S. W branch of RAIK VEIN at Send. Crosses
HORNERS JEFFERY'S V.

Shafts, etc. WILSON'S SHAFT near on on this vein.

SRMR&B 17 (1921) Blende & galena on dumps

Mid W

LAVEROCK HALL VEIN, Leadhills, Lan.

N-S, along top of "The Dod". Long, from SUSANNA VEIN. At S end forks; E fork = GEORGE'S ROUST VEIN, W fork = SARROWCOLE VEIN.

SRMRGB, 17 (1921). Quartz, galena, & pyromorphite
on dumps.

AKT, TRSEdinb. 63 85 (1956). Aragonite, in vughs.

GR, RSWB (8/55) Loc 30, at intersection with

Georges Roust & Sarrowcole Veins. See GEORGES
ROUST VEIN Much pyromorphite on
white vein quartz

LITHAM'S SHAFT, Leadhills, ^{Far NE} Lan.

See also MIDDLE GRAIN VEIN

On MIDDLE GRAIN VEIN

LONGCLEUCH Lead hills or Wanlockhead

A. Watson Tri. Ed. Geol Soc 13, 98 (1939) Read 1932.

Cu vein on the Longcleuch carried a small quantity of niccolite, but dumps too overgrown now

Gold on "Bulmers Gold Scaurs" on the Longcleuch

J. M. Porteous "Gods Treasure House in Scotland" (1876).

Bulmer mined little string or vein powdered with small gold at head of Longcleuch Burn, another found by Bowes. In 1863

miners washed for gold at head of Longclench
getting 12 grains/day.

Wilson (1921) on Longclench Vein, on W side, at
the foot of the clench; chalcopysite;
copper pitch; malachite. Niccolite too,
(Watson, 1934).

RJG (1981) Chalcopysite, a little malachite,
worked in 18th Cent. at Longclench Vein

MARCHBANK'S VEIN, ^{Far SSW} Leadhills, Lan.

N-S, short, from HOPEFUL VEIN.

Mid of L'hills

MEADOWHEAD VEIN, Leadhills, Lan.

NW-SE, longish. From GLENNERY SCAR VEIN
ROANBURN VEIN. Crosses RAIK V., MUIR'S V. etc.

SRMR6B 17(1921) Rough 4" galena found.

Ponteous (1876) In 1855, in the shaft on Meadowhead
vein opp. the old smithy, a $\frac{1}{2}$ " quartz vein was
found, containing an 8-10 grain nugget of gold
- "this vein had gold, silver, lead, antimony, and

sulphate of iron".

GR, RSWB (8/55). Loc 3: Large dump near houses, N end
of vein. Brown breccia, cemented by calcite, &
black shale. Calcite, large rhombs & scaleno-
hedra; drusy quartz; crested baryte;
chalcopryite xls; galena cubes embedded in
calcite; dolomite; cerussite

Loc 4. Further N on the vein. Black dump, with
massive galena & chalcopryite in calcite;
some quartz & baryte; traces pyromorphite stain
good chalcopryite xls; chrysocolla.

RJG (1981) Worked from WEMBLEY STG in 1920's

Far NE

MIDDLE GRAIN VEIN, Leadhills, Lan

Shafts etc. Litham's sh. (qv)

N-S

SRMRGB 17: Large dumps, with pyromorphite and
galena. Opened August 1764

Near N
MILL VEIN, Leadhills, Lan.

N-S, short. GLASGOW VEIN is a branch.

Near SSE

MINE HILL SHAFT, Leadhills, Lan.

See also RAIK VEIN

On RAIK VEIN

SRMRGB, 17 (1921). Mimetite

Temple (1956). blende

RSWB, GR Loc 29

RSN (105) 46 30 Dumps @ 887141 on N side of
Mine Hill (ie dumps SE of tramway tunnel, of
HORNER'S, LAMMINGTONS, WESTER & RAIK V's. — reasonable

hemim e pyrom.

Mid SSE
MOFFAT SHAFT, Leadhills, Kan

See also PARK'S Sh, KATYSTAKLIN VEIN, HORNER
JEFFERY'S VEIN.

Next to Parks Shaft, ^{near} ~~at~~ intersection of Homers
Jeffery's and Katystaklin Veins.

Temple (1956) Blende

RSWB, GR Loc 49 See PARK'S SH

MUIR'S VEIN, Leadhills, ^{Mid SSE} Lan.

Can-s. fairly short. Crosses HORNERS/JEFFERY'S V

RPH Lamb, Priv. Comm. 10/90. ~~At~~ From dump

at intersection of Muir's vein with
Horners or Jeffery's vein, cerussite
xls in limonite-gozzan with
traces of minute wulfenite xls.
(Pale yellow, both  and platy .)

^{Far E}
NELSON'S LEVEL, Leadhills, Kan.
See also GLEN EA'S VEIN

On Glen Ea's Vein

NETHER CLEUCH, Leadhills, Lan.

See CHARTERIE'S DRIFT.

Far E

PARK'S LEVEL, Leadhills, Lan.

See also GLEN EA'S VEIN

On Glen Ea's Vein

Mid SSE

PARK'S SHAFT, Leadhills, Lan.

See also MOFFAT Sh, KATYSTAKLIN VEIN, HORNERS
JEFFERY'S VEIN.

Next to Moffat Shaft, ^{near} intersection of Horners
Jeffery's and Katystaklin Veins

RWB, GR Loc 49. Poor. Some galena,
quartz, baryte, sphalerite xls; calcite
scalenoh; pyromorphite stains.

Dumps around Parks & Moffat Sh.

Mid ENE
PEARSON'S HEAD, Leadhills, Lan.

See also STRAIGHT BRAE VEIN

Mid NW
PORTOBELLO VEIN, Leadhills, Lan.

See SUSANNA V. also.

N-S, short, from HUMBY VEIN, cutting SUSANNA

RSWB, GR. Locs 7, 8 See Susanna V

PORTOTO VEIN, Leadhills, Lan.

See HORNER'S JEFFERY'S VEIN.

Mid N

POUTSHELL LEVEL, Leadhills, Lan.

See also GRIPPS LEVEL

RAIK VEIN, Leadhills, Lan. ^{Near E}
[= HIGH WORK VEIN] See BROAD LAW V

N-S. long. Crossed by Broad Law V, Meadowhead V.
Wilson's, and Labour-in-Vain Veins abut.

A long vein; at S end branches, W brach
= Lammington's Vein; another minor W branch
= Wester Vein. S end abuts against Brown's V.

Shafts, etc. Mine Hill Shaft. - mimeite SRMRGB 17 (1921)

SRMRGB 17 (1921). Blende & galena on dumps

AKT, TRS Edin. 63, 85 (1956). Plattnerite;
plumbogummite, ~~with pyromorphite~~

Rothwell & Mason (1992) UKJMM II 30-40. Wulfenite,
orange to or-yell. bipyr. on yell. pyromorphite
[Ident XRD (RSM); Rust, Meikle] Not easy to see.
[NS 889 157]. [N.B. yellow pyrom - cf
the mimetite?]

N. Hubbard, RSN(105)46, 29-30 BROAD LAW LOW L. dump
at NS 886 157, worked RAIK's v. Cellular
hemimorph w nice micro xls in cavs. ass w
pyrom & rarely small orange bipyr. Wulfenite
↓
Loc 10?

Mid N

REID'S SHAFT, Leadhills, Lan.

See also REID'S VEIN, WILSON'S VEIN. BROAD LAW

On Reids Vein, at or near intersection
with Wilson's Vein

RSWB, GR Locs 11, 12 See BROAD LAW V.

Mid N

REIDS VEIN, Leadhills, Lan.

See also WILSON'S VEIN.

N-S. In plantation. Cuts Wilson's Vein
Shafts etc: Reids Shaft, Atkinson's Sh.

RSWB, GR (8/55) Loc 11. Overgrown See BROAD LAW V

ROAD VEIN, Leadhills, Lan.

See HADDINGTON'S VEIN.

ROANBURN VEIN, Leadhills, Lan. Mid SE

N-S, Longish. MEADOWHEAD v. abuts. S end abuts
against KATYSTAKLIN V near PARKS & HOFFAT Sh

Shafts, etc. A shaft almost due E of Leadhills Rly.
labelled "Old Lead Mine" on OS 6" map.
reputed to be v. rich by Mr Stewart of Leadhills
(Priv Comm, 1955)

SRMR&B, 17 (1921). Assoc. with felsite dyke along part
of its course.

RSWB, GR. Loc 49 PARK'S SH (qv)

PT

A. Livingstone, Priv. Comm 9/89 Queitite
"in the dumps of Roanburn, L'hees,
found at the turn of the year"

SiO₂ 14.1; PbO 66.7 - ZnO 11.4; SO₂ 5.8%

to visit a small shaft dump on Roan Burn Vein between Wanlockhead and Leadhills. This dump had previously produced a very extensive suite of minerals including some extremely rare ones, but visual identifications in the field included only the following :-

Linarite

Galena

Cerussite

Caledonite

Pyromorphite

Leadhillite

Several bags full of promising material (heavily oxidised galena - pyromorphite pebbles) were taken home for detailed examination.

At around 1.00 p.m. the weather turned foul and the party retreated to the cars for lunch - hail and snow made things quite unpleasant

BMSN(1988) 23.6

ROAN'S DRIFT, Leadhills, Lan.

Far NE

See also GOLD SCAURS VEIN etc.

On gold Scaur's Vein

Mid SW

SARROWCOLE VEIN, Leadhills, Lan.

NNW-SSE, short. Is S extension (W branch) of
LAVEROCK HALL VEIN. Send abuts against a
barren clay string.

RSWB, GR (8/55) loc 30, at intersect. with GEORGES
ROUST VEIN & LAVEROCK HALL V. See
Georges Roust Vein. V rich in pyromorphite
on quartz

SCAR BURN ? Leadhills, Lan

Hedde, Vol I (1901). Gold with brown iron ochre, a
5 $\frac{2}{3}$ dwt/ton.

Mid NW
SCAR VEIN, Leadhills, Lan.

By Leady Manner's Scar, NOT = 'SCAR VEIN on Leadhills Dod. Equ.

WNW- ESE. A N branch of E end of SUSANNA
VEIN. Crosses HUMBY VEIN. PORTOBELLO VEIN
abuts against it.

Shafts etc: Harrison's Shaft.

Far SSW

SCAR VEIN, Leadhills, Lan.

On Leadhills Dod; NOT = SCAR VEIN, by Lady Manner's Scar.

NNW-SSE, from BROW VEIN, crosses KATRINE VEIN.

R. Brown (1926). Mottamite, Scar V, Leadhills Dod

GR, RSWB, (1955) Brochantite ("Loc 24"), checked by X-ray (BM), with malachite, fibrous, & chrysocolla Brown shale dumps, with quartz; some galena & pyromorphite & chalcopysite, small but xline linarite. Small xls limonite pseudo. after pyrite in a rather decomp felsite.

SHORTCLEUGH BURN, ^ELeadhills or Wanlockhead

R Brown (1919). Lump of quartz with gold found
by G V Wilson, 1918, in Shortcleugh Burn, at head
of Elvanwater.

Far ESE

SHORTCLEUGH VEIN, Leadhills, Lan.

NW-SE

OS 6" map shows an Old Lead Mine on the vein.

SRMRGB 17: "Old mine" referred to above is dated 1788

Adit opens into Shortcleugh water (w bank)

"No good"

SHORTCLEUCH WATER, ^E Leadhills, Lan.

Porteous (1876) gold is red.

AR, MM 211 (1944) waterworn mass of gold in quartz (500 grains) (figured in colour) found June, 1940, by John Blackwood, at depth of 3 ft, a few yds from E bank of Sh. Water, ca midway between ruined Lowther Cottage & junction of Windgate Burn.

^{Mid E}
SILVERSIDE SHAFT, Leadhills, Lan.

See also HADDINGTON'S VEIN

On Haddington's Vein

Far SSW

STAY-THE-VOYAGE VEIN, Leadhills, Lan.

NNW-SSE. Longish, crosses EAST STAYVOYAGE
VEIN. KATRINE VEIN about near S end.

RSWB, GR (8/56) Loc 26 may be on this vein.

~~Nothing of interest found except~~ Green xls
of pyromorphite on what seems to be waterworn
brick!! Haematite, cerussite, malachite

Mid ENE

STRAIGHT BRAE VEIN, Leadhills, Lan.

Shafts etc. Brown's, Williamson's Sh, Pearsons Head.

N-S

SRMRGB 17: Dumps near Risping Cleuch have barytes,
galena, pyromorphite. Open August 1766

Far NW

SUSANNA VEIN, Leadhills, Lan. (I)

WNW-ESE. Crosses PORTOBELLO V; SCAR V is a branch;
LAVEROCK HALL and MUMBY VEINS abut.
Outcrop opencasts form "Lady Manner's Scar".

SRMRGB, 17 (1921) V. rich in oxidised minerals.
Cerussite (worked as massive "grey lead ore").
Vanadinite (v. rare, only Belton Grain Vein
and Susanna). Lanarkite (rarest, Susanna only).

R. Brown (1919) Most disappointing recently - one spec.

leadhillite + pyromorphite, one pyromorphite +
mimetite. Heddle says lanarkite only in
Susanna, but (I have found it.) elsewhere also.

R. Brown (1926). Leadhillite, erinite [cornwallite]
dull emerald or grass green coatings, with
linarite, caledonite, & cerussite. Susannite.
Aurichalcite

AKT, TRS Edinb. 63 85 (1956). Minium, plattnerite
Blende

RSWB, GR (8/55). Loc. 7, Lady Manner's Scar - material
presumably from Susanna & Glennerly Scar vein
| Cont'd II

SUSANNA VEIN, Leadhills, Lan. (II)

Bottom part of scar has much pyromorphite
on quartz, white barite, good xls cerussite.

Loc 9. Upper part of large dumps below scar.
Not very good. Masses of white barite,
almost transparent. Some blende.

See also HUMBY VEIN. Locs 8, 9, 38 - nothing reported
1980 Edinb. club has reopened a lower adit. Much work
Avril Woodburn & Nigel Hoppe (5/81). Someone has
dug into mine fairly high up. From their
tailings - nice but micro orange pyro-mimet

RJG (1981) . ~150 m below adit by 1790's
with widths of up to 4.3m solid galena.
GRIPPS level driven for drainage between
1770 & 1794 for 1.5 km. Napoleonic
War ensured intense working (&
specimen recovery), but area activity
declined during 1830's. Susanna M.
reopened 1869 but closed not long
after.

Illustr:- Cerussite (Hedde, 1901); Anglesite, blades
honey yellow 7.5cm RSMus; Hedde Coll 721.16, also diag
ex Hedde (1901) Lanarkite white to pinkish-green blades
~2.5cm. RSMus Coll, diag. ex Hedde (1901). Diagen ex
Hedde of caldonite, linarite. Linarite xls RSMus Hedde Coll 741.

SUSANNA VEIN, Leadhills Lan. (III)

BMS News (1996) 45 2 Matheddeite, lanarkite

RJG (1981) [Cont'd.]

Cerussite formerly abundant in upper levels. Anglesite, formerly plentiful. Lanarkite & Heddeite, 1901 says "rarest min. in district, only Susanna..." but R Brown (1919) found also elsewhere). Orange (?chromian) pyromorphite (Heddeite says "only from Susanna...")

W. Paar. New species on old specs.

[See LEADHILLS card]: Scotlandite, with lanachenite, with linarite & caled.

WP, RSWB, TTC, PK. MM (1984) 48, 283-288

RNS(105)46 30. A nice l'hiel w a little scotl. coll @ NS 882 158

Steve Rust, Min. Realm (1983) 3 [2/3] 11-12. Dug in

"one of the smaller untouched dumps" of "Susanna mine area". Dump v. old - had to dig 2 ft down to dump material. In $\sim 1 \text{ m}^3$ got

7 specs cont'd wulfenite, orange $\rightarrow$ yellow tabular $\rightarrow$ bipyram w. yellow pyromorphite $\rightarrow$ 4mm, cerussite, anglesite (1 spec)

leadhillite (3 spec's, xls $\rightarrow$ 4mm on spec's w "v. little remaining galena) on v. corroded galena, w. quartz.

Rothwell & Mason (1992) UKJMM II 30-40 Wulfenite orange bipyrr coll. M. Rothwell in 1984 [ident. vis.] on pyromorphite & cerussite, from NS 879 138.

SUSANNA VEIN, Leadhills, Lan. (TV)

M. Cooper et al (2009) MM 73, 235-250
Steverustite, 23 samples from dumps.

THIEF SLACK HASS VEIN, L'hills, Lan

See HADDINGTON'S V.

Near N

WEMBLEY SHAFT, Leadhills, Lan.

See also GLASGOW VEIN

Sunk 1920; on glasgow vein

Baryte, witherite

R. Brown (1926). Witherite, "recently"

Temple (1956). Blende

RJG (1981) = BORLASE SH. Sunk 1925-8 on
MILL vein. Xcut at 137 m from surface
cut GLASGOW, CARSE'S, MEADOWH'D & LABOUR-

IN-VAIN V's.

RSWB, GR

~~See~~ Loc 36. See GLASGOW V.

WESTER VEIN, Leadhills, Mid S
lan.

NNE-SSW, short, between RAIK and LAMMINGTON'S V'

Far SW

WEST STAYVOYAGE VEIN, Leadhills, Lan.

NNW-SSE, LEE'S VEIN, Wanlockhead, branches off. S end abuts against MARCH VEIN, Wanlockhead - S extension of EAST STAYVOYAGE VEIN.

WILLIAMSON'S SHAFT, ^{Mid NE} Leadhills, Lan.

See also STRAIGHT BRAE VEN

On Straight Brae Vein

WILLIAMSON'S VEIN, Leadhills Lan.

See BROAD LAW VEIN

Mid S

WILSON'S SHAFT, Lead hills, Lan.

See also. BROWN'S V, LAMMINGTON'S VEIN, DOBBIE'S V

Near Lammington's Vein and near the intersection
of Brown's and Dobbie's Veins

V. Near; NE

WILSON'S VEIN, Leadhills, Can.
See also REIDS VEIN, RAIK VEIN.

NNE-SSW, cuts Reids Vein. NOT = Wilson's Vein, Wankarem
Shaft etc. Reids Shaft. After a gap, a
Southern section, NNW-SSE runs from a
position parallel & near to GLASGOW VEIN, to
join with RAIK VEIN just E of Leadhills villa

RSWB, GR (8/55) N section: Loc 12: Rather overgrown,
some pyromorphite, barite, quartz, calcite. Trace
galena. Quite a lot of blende in calcite.

Far SE

WINDGATE BURN, Leadhills, Lan.

SRMR6B, 17 (1921) shows old level on 3" quartz vein, in black shale, at site of "old Lead Mine" of 6" OS map.

R. Brown (1919) Gold placers. good gold got in 1918

A. Watson (1939) (Lead 1932). Gold close to confluence of Wingate and Shortcleuch.

AR, MM 271 (1944) John Weir, in 1936 worked terrace on

W side of Windgate Burn @ junction with Dun Gra
12-15 in Au-bearing silt on slaty rock, overlain
by 5 ft gravel with some boulders. With the
gold, limonite nodules 1 in or more across, also pellets
of cerussite & pyromorphite.

Far N

WOOL GILL VEIN, Leadhills, Lan.

See also BROAD LAW VEIN, HIGHLAND LEVEL

NNE-SSW. N continuation of BROAD LAW VEIN.

SRMRGB 17: Large dumps with "calamine", galena,
blende. Cut by Highland Level

Temple (1956) Blende

RSWB, GR (8/55). Loc. 15: Large dump of black shale
with flesh-coloured felsite. galena, blende
calcite, quartz, pyromorphite, white botryoids
?hemimorphite.

FarnNE

WOOL LAW HEAD VEIN, Leadhills, Lan.

See also HIGHLAND LEVEL

NE-SW vein at head of Big Wool gill. Cut by
Highland Level, qv.

CRAWFORDJOHN, Lanarks, Scotland.

See also LEAD HILLS; WANLOCKHEAD, Dumf.

L; Far W

BELTON GRAIN VEIN, Crawfordjohn, Lan.

See under Wanlockhead, Dumf.

N end ("drusy and cavernous") is in Crawfordjohn parish. outcrop marked by line of springs.

^{L; Far W}
BROW VEIN, Crawfordjohn, Lan.

See under Leadhills, Lan.

NW end of Brow Vein, Leadhills, Lan, extends quite a long way into Crawfordjohn paris

DUNEATON WATER, Crawfordjohn, Lan.
See also its tributaries GLENDORCH & GLENKIP BURNS

Gold.

GLENDORCH BURN, Crawfordjohn, Lan.

Porteous (1876) Gold is white as silver

L; Far NE

GLENKIP BURN, Crawfordjohn, Lanarks.

Ponteous, (1876) gold is white as silver

L; Far W

GORDON'S VEIN, Crawfordjohn, Lan.

NNW-SSE, NW ~~extension~~ of BROW VEIN.

SRMRBB, 17 (1921). Much blende on dumps

Temple (1956) Blende

SUSANNA V., Crawfordjohn, Lan.

See under LEADHILLS.

W end of this vein is in
Crawfordjohn parish

WANLOCKHEAD, Dumfriesshire, Scotland.

See also LEADHILLS, Lan.; CRAWFORDJOHN, Lan

WANLOCKHEAD, Dumf.

See also specific locs, also LEADHILLS, Lan.

SRMRGB 17 (1921). Veins opened up 1680. Among minerals: jamesonite [doesn't say whether Leadhills or Wanlockhead] (→ Applies to all these minerals!).
azurite, plumbonacrite, hydrozincite, limonite,
aurichalcite, minium, smithsonite,
malachite, chrysocolla, pyromorphite,
mimetite, anglesite, goslarite (on timber
of upper dry old levels), leadhillite
(except Belton Grain Vem [!]), swannite,
caldonite, linarite, quartz, calcite,
aragonite, dolomite, gypsum (Wanlockhead).

R Brown (1919) Small piece of native copper on an old
heap with caledonite & vanadinite (probably
from B.G.V. or Margaret's V.). See under
LEADHILLS for part of general minerals list

AKT, TRS Edinb. 63 85 (1956) See LEADHILLS cards
for non-specific mineral list.

RJG (1981) Descrip, hist., illustr., mineralogy.
Long mineral list - see LEADHILLS cards.

MP Cooper Priv Comm 6/88 Veszelyite, v.g., $x_b \rightarrow \frac{1}{4}''$!
found on a dump at Wanlockhead - unfort
most of the big ones altered partly
 $\rightarrow$ chrysocolla [from STRAITSTEP V.]

W; Mid NW 8W

BAY SHAFT, Warlockhead, Dump.

On BAY VEIN

J.S. Thomson, MM 7 143 (1886) Pb in calcites - fibrous
dog-teeth, & scalenohedra, from trace (d 2.544-2.6
to 0.91% $PbCO_3$ (d 2.708-2.710).

RWB, GR (1956) Loc 47. ^{Micro xls} ~~yellow~~ hemimorphite
(Cds ^{some} coated?) with sphalerite. The
yellow powdery ^{coating} 1 may be greenockite.

W; mid NW of W

BAY VEIN, Wanlockhead, Dumf.

NW-SE, from OLD GLENCRIEFF VEIN to
STRAITSTEP VEIN. WEIR'S VEIN branches
off to S.

Shaft, etc. BAY SHAFT, 19v.

Mid E → N of W 91

BELTON GRAIN VEIN, Wanlockhead, Dumf.(I)

NNW-SSE. Crosses NEW VEIN. S end abuts
against LEE'S VEIN.

Shafts, etc. HIGH PIRN MINE, at intersection
with NEW VEIN.

SRMRGB, 17 (1921). N end drusy and cavernous.
(in Crawfordjohn parish).
Hydrocerussite, scaly coatings, with cerussite
and plumbocalcite. Botry. haematite (best
loc)

vanadinite (v. rare, only B&V & Susanna).

R. Brown (1919). Vanadinite, in B&V at head of Whytes Cleuch, and on New V., or a stringer that intersects B&V at head of Camshough (v. rich in vanad. eg, in 1918, 20 spec of picked up in a short time, mostly v. on hemi, on same vein plattnerite on van. + hemi, also vanad + "Ca-V-pyro" (collieite) on qtz.

R. Brown (1926). Mottramite, B&V at head of Whytes Cleuch. Erinite [cornwallite], dull emerald to grass green coatings, with linarite, caledonite, & xenussite.

BELTON GRAIN VEIN, Warlockhead, Dumf. (II)

J.S. Thomson, MM 7 143 (1886) Pb in calcites, from
0.86% (d = 2.699) to 3.51% (d = 2.758-2.766) PbCO_3

RSWB, GR (8/55). Loc 19: Near road. good botry haematite,
good quartz & calcite; plumbocalcite rhombs;
baryte, pyrite, chalcopysite; chrysocolla;
hemimorphite blueish crust; dolomite;

Loc 20. In saddle of Dod at head of Cam ~~Schuch~~ Schuch:
Quartz matrix, vuggy, & part red-stained. A lot
of encrusting green & yellow pyromorphite; good
x's cerussite & ? anglesite in small vughs

Loc 21 & 22, At head of Whytes Cleuch: large dumps

of shale, with some matrix like "Loc 20", but no good spec's found. chrysocolla, linarite (1 spec. each). cerussite, quartz, galena. Orange pyrom.

RJG (1981) Very rich; worked to ~115 m below adit

Illustr: Ceruss xls $\rightarrow$ 1 cm. R.S. Mus Coll 1951.8.35
Vanadinite, light brown sharp hex xls $\rightarrow$ 3 mm
R.S. Mus Coll 552.9.

Anglesite formerly plentiful

A. Livingstone (1994) An apatite high in lead... Min Mag 58, 159-163

A. Livingstone (1994) "Analyses of calcian phosphatic
vanadinite and apatite high in lead, from
Wentlockhead, Scotland". J. Russ. Soc. 5, 2, 124-6

Near N of W
COVE VEIN, Wanlockhead, Dumf.

NNW-SSE, long. Crosses NEW COVE VEIN. WILSON
and ~~the~~ LOCHNELL VEIN abut.

RSWB, GR (8/55) Loc 34 - see under WILSON'S V.

Near E $\rightarrow$ N of W

CRAWFURD'S VEIN, Wanlockhead, Dumf.

NNW-SSW, long. Old levels on 6" OS map where
crosses stream.

SRMRGB, 17, (1921) No good.

R. Brown (1919). Lanarkite, with leadhillite at the
old dressing-floors on the Crawford vein, on
top of the Dod.

Far SSW 9W
GLENCLACH BURN, Wanlockhead, Dumf.

Porteous (1876) Gold is like small pin-head.

GLENCRIEFF SHAFT, Wanlockhead, Dumf.

See also NEW GLENCRIEFF VEIN

See NEW GLENCRIEFF SHAFT.

On WEST BRANCH of New Glencrieff Vein

RJG (1981) Reopened 1920's to work New
Glencr. V e its W. branch, to over
425 m below surface.

GLENGABER MILL, Wanlockhead

See MEADOWFOOT MILL.

GLENGLASS ADIT, Wanlockhead, Dumfries

RJG (1981). The W branch of New
Glencreeff vein [qv] discovered in 1740
during driving of glenglass drainage
adit.

Near ENE of W

GOLDSKAUR VEIN, Wanlockhead, Dumf.

NNW-SSE, S extension of NEW VEIN, S of
intersection with BELTON GRAIN VEIN.

SRMRGB, 17 (1921). No good.

Near to mid NNW $\nearrow$ W

HIGHLANDMAN'S VEIN, Wanlockhead, Dumf

N-S, fairly short.

SRMRGB, 17 (1921) No ore.

HIGH PIRN MINE, Wanlockhead, Dumf. (I)

On BELTON GRAN and NEW VEINS, near intersection

R. Brown, (1919). Vanadinite.

AKT, TRS Edinb. 63 85 (1956). Cotunnite, rare,
 with pyromorphite, mimetite, and
plumbogummite. Plumbogummite rare.
~~sometimes with~~ plattnerite. Beudantite
 rare - High Pirn mine only, as red-brown inclusions
 on quartz

RSWB & GR (1955). "Loc 20" Quartz with
much encrusting green & yellow pyromorphite.
good xls cerussite & poss. anglesite (?)
ceruss. common

B. Craik-Smith (1999) Russ Soc N'letter 35, 4. "New
mineral for Wanlockhead, Scotland"
Coll Wg vanadinite in 1982 as v dark red plates
to 1cm x 0.5-1mm (!) on green-white "cupreous
smithsonite" [?] on galena xls, w. ceruss, angles,
white pyrom. On surface of vanad is white film
and honey-yellow globs $\rightarrow$ 0.1mm: XRD = cassedaniite
[$\text{Pb}_5(\text{VO}_4)_2(\text{CrO}_4)_2 \cdot \text{H}_2\text{O}$] or intermed to embreyite [Prep.
XRD, BM(NH)] [cf LADY ANNE sh, L'hills]

HIGH PIRN M., Wanlockh'd, Dumpf (II)

N. Hubbard RSN('05) 46 29. Dumps @ NS 873 139:-
Pyrom, ceruss common; a few pieces of
motttramite & hydrocerussite.

Mid E 9 W
LEE'S VEIN, Warlockhead, Dumf.

N-S, branching from WEST STAYVOYAGE VEIN
near county boundary. BELTON GRAIN
VEIN abuts near S end.

SRMRGB 17 (1921). No galena; much haematite

Mid of W

LOCHNELL VEIN, Wanlockhead, Dumf.

N-S, from COVE VEIN, close to intersection with WILSON'S VEIN (of which it may be a S extension). S end abuts against MARGARET'S VEIN (STRAITSTEP VEIN)

R. Brown (1926). Vein cut in 160 fm level. "good lead"

Blende

RSWB, GR Loc 43 Intersec. w. Straitstep V. Nothing ^{reported}

MARGARET'S VEIN, Wanlockhead, Dumf.

See STRAITSTEP VEIN

Mid NE-E of W

MARSH VEIN, Wanlockhead, Dumf

N-S. S extension of EAST STAYVOYAGE VEIN.
Joined by WEST STAYVOYAGE VEIN.

SRMRGB. "No lead."

11 68

NS 85 14

"MEADOWFOOT MILL", Wanlockhead, Dumf.
≡ GLENGABER MILL & really (I)

Info. from Avril Woodburn & Nigel Hoppe, 12/82

Large area of slags. An amateur from a lapid. club found a superb elyite $Pb_4CuSO_4(OH)_8$, as violet-purple blades in the slags - 2nd? world loc. "checked by BM". Avril brought a few ^{small} pieces of slag to look at - many components!! What looks like: cerussite, anglesite, phosgenite?, hydrocerussite (or l'huillite - thin pearly hex plates); ? laurion or para;  v pale blue; linarite; langite
 * ? ceruss

serpierite; brick red v. sharp tetrahedra,
silvery met. dodec; violet brilliant metallic
coppery bits, etc etc.....

Pam Pearce, "Elyite" Min. Realm (1982) 2 [3], 24-25
Slags "at Wanlockhead" with malachite, langite,
lanark; linarite, anglesite, cerussite, caledonite,
serpierite (Ident. Mr Couper, BM). One spec
w.v. small tufts of violet Xs, ident optically
(not enough for X-ray without destroying spec
— now in BM) as elyite, prev. known only
from Nevada & also v. sparingly, in cavs in
slag at Langenthal, Harz, W. Germany.

~~serp~~
~~asp~~ "LEADHILLS IV"]

MEADOWFOOT MILL, Wanlockhead, Dumf. (II)

RSWB & TIW 21/7/83 Slag heaps not
far from the stream dug into.

Much slag collected, broken up,
examined under microscope:

Cerussite^{IR}; linarite; brochantite; langite;
serpierite?; anglesite (IR); paralaurionite;
leadhillite; much excellent wroewolffite;
laurentthalite, emer. green rectang. caledon

Small bright green spherules = malachite (IR).

Elyite found!

Colourless

radiating & brushes, quite common (!)
= lanarkite (IR). "Turichalate-serp"

like mineral = a basic hydrated sulphate
unident.

Assoc w elyite on "like 9", small blueish-green xls = CHENITE !! (IR)

Small & v pale blue-green blades
→ in HCl do not fizz, go white more slowly than
caledonite ∴ prob = chenite.

D. Green (1987) "Rock Bottom" 2, 3-9 "The minerals
of Meadowfoot smelter".

History, process, slag mineral formation.

Aragonite (XRD) white botry crust; anglesite (XRD)
abundant, block or prismatic; brochantite (XRD)
Caledonite sparing, long prismatic, light blue,

MEADOWFOOT MILL, Wanlockhead, Dumf(III)

with terminations appearing more intensely blue than the prism faces; cerussite; chenite (XRD) v. rare small sky-blue xls; tabular $\rightarrow$ 0.5 mm w. elyite & lanark, or elong prismatic assoc w. linear lanark, angles. One spec in ~~Dr~~ Bell coll has xls $\rightarrow$ > 1 mm!

Copper; cuprite; elyite some on furnace bricks capped w. slag; galena; gypsum (XRD); lanarkite (XRD); langite (XRD), f. rare, deep blue ψ -hex ~ equant xls; lautenthalite (XRD) [XRD related to that of devilline], parallel aggregates of platy xls, transp., curved, either deep green $\rightarrow$ 1 mm w. anglesite or blue-green plates

at st L's

orientated, on altered wroewolfeite or
langite cores.

Leadhillite (XRD) f. rare,

transp. hex. plates, occas blocky; linarite
(XRD). abundant in good xls;

limonite; lotharge (XRD) red patches of v. micro
translucent red plates w. "a good 3 directional
cleavage".

Malachite (XRD) - green $\rightarrow$ yellow-green
botry spheres; monohydrocalcite (ident.
chem.) v. rare, clear glassy triangular xls



or



; olivine (XRD) ill defined

crust - ~~part~~ formed in smelting;

paralauroionite (XRD) thin laths with
lanarkite , to several mm length;

MEADOWFOOT MILL, Wanlockhead, Dumf. (IV)

Pb present.

plattnerite (chem) dark brown needles w. met. lustre;

posnjakite (vis. ident by comparison w. xls. in Lapis 9 [3] 16) triang xls 

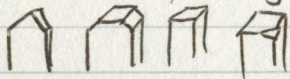
the rarest of the langite grp mins. here.

schmiedelerite "reported as tiny blue-mauve lath-like xls" w. calcd, serp, linar, angles.

Serpierite (XRD) & devilline. common, pearly

lustre, blue $\rightarrow$ turquoise $\rightarrow$ green, diff. to disting from each other by vis. or XRTs. Wroewolffite

(XRD) the commonest langite grp mineral here, prismatic, lighter colour than the langite.



Unknowns M1-4. "M4" is a brill. yellow transp. X, prismatic? monoclinic. one xl only.

S.C. Johnson, spec $\rightarrow$ RSI0B (99-141) Priv Comm 9/99

Found Sb-rich slag in one small area
with brownish micro-octahedra ?romelite
(EDAX+SEM: Major Sb, Ca) with greenish micro-
pentag-dodecahedra (SEM; EDAX: Major Pb, Sb, S;
also "white/clear" xls, EDAX: major Si, Cl; semi-
major Na, Ar, S, K, Ca... (??)

Fair S of W
MENNOCK WATER, Wanlockhead, Dumf.

Ponteous (1876) Gold is rough

Near N of W

NEW COVE VEIN, Wanlockhead, Dumf.

Ca N-S. Not very long. Crosses COVE VEIN

RSWB, GR 8/55 loc 34 See under WILSON'S V.

Mid W of W

NEW GLENCRIEFF SHAFT, Wanlockhead, Dumf.

On WEST BRANCH, NEW GLENCRIEFF VEIN.

Mrd W of W

NEW GLENCRIEFF VEIN, Wanlockhead, Dumfries

NNW-SSW. Long. Forks at N end into
EAST and WEST branches.

Shaft, etc. NEW GLENCRIEFF SHAFT, on
WEST BRANCH.

SRMRGB 17 (1921). Large cubooctahedra galena,
Hemimorphite xls were very plentiful. Wetherill
-cavity opened in 1918 at 200 fms in W. Branch;
botr. masses up to 8" by alt. of baryle.

In S end of vein, oxidised zone down to 200 fm
Hemimorphite between 80-100 fm levels on corroded
blende. Calcite, aragonite, chalcopysite, baryte,

R. Brown (1919) Lanarkite, in v. fine xls. Fine pseudo-
morphs eg yellow pyromorphite after calcite; calcite
which are hemim. inside & pyro outside; arag after
calcite; pyrite after baryte. Best for spec's
was 80-120 fms: Hemimorphite, aragonite,
cerussite, hydrocerussite, pseudomorphous
pyromorphite; good hemi, yellow with ? Cds,
but no xime Cds ever found;

120-160 fm: good rich amber baryte, one spec
aurichalcite on hydrocerussite, another
[cont'd III]

NEW GLENCRIEFF VEIN, WANLOCKHEAD, Dumf. (II)

STOPED AREA



GALENA



GALENA &
BLENDE



GALENA, BLENDE &
HEMIMORPHITE

+ POCKET CONTAINING WITHERITE

Scale of Feet

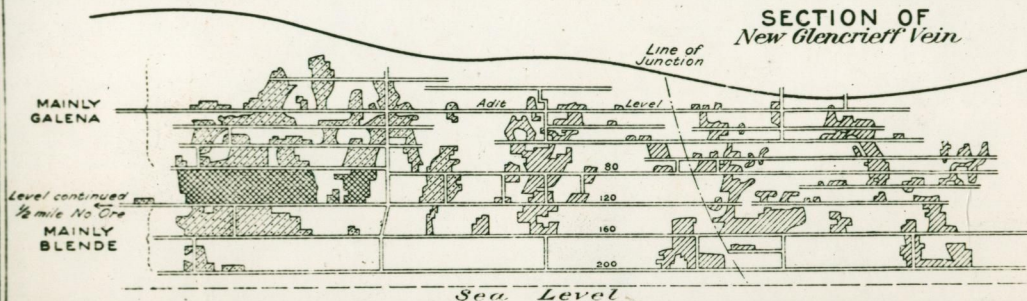
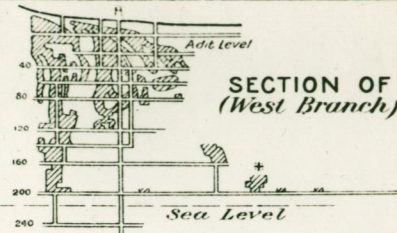
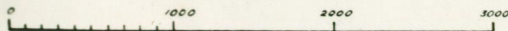


FIG. 3.—Sections of the workings in the New Glencrieff Vein and its west branch (Wanlockhead).

NEW GLENCRIEFF VEIN, Wanlockhead, Dumf (III)

with auri. + ceruss. after galena. Hydrocerussite
(40 fm) like silver paper over galena; at
120 fm in thin silvery xls. Above 160 fm
good quartz - best loose at bottom of a vugh,
some 2" diam. 160 fm level, a spec. of massive
yellowish-white magnesite. Lanarkite; leadhillite;
Jamesonite; chrysocolla; chalcophyllite; smithsonite; dolomite; niccolite; mtn leat

R. Brown (1926). Niccolite & cobaltite from W. Branch
(north), No 4. level, recently Wulfenite again
(2nd time) recently, in 80 fm level of W. Branch

A K Temple, MM 30 541 (1954). Rammelsbergite,

with niccolite, from No 4 level of West Branch, also from dumps & from 3 spec's in Scottish Mus Coll.

AKT, T.R.S. Edinb. 63, 85 (1956). Niccolite, sammelsbergite, cobaltite, aragonite, witherite (W. Branch), gypsum, erythrite, annabergite. Blend

GR, Priv Comm. Anal of pink calcite coll 1955 gives CaCO_3 , 97.1; MgCO_3 1.1; FeCO_3 0.9; ~~also~~ MnCO_3 , 0.5% Fe^{3+} , trace only. Total 99.6.

Hedde, Vol I (1901). "Niccolite at West Grove mine [ie vein], with arsenic [an arsenide?] (Wilson)"

NEW GLENCRIEFF VEIN, Wanlockhead, Dumf. (IV)

AR, (1912) Hemimorphite with blende, & yellow
powdery greenockite [cf BAY sh.]

RSWB, GR (8/55) Working. Excellent pinkish dog-
tooth calcite [anal by GR. v. supra], spotted
with pyrolusite. Fresh white dolomite
with quartz & calcite, galena, blende, &
chalcopryite in masses, & good xls. Haematite
Locs 18, 46, 45 ("old ox dumps") [Pale rose calcite.]

RSWB, JRK, TMS, 4/66; I, 27-8 Loc 45: Calcite, gal, sphaler,
Chalcopy; vg linarite, caledonite, erythrite, chrysocolla,
quartz, pyromorphite, hemimorph (white to bluish); aurichalcit,
vanadinite, brochant, malach; leadhillite, angles; cerussite

hydrozincite.

RSWB 7/71, 6/72 etc. Mottramite (IR, BMxRT) dark brown resinous coatings and micro xls on quartz and on green to white massive $\rightarrow$ botry pyromorphite, associated with vanadinite & ~~one~~ one specimen with leadhillite. On "old oxidised dumps" ("Loc. 45") nearest to road & stream — may be derived from old workings in Whyte's Clough rather than from the Glencierff workings?

RJG (1981) Discovered betw 1710 & 1721. Reopened betw. 1842 & 1850 after ~ 70 years abandoned & "richest ore shoot in Scot." disc. at S end. A strong cavernous vein. At S end,

NEW GLENCRIEFF VEIN, Wanlockhead, Dumf. (V)

top levels rich in galena, main ore shoot
cont'd 365 m. Much hemimorphite in
80 fm. lev., gave way to sphalerite at
120 fm. lev. From 120 fm lev. galena
faded downward until at 200 fm. lev
almost entirely sphalerite. Gangues:-
calcite, ankerite, quartz, baryte, small quartz
witherite. Sec'y's:- pyromorphite,
cerussite, hemimorphite. Deep ox.
zone to 365 m depth at S end
(SRMRGB 17 1921). Acc to R. Brown (1919) richest
for specimens betw 80-120 fm levels,

where many fine specks of hemimorphite,
aragonite, cerussite & pyromorphite
obtained. One vugh $1.8 \times 1.8 \times 0.6$ m
lined w. arag. & ceruss., mostly destr.
by blasting. 1st Scot. withenite found
at 200 fm lev. in W Branch in 1919
w. calcite baryte & galena in a vugh
 $7.3 \text{ m} \times 4.6 \times 0.9 \text{ m}$, in 2 glob masses
17.8 cm & 12.7 cm in diam, & after baryte
"hanging like fungi". (Brown, 1919).

Abandoned 1934. Retried 1954-1958
worked STRAITSTEP v. just before 1934
Illustr:- stal hemimorph. R.S.Mus.Coll 1951. 8.21; Baryte
white, w. yellow termin's, on sphal. $13 \times 19 \text{ cm}$. R.S.Mus.Coll
1927. 2.7.

NEW GLENCRIEFF V., Wanlockhead, Dumf. (VI)

K. Nicholson & D. Banks. MM 51 (1987) 175-6

In greywacke adjacent to several small quartz grains at NS 867 128 in Glencrieff Burn, disseminations of marcasite, pyrite, chalcopryite, sphalerite, galena, with pyrrhotite grains to 250 μ m with exsol. lam. of pentlandite
[This loc must be adjacent to New Gl. Mine]

Glencreif dumps, Wanlockhead, Dumfries & Galloway. RSN(1996) 28

The following minerals were collected:

pyromorphite, cerussite, malachite, quartz,
chrysocolla, hemimorphite, chalcopryite, galena
and caledonite.

BMSK(988) 23 7

Sunday 1 May - New Glencrieff Mine, Wanlockhead

Everyone gathered at the Mining museum in Wanlockhead to await arrival of our guides - Bob Reekie and Brian Jackson of the R.M. First stop was the dumps of the New Glencrieff Mine - yielding good selection of typical material, in steady rain :-

→ Bright orange

<u>Pyromorphite</u>	<u>Cerussite</u>	<u>Leadhillite</u>	<u>Chalcopyrite</u>
<u>Descloizite</u> [?]	<u>Sphalerite</u>	<u>Dolomite</u>	<u>Chrysocolla</u>
<u>Hemimorphite</u>	<u>Smithsonite</u>	<u>Galena</u>	

T. Neall & D.I. Green (2005) J Russ Soc 8 [2] 110-111

On fenced-off collecting-allowed site off at foot of Whytes Cleugh. @ NS 866 134, Kegelite (1st. Brit) patches to 5mm embedd in Leadhillite & int. mass. w. ceruss. Rosettes of rad greenish-yellow fibres. On sample also hemim. descloiz.

Far NNE of W

NEW VEIN, Wanlockhead, Dumfr.

N-S. Crosses BELTON GRAIN VEIN, S of intersect
becomes GOLDSKAUR VEIN.

Shafts etc. HIGH PIRN MINE, at intersection
of NEW and BELTON GRAIN VEINS.

SRMRGB, 17 (1921). Vanadinite

R. Brown (1919) Vanadinite (see under Belton Grain V)

R. Brown (1926). Dechenite, ^{↗ = Desclorizite} seldom, only New Vein,
Wanlockhead Dod, with Vanadinite and

smithsonite, or with vanadinite, moltramite
and pyromorphite. Botryoidal, dark or reddish
yellow. Vauquelinite, monoclinic xls or
botry - blackish or dark olive green [?=moltramite]

RSUB, GR. Loc 21 New Vein e/or Belton Grain
Vein, higher dumps nr head of Whytes
cleugh. Cerussite, quartz, chrysocolla,
galena.

OLD GLENCRIEFF SHAFT, Wanlockhead, Dum

On OLD GLENCRIEFF VEIN, [q.v].

Far NW to mid W to far S of W

OLD GLENCRIEFF VEIN, Wanlockhead, Dum

NNW-SSE, long. BAY vein branches off.

Shafts etc. OLD GLENCRIEFF SHAFT.

SRMRGB 17 (1921) Large dumps, stained red.

Far N N W to v near W to far S of W
STRAITSTEP VEIN, Wanlockhead, Dumf(I)
[= MARGARET'S VEIN]

NNW-SSE. Long. joined by BAY and LOCHNEL
VEINS

SRMRGB, 17(1921). Blende on dumps

R. Brown (1919). Lanarkite on old heaps from
Margaret's Vein near Old Toll. Vanadinite.
Rich in blende which has altered to
"calamine" [smithsonite]. Caledonite, linarite,

leadhillite, anglesite, cerussite, pyromorphite,
vanadinite, hemimorphite, etc.

Dr Martin had a $1\frac{1}{2}$ oz gold nugget, found
long ago in Straitsteps flat & now at
Edinburgh. [See also Heddlie Vol I (1901) 10z 6dwt
6 grains (figured)]

RTG (1981) Worked from New Glencrieff
mine shortly before aband in 1934

RSWB, GR Locs 43, 41, 42. 44 (Sphalerite) (35)

RSWB. 5/84 Loc 42 barren. Loc 41 by Old Toll: Much
sphalerite, some $\rightarrow$ hemimorphite. galena, pyrite, haem. qtz, Ca.

STRAITSTEP VEIN, Wanlockhead, Dumf (II)

UKJMM ("Rock Bottom") (1988) 5, 10-11 "Mineral News". A

field trip on 2/5/88 led to discov. of
Veszelyite on Straitstep Vein tips as a
consequence of looking for lanarkite.
Found by Neil Hubbard. Ident XRD.
Epimorphs & pseudomorphs of chrysocolla
after vesz. f. common.

"^{ie} Loc 43"

UKJMM (1990) 8, 6-7 D. Green. The
Veszelyite on dump at NS 872 129. Most
⇒ 1 mm, a few to 5 mm. also ψ morphs &

(TIT)
Wanl.
7
BMSN (1988), 23, 7
A small group (Messrs. Spence, Rust, Hubbard and Green) moved a small, mostly grassed over, tip in the centre of Wanlockhead Straitstep Vein). The dump was listed by Temple (ms notes) yielding lanarkite, but their search failed to yield any specimen of the mineral. However, several nice specimens of bright botryoidal hemimorphite were collected, together with a number of pieces showing most interesting dark blue to light green pyramidal crystals. The finest of these showing half a dozen blue crystals to 4 mm on matrix (Neil Hubbard). The species subsequently been shown (by X-ray diffraction) to be veszelyite species new to the British Isles.

During the course of discussions in the evening, again spent in comfortable surroundings of the Nithsdale Hotel, it was agreed the Straitstep Vein material was potentially of such mineralogical interest that permission would be sought the following day to a more extensive dig.

Permission was granted for us to dig into the Straitstep dump, and the party therefore moved on to this locality. Within a short time, several pieces of hemimorphite encrusted matrix bearing the blue - green crystals were recovered. Jean Spence was particularly successful, and John Dickinson and Mike Rothwell hit a pocket which yielded what was undoubtedly the finest specimen - a single greenish bi-pyramid around 5/16" from base to apex sitting on a pale botryoidal hemimorphite. On this, and several other specimens, the veszelyite is mostly altered to chrysocolla. The party gradually dispersed around lunchtime to begin the long journey home.

23/8

EM 30 (1908)

^{Through W}
WANLOCK WATER, Wanlockhead, Dumf.

Ponteous (1876) gold is like small scales
on Wanlock.

WAYGATE SH; Wanlockhead, Dumf.

See STRAITSTEP VEIN

^{Near W}
WEIR'S VEIN, Wanlockhead, Dumf.

NNW-SSE from BAY VEIN, medium length

NS 86 13 Mid NW → Far N of W

WHITE'S CLEUGH, Wanlockhead, Dumf.

See also OLD GLENCRIEFF VEIN & ^{shaft} SHAFT, BAY VEIN & shaft,
STRAIT STEP V., HIGHLANDMAN'S V., COVE V., NEW
COVE V., WILSON'S V., CRAWFURD'S V., BELTON GRAIN V.,
NEW V.

AKT, TRS Edinb. 63 85 (1956). "Whites Cleugh", other
wise unspecified: Chrysocolla; apatite, rare
lead hydroxyapatite (new as mineral), rare
(with polysphaerite, pseudo. after galena
→ [? Mattheddleite?] ← [Ca-pyromorphite-Hey])

KNicholson, D. Banks, MM (1987) 51, 175-6 Magnetite
in red-brown blocks on dumps near NS 870 13
near Whites Cleugh, with abundant vugs lined

with quartz xls. [870 138 must be high up
or on saddle due N of the stream is the
head of the cleugh!]

RSWB etc. Scattered dumps not all
assoc. with specific veins. A good
collecting area. See specific locs.

23, 7
BMSN (1988)

The group gradually worked its way up into Whytes Cleugh, where onset of bright sunshine aided collecting no end. Specimens of following were collected :

Caledonite ✓

Leadhillite ✓

Pyromorphite ✓

Quartz ✓

Cerussite ✓

Linarite ✓

Chrysocolla ✓

Hematite ✓

Hemimorphite ✓

Calcite ✓

Descloizite [?]

and we headed for the more protected valley of Whytes Cleugh.

The dumps here can be quite rewarding, but wet and cold, our enthusiasm waned. Species which could be confirmed included the following :

Linarite ✓

Cerussite ✓

Pyromorphite ✓

Hematite ✓

Chrysocolla ✓

? Possible vanadinite ✓

(Roy Starkey)

23, 6
BMSN (1988)

Everyone joined up at the Nithsdale Hotel in Sanquhar for an evening meal and to discuss the day's activities.

Far to mid N q w

WILSON'S VEIN, Wanlockhead, Dumf.
[NOT = WILSON'S VEIN, Leadhills, q.v.]

N-S, short. Abut against COVE VEIN.

RSWB, GR (8/55) Loc 34. Old shaft near intersection
of WILSONS, COVE, & NEW COVE VEINS. quartz
matrix, with baryte & haematite. Good
pyromorphite, some cerussite & chrysocolla.
"Mantlepiece spec's" of yellow qtz. Calcedonite

RSWB Dump at head of Whytes cleugh on
Wilson's vein has chrysocolla

