

Route to: Initials Date  
Head, Geochronology Section  
Age Determination Committee  
Chief, R & EG Division

Suite sent to Randy Parrish  
Sept 20/84  
Age det. prog.   
or  
'Spot age'

Project No.: 740098 Project Officer: Dr K.M. Dawson Date: 18/09/84

AGE DETERMINATION METHOD:

Isotope system: Rb-Sr -  K-Ar -  U-Th-Pb -  Other:   
Type: Isochron -  Single determination -  Concordia  Test -   
Material: Whole rock  Mineral(s) -

SAMPLE INFORMATION:

Collected by: K.M. Dawson Field Note Reference: DY 2931

Sample No.: DY 2931 Specimen No.: DY 2931 Thin Section No.: DY 2931  
Nos. of related samples submitted for age det. -   
OR  
Sample Nos. submitted for isochron test -  DY 2926, DY 2927, DY 2928

For single samples:

Specimen -  Grab -  Chip -  Mineral -  Other:   
Fresh -  Altered -  Weathered -  Any weathered surfaces?   
If in rock, content of mineral(s) to be dated: \_\_\_\_\_, %; \_\_\_\_\_, % Approximate sample weight: \_\_\_\_\_

LOCATION AND REFERENCE:

UTM: Zone-  E-  N-   
Province: BC NTS: 1040/16 Longitude: 130°20' W; Latitude: 59°55' N  
Topographic location: Headwaters Tootsee R. 'Tour Ridge' 1 km east of Midway camp.  
If applicable, map-unit No.: 5, & reference: 18-1968 Jennings R.

GEOLOGICAL INFORMATION: Geological setting (rock association, structure, etc.):

McDame Gp limestone cut by greenstone dyke 25m wide.  
Alteration zone 2-3m wide developed in McDame hostrock.

Macroscopic description (rock name, type, grain size, texture, etc.):

Pale brown carbonate, calcite ± siderite, dolomite (?)

Microscopic description (mineral composition, etc., with special reference to the mineral(s) to be dated):

Thin section in preparation.

AGE PROBLEM:

Determine age of carbonate alteration assemblage with RbSr isochron and compare to zircon date on greenstone dyke, other carbonate RbSr data from exihody (DY 2931 greenstone dyke, 2926-2927-2928 carbon to RbSr).

Comments by Geochronology Section:

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or
'Spot age'

Project No.: 740098 Project Officer: Dr. M. Dawson Date: 18/09/84

AGE DETERMINATION METHOD:

Isotope system: Rb-Sr, K-Ar, U-Th-Pb, Other
Type: Isochron, Single determination, Concordia, Test
Material: Whole rock, Mineral(s)

SAMPLE INFORMATION:

Collected by: KM Dawson Field Note Reference: DY 2930
Sample No.: DY 2930 Specimen No.: DY 2930 Thin Section No.: DY 2930
Nos. of related samples submitted for age det.
OR
Sample Nos. submitted for isochron test

For single samples:

Specimen - Grab, Chip, Mineral, Other
Fresh, Altered, Weathered, Any weathered surfaces?
If in rock, content of mineral(s) to be dated: Approximate sample weight:

LOCATION AND REFERENCE:

UTM: Zone, E, N
Province: BC NTS: 1060/16 or Longitude: 132°20' W; Latitude: 59°55' N
Topographic location: Headwaters Toetssee R. 'Tour Ridge' E of Midway PbZn Ag deposit campsite.
If applicable, map-unit No.: 5, & reference: 18-1968 Jennings R.

GEOLOGICAL INFORMATION: Geological setting (rock association, structure, etc.):

McDane Group limestone cut by granitoid dyke 25m wide.
Dyke is probably related to several cut in drilling nearby ore zones.

Macroscopic description (rock name, type, grain size, texture, etc.):

Dense granitoid - probably diabase or diorite.

Microscopic description (mineral composition, etc., with special reference to the mineral(s) to be dated):

Thin section in preparation

AGE PROBLEM: Determine age of dyke with zircon-lead; compare to

KAr (or PbSr) ages of dykes DY 2925, DY 2929; also compare to RbSr isochron age determined on carbonate alteration envelope, (DY 2931). Establish age of dyke relative to mineralization.

Comments by Geochronology Section:

DY 2930

Route to: \_\_\_\_\_ Initials: \_\_\_\_\_ Date: \_\_\_\_\_  
 Head, Geochronology Section \_\_\_\_\_ Age det. prog.   
 Age Determination Committee \_\_\_\_\_ or  
 Chief, R&EG Division \_\_\_\_\_ 'Spot age'

Project No.: 740098 Project Officer: Dr L M Dawson Date: 18/09/84

AGE DETERMINATION METHOD:

Isotope system: Rb-Sr -  K-Ar -  U-Th-Pb -  Other: \_\_\_\_\_  
 Type: Isochron -  Single determination -  Concordia  Test -   
 Material: Whole rock  Mineral(s) -

SAMPLE INFORMATION:

Collected by: LM Dawson Field Note Reference: \_\_\_\_\_

{ Sample No.: DY2928 Specimen No.: DY2928 Thin Section No.: DY2928  
 Nos. of related samples submitted for age det. -   
 OR  
 { Sample Nos. submitted for isochron test -  DY 2926, DY 2927, DY 2931

For single samples:

Specimen -  Grab -  Chip -  Mineral -  Other: \_\_\_\_\_  
 Fresh -  Altered -  Weathered -  Any weathered surfaces? \_\_\_\_\_  
 If in rock, content of mineral(s) to be dated: \_\_\_\_\_, %; \_\_\_\_\_, % Approximate sample weight: \_\_\_\_\_

LOCATION AND REFERENCE:

UTM: Zone-  E-  N-   
 Province: BC NTS: 1040/16 or Longitude: 130°20'W W; Latitude: 59°55'N N  
 Topographic location: Headwaters Tootsee R: Midway PbZnAg deposit.

If applicable, map-unit No.: U5, & reference: 18-1968 Jennings R.

GEOLOGICAL INFORMATION: Geological setting (rock association, structure, etc.):

McDame Gp limestone: host rock for epigenetic galena-sphalerite-pyrite-quartz-calcite veins at Silvertip Hill zone.

Macroscopic description (rock name, type, grain size, texture, etc.):

Bull calcite alteration envelope about 2m wide enclosing No. 2 zone oxidized Fe-Zn-Pb veins & lenses, total width ~4m.

Microscopic description (mineral composition, etc., with special reference to the mineral(s) to be dated):

Thin section in preparation.

AGE PROBLEM: Determine age of alteration assemblage associated with Silvertip Hill PbZnAg veins with RbSr isochron

Comments by Geochronology Section:

DY2928

Route to: \_\_\_\_\_ Initials \_\_\_\_\_ Date \_\_\_\_\_  
Head, Geochronology Section \_\_\_\_\_  
Age Determination Committee \_\_\_\_\_  
Chief, R & EG Division \_\_\_\_\_

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Project No.: 740098 Project Officer: Dr. K.M. Dawson Date: 18/09/84

AGE DETERMINATION METHOD:

Isotope system: Rb - Sr -  K - Ar -  U-Th-Pb -  Other: \_\_\_\_\_  
Type: Isochron -  Single determination -  Concordia  Test -   
Material: Whole rock  Mineral(s) - : \_\_\_\_\_

SAMPLE INFORMATION:

Collected by: K.M. Dawson Field Note Reference: DDH 83-41: 893.4-893.6 m

{ Sample No.: DY2927 Specimen No.: DY2927 Thin Section No.: DY2927  
Nos. of related samples submitted for age det. -   
OR  
{ Sample Nos. submitted for isochron test -  DY2926, DY2928, DY2931

For single samples:

Specimen -  Grab -  Chip -  Mineral -  Other: Drill core  
Fresh -  Altered -  Weathered -  Any weathered surfaces? \_\_\_\_\_  
If in rock, content of mineral(s) to be dated: \_\_\_\_\_, %; \_\_\_\_\_, % Approximate sample weight: \_\_\_\_\_

LOCATION AND REFERENCE:

Province: BC NTS: 1040/16 or UTM: Zone-  E-  N-   
Longitude: 130° 20' W; Latitude: 59° 55' N  
Topographic location: Headwaters Tootsee R: Midway PbZnAg deposit

If applicable, map-unit No.: 5, & reference: 18-1968: Jennings R

GEOLOGICAL INFORMATION: Geological setting (rock association, structure, etc.):

McDame Gp limestone host for galena-sphalerite-pyrite-pyrrothite mineralization in quartz-calcite gangue. SE end of zonal trend of increasing pyrro + cpy, decrease sphal + galena. 1 km SE of centre of Discovering Zone

Macroscopic description (rock name, type, grain size, texture, etc.):

White coarse grained Calcite-quartz alteration, above crystalline pyrite at 894m, then pyrrothite + chalcopyrite in qtz-calcite gangue, then carbonate alteration again + carbonate breccia.

Microscopic description (mineral composition, etc., with special reference to the mineral(s) to be dated):

Thin section in preparation

AGE PROBLEM: Determine age of carbonate alteration assemblage associated with Midway mineralization.

Comments by Geochronology Section:

DY 2927

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Project No.: 740098 Project Officer: Dr. K.M. Dawson Date: 18/09/84

AGE DETERMINATION METHOD:

Isotope system: Rb-Sr -  K-Ar -  U-Th-Pb -  Other: \_\_\_\_\_  
Type: Isochron -  Single determination -  Concordia  Test -   
Material: Whole rock  Mineral(s) - : \_\_\_\_\_

SAMPLE INFORMATION:

Collected by: K.M. Dawson Field Note Reference: NDH 84-57: 113.0-113.3m

Sample No.: DY 2926 Specimen No.: DY 2926 Thin Section No.: DY 2926  
Nos. of related samples submitted for age det. -   
OR  
Sample Nos. submitted for isochron test -  DY 2927, DY 2928, DY 2931

For single samples:

Specimen -  Grab -  Chip -  Mineral -  Other: Drill core  
Fresh -  Altered -  Weathered -  Any weathered surfaces? \_\_\_\_\_  
If in rock, content of mineral(s) to be dated: \_\_\_\_\_, %; \_\_\_\_\_, % Approximate sample weight: \_\_\_\_\_

LOCATION AND REFERENCE:

UTM: Zone-  E-  N-   
Province: BC NTS: 104 0/16 or Longitude: 130°20' W; Latitude: 59°55' N  
Topographic location: Headwaters Tootsee R. Midway PbZnAg deposit  
Silver Creek Zone  
If applicable, map-unit No.: 5, & reference: 18-1968 Jennings R.

GEOLOGICAL INFORMATION: Geological setting (rock association, structure, etc.):

McDame Gp limestone: Silver Ck high grade PbZnAg intersected 103-112m. Fresh pink carbonate (calcite ± dolomite (?)) in stockwork adjacent to lower contact of massive ore.

Macroscopic description (rock name, type, grain size, texture, etc.): Pink coarse grained carbonate-matrix breccia and stockwork.

Microscopic description (mineral composition, etc., with special reference to the mineral(s) to be dated): Thin section in preparation

AGE PROBLEM: Determine age of carbonate alteration paleontology associated with Midway mineralization.

Comments by Geochronology Section:

DY 2926