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MRD 4-Kirkland Lake Incentive Program (KLIP) Data (Data to accompany OFR 5335, 5355, 5356, 5394,5395 and 5456)

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Ontario Geological Survey, 1990. (Data to accompany OFR 5335, 5355, 5356, 5394,5395 and 5456), Kirkland Lake Incentive Program (KLIP) Data; Ontario Geological Survey, Miscellaneous Release - Data 4.

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ONTARIO GEOLOGICAL SURVEY

KIRKLAND LAKE INCENTIVES PROGRAM (KLIP) DATA

INTRODUCTION

This documentation concerns data collected in 1979, 1980, 1981 and 1982 for 171 reverse circulation drill holes as part of the KLIP (Kirkland Lake Incentives Program) project. This document is intended to be a reference guide to the organization of the computer data on this diskette.

Sample Numbering Conventions

ex: 790801

The first two digits indicate the year (1979), the second two digits indicate the hole (08) and the third two indicate the sample number in that hole (01).

Data Conventions

This section lists special conventions used within certain databases.

Minus Sign

a) Geochemical Data: minus value indicates an analysis that was less the detection limit of the technique. The number following the minus sign represents the detection limit.

b) Mineralogy Data: -0.1 indicates the mineral was seen during a scan of the heavy mineral concentrate.

Zero or Blank

When a zero or blank value occurs in a geochemistry file this indicates that there is no analysis for that sample.

This situation occurs for one of the following reasons:

1. The sample was lost
2. The sample was not large enough for all analyses to be performed

DATA FILES

This section concerns the data files produced for the KLIP project. The following description refers to dBase IV format. The ASCII files are identical in organization to the dBase files. For each file a description of the database structure and definitions of the fields are included.

A. GENERAL INFORMATION

A1. Filename: LOCATION.DBF

- location in UTM coordinates and elevation of drill hole collars

Format:

Field	Field Name	Type	Width
1	HOLE	Character	4
2	TOWNSHIP	Character	20
3	EASTING	Numeric	8
4	NORTHING	Numeric	8
5	ELEVATION	Numeric	6

Key:

EASTING UTM easting coordinate
 NORTHING UTM northing coordinate
 ELEVATION elevation of drill hole collar in feet above sea level. Note, elevation information for the 1982 drill holes not included.

A2. Filename: TYPE.DBF

- sample type and intervals in feet

Format:

Field	Name	Type	Width	Dec
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	FROM	Numeric	6	1
4	TO	Numeric	6	1
5	TYPE	Character	15	

Key:

FROM upper limit in feet
 TO lower limit in feet
 TYPE type of material sampled, eg till, sand,

A.3 LITH.DBF

- overburden descriptive logs

NOTE: LITH.DBT is also required to use this database

Format:

Field	Name	Type	Width
1	HOLE	Character	4
2	ORDER	Numeric	10
3	FOOTAGE	Character	17
4	NAME	Character	18
5	DESCRIP	Memo	10

Key:

ORDER numeric order for each unit, starting at top of hole. This variable allows the file to be sorted by HOLE then by ORDER to ensure output is in proper downhole sequence.
 FOOTAGE upper and lower limit of sample interval in feet

NAME name of unit, eg. Clay
DESCRIP description of unit

B. OVERBURDEN GEOCHEMICAL DATA

B.1 Filename: FINE.DBF

- trace element geochemical data for the -0.063 mm fraction

Format:

Field	Name	Type	Width	Decimals
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	CU_PPM	Numeric	6	
4	PB_PPM	Numeric	6	
5	ZN_PPM	Numeric	6	
6	NI_PPM	Numeric	6	
7	MO_PPM	Numeric	6	
8	AS_PPM	Numeric	6	
9	AG_PPM	Numeric	6	1
10	AU_PPB	Numeric	6	
11	U_PPM	Numeric	5	1

B.2 Filename: HMC-C.DBF

- trace element geochemical data for the coarse (-1.600+0.125 mm) heavy mineral fraction

Format:

Field	Name	Type	Width	Decimal
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	CU_PPM	Numeric	6	
4	PB_PPM	Numeric	6	
5	ZN_PPM	Numeric	6	
6	NI_PPM	Numeric	6	
7	MO_PPM	Numeric	6	
8	AS_PPM	Numeric	6	
9	AG_PPM	Numeric	6	1
10	AU_PPB	Numeric	6	
11	U_PPM	Numeric	5	1

B.3 Filename: HMC-F.DBF

- trace element geochemical data for the Fine (-0.125 mm) heavy mineral fraction

Format:

Field	Field Name	Type	Width	Decimal
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	CU_PPM	Numeric	6	
4	PB_PPM	Numeric	6	
5	ZN_PPM	Numeric	6	
6	NI_PPM	Numeric	6	
7	MO_PPM	Numeric	6	
8	AS_PPM	Numeric	6	
9	AG_PPM	Numeric	6	1
10	AU_PPB	Numeric	6	
11	U_PPM	Numeric	5	1

C. OVERBURDEN HEAVY MINERAL DATA

C.1 Filename: WEIGHT.DBF

- heavy mineral fraction weight data

Format:

Field	Name	Type	Width	Dec
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	T_SPLT	Numeric	6	1
4	OVER	Numeric	6	1
5	T_FEED	Numeric	6	1
6	T_CONC	Numeric	6	1
7	MILIGHT	Numeric	6	1
8	NMAG_F	Numeric	6	1
9	MAG_F	Numeric	6	1
10	NMAG_C	Numeric	6	1
11	MAG_C	Numeric	6	1
12	GRNS_VG	Numeric	3	

Key:

T_SPLT	table split (kg)
OVER	+10 mesh material (kg)
T_FEED	table feed (kg)
T_CONC	table concentrate (g)
MILIGHT	methylene iodide lights (g)
NMAG_F	non-magnetic fine (-0.125 mm) fraction (g)
MAG_F	magnetic fine (-0.125 mm) fraction (g)
NMAG_C	non-magnetic coarse (-1.600+0.125 mm) fraction (g)
MAG_C	magnetic coarse (-1.600+0.125 mm) fraction (g)
*GRNS_VG	number of visible gold grains

* not counted in 1979

C.2 Filename: MIN-F.DBF

- mineralogy of the fine heavy mineral (-0.125 mm) fraction

NOTE: not all minerals identified in all years

Format:

Field	Name	Type	Width	Decimal
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	GAR	Numeric	4	
4	HEM	Numeric	4	
5	SULP	Numeric	4	
6	ILM	Numeric	4	
7	EPID	Numeric	4	
8	PX	Numeric	4	
9	ZIR	Numeric	4	
10	*HORN	Numeric	4	
11	*PY	Numeric	4	
12	*Q_F	Numeric	4	
13	*CARB	Numeric	4	
14	*RUT	Numeric	4	
15	*STAU	Numeric	4	
16	*SPH	Numeric	4	

17	*MAG	Numeric	4
18	*OTHER	Numeric	4
19	SUM	Numeric	4

Key:

GAR	garnet		
HEM	hematite		
SULP	sulphides		
ILM	ilmenite		
EPID	epidote		
PX	pyroxene		
ZIR	zircon		
*HORN	hornblende		
*PY	pyrite		
*Q_F	quartz and feldspar		
*CARB	carbonate		
*RUT	rutile		
*STAU	staurolite		
*SPH	sphene		
*MAG	magnetics		
*OTHER	all other known and unknown minerals		
SUM	calculated total		

* identified for 1982 samples only

C.3 Filename: MIN-C.DBF

- mineralogy of the coarse heavy mineral (-1.600+0.125 mm) fraction

NOTE: not all minerals identified in all years

Format:

Field	Name	Type	Width	Decimal
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	GAR	Numeric	4	
4	HEM	Numeric	4	
5	SULP	Numeric	4	
6	ILM	Numeric	4	
7	EPID	Numeric	4	
8	PX	Numeric	4	
9	ZIR	Numeric	4	
10	*HORN	Numeric	4	
11	*PY	Numeric	4	
12	*Q_F	Numeric	4	
13	*CARB	Numeric	4	
14	*RUT	Numeric	4	
15	*STAU	Numeric	4	
16	*SPH	Numeric	4	
17	*MAG	Numeric	4	
18	*OTHER	Numeric	4	
19	SUM	Numeric	4	

Key:

GAR	garnet	
HEM	hematite	
SULP	sulphides	
ILM	ilmenite	

EPID epidote
 PX pyroxene
 ZIR zircon
 *HORN hornblende
 *PY pyrite
 *Q_F quartz and feldspar
 *CARB carbonate
 *RUT rutile
 *STAU staurolite
 *SPH sphene
 *MAG magnetics
 *OTHER all other known and unknown minerals
 SUM calculated total

* identified for 1982 samples only

C.4 Filename: MIDMIN-F.DBF

- mineralogy of the fine mid-density (-0.125 mm) heavy mineral concentrate

NOTE: No data for 1982 samples

Format:

Field	Name	Type	Width	Decimal
1	SAMPLE	Character	8	
2	HOLE	Character	4	
3	AMPH	Numeric	4	
4	CARB	Numeric	4	
5	EPID	Numeric	4	
6	QTZ	Numeric	4	
7	MAG	Numeric	4	
8	GAR	Numeric	4	
9	APAT	Numeric	4	
10	*CHLR	Numeric	4	
11	*BIO	Numeric	4	
12	*SER	Numeric	4	
13	TOUR	Numeric	4	
14	*ZIR	Numeric	4	
15	*RUT	Numeric	4	
16	SUPH	Numeric	4	
17	SPH	Numeric	4	
18	TOP	Numeric	4	

Key:

AMPH amphibole
 CARB carbonate
 EPID epidote
 QTZ quartz
 MAG magnetics
 GAR garnet
 APAT apatite
 *CHLR chlorite
 *BIO biotite
 *SER sericite
 TOUR tourmaline
 *ZIR zircon
 *RUT rutile
 SUPH sulphides

SPH sphene
TOP topaz

* not identified for 1979 samples

C.5 Filename: MIDMIN-C.DBF

- mineralogy of the coarse mid-density (-1.600+0.125 mm) heavy mineral concentrate

NOTE: No for 1982 samples

Format:

Field	Name	Type	Width	Decimal
1	SAMPLE	Character	8	
2	HOLE	Character	4	
3	AMPH	Numeric	4	
4	CARB	Numeric	4	
5	EPID	Numeric	4	
6	QTZ	Numeric	4	
7	MAG	Numeric	4	
8	GAR	Numeric	4	
9	APAT	Numeric	4	
10	*CHLR	Numeric	4	
11	*BIO	Numeric	4	
12	*SER	Numeric	4	
13	TOUR	Numeric	4	
14	*ZIR	Numeric	4	
15	*RUT	Numeric	4	
16	SUPH	Numeric	4	
17	SPH	Numeric	4	
18	TOP	Numeric	4	

Key:

AMPH amphibole
CARB carbonate
EPID epidote
QTZ quartz
MAG magnetics
GAR garnet
APAT apatite
*CHLR chlorite
*BIO biotite
*SER sericte
TOUR tourmaline
*ZIR zircon
*RUT rutile
SUPH sulphides
SPH sphene
TOP topaz

* not identified for 1979 samples

D. BEDROCK DATA

D1. Filename: BEDDESC.DBF

- bedrock descriptions for all years

- note that BEDDESC.DBT is also required to use this database

Format:

Field	Name	Type	Width
1	SAMPLE	Character	6
2	NAME	Character	57
3	DESCRIP	Memo	10

Note: all data are character data in this database

D2. Filename: BEDCHEM.DBF

- bedrock trace element geochemistry

Format:

Field	Name	Type	Width	Dec
1	SAMPLE	Character	6	
2	HOLE	Character	4	
3	CU_PPM	Numeric	6	
4	PB_PPM	Numeric	6	
5	ZN_PPM	Numeric	6	
6	NI_PPM	Numeric	6	
7	MO_PPM	Numeric	6	
8	AS_PPM	Numeric	6	
9	AG_PPM	Numeric	6	1
10	AU_PPB	Numeric	6	
11	U_PPM	Numeric	5	1

All data included in these computer files are contained in the following published Open File Reports:

1. Averill, S.A. and Fortescue, J.A.C. 1983. Deep overburden drilling and geochemical sampling in Hearst, Catherine, McElroy, Gauthier, Arnold, Clifford and Bisley Townships, Districts of Timiskaming and Cochrane; Ontario Geological Survey, Open File Report 5456, 315 p.
2. Averill, S.A. and Thomson, I. 1981. Reverse circulation rotary drilling and deep overburden geochemical sampling in Marter, Catherine, McElroy, Skead, Gauthier and Hearst Townships, District of Timiskaming; Ontario Geological Survey, Open File Report 5335, 276p.
3. Fortescue, J.A.C., Lourim, J., Gleeson, C.F., Jensen, L. and Baker, C.L. 1984. A synthesis and interpretation of basal till geochemical and mineralogical data obtained from the Kirkland Lake (KLIP) area (1979-1982), Part I and Part II, Ontario Geological Survey, Open File Report 5506, 144p., 630p.
4. Lourim, J. 1982a. Mid-density (S.G. 2.81-3.32) mineralogy of glacial overburden as an indicator of gold mineralization in Benoit, Maisonville, Grenfell, Eby, Otto, Boston and McElroy Townships, Districts of Timiskaming and Cochrane; Ontario Geological Survey, Open File Report 5394, 120p.
5. Lourim, J. 1982b. Mid-density (S.G. 2.81-3.32) mineralogy of glacial overburden as an indicator of gold mineralization in Melba and Morrisette Townships and portions of Lebel, Eby, Bisley and Arnold Townships, Districts of Timiskaming and Cochrane; Ontario Geological Survey, Open File Report 5395, 104p.
6. Routledge, R.E., Thomsom, I., Thompson, I.S. and Dixon, J.A. 1981. Deep overburden drilling and geochemical sampling in Melba, Bisley, Maisonville, Morrisette, Arnold, Grenfell, Lebel, Eby, Otto, Boston and McElroy Townships, Districts of Timiskaming and Cochrane; Ontario Geological Survey, Open File Report 5356, 423p.
7. Thomson, I. and Lourim, J. 1981. Mid-density (S.G. 2.81-3.32) mineralogy of glacial overburden as an indicator of gold mineralization in Marter, Catherine, McElroy, Skead, Gauthier and Hearst Townships, District of Timiskaming; Ontario Geological Survey, Open File Report 5355, 112p.