Data Dictionary for 1:100,000-scale Solid and Superficial Geology Map (First Edition) Hong Kong Geological Survey

Explanatory Notes

- This document describes the data dictionary for all the eight (8) geological datasets (see Table 1) pertaining to the 1:100,000-scale Solid and Superficial Geology Map (Map Series HGM100, First Edition), produced by the Hong Kong Geological Survey Section in year 2000.

- The format of each field in the attribute table for each dataset is defined in terms of input width or size, output width, and data category (see explanation in Table 2).

- Attributes of each field are either restricted or unrestricted in format. The lists of the restricted attribute values are presented in Appendix A.

Table 1 Geological Datasets Shown on 1:100,000-scale Geological Map of Hong Kong (in the Order from/ Top to Bottom)

Dataset	Attribute	Title of Field for Symbology	Label on Map	Title of Field for Label
Major Mines	Point	M_Code	Yes	M_CODE
Structural Symbols	Point	Stru_Type	Yes	Dip_Angle
Faults	Line	F_Type	No	(N/A)
Geological Contacts	Line	G_Type	No	(N/A)
Fold Axes	Line	Fold_Type	No	(N/A)
Dykes	Line	D_Type	Yes	D_Type
Subcrop	Line	Sol_Type	Yes	Sol_Type
Geology	Polygon	Geo_Type	Yes	Geo_Type

Table 2 Format of Fields of Attribute Tables of Geological Datasets

Field Format (examples)				Explanation
9	9	N	3	A number (N) with an input and output width of 9 spaces including 3 spaces reserved for decimal places.
25	25	C		A character (C) field with an input and output width of 25 spaces

Data Dictionary

Major Mines

Field Title	Field Format	Description
FID	5 5 N 0	Unique identifying code
M_Code	5 5 C	Code of chemical element or mineral(s) extracted from the major mines (abandoned). Choose from **'List of Minerals'**

Structural Symbols

Field Title	**Field Format**	**Description**
FID	5 5 N 0	Unique identifying code
Stru_Type	20 20 C	Code of the structural symbol. Choose from **'List of Structural Symbols'**
Rotation	12 12 N 6	Strike of structures in degrees, 0 to 360 degrees (in geographic rotation style)
Dip_Angle	20 20 C	Dip angle of structures in degrees, 0 to 90 degrees

Faults

Field Title	**Field Format**	**Description**
FID	5 5 N 0	Unique identifying code
F_Type	10 10 C	Code of the fault line. Choose from **'List of Fault Lines'**

Geological Contacts

Field Title	**Field Format**	**Description**
FID	5 5 N 0	Unique identifying code
G_Type	10 10 C	Code of the geological line. Choose from **'List of Geological Lines'**

Fold Axes

Field Title	**Field Format**	**Description**
FID	5 5 N 0	Unique identifying code
Fold_Type	10 10 C	Code of the major fold axis. Choose from **'List of Fold Axes'**

Dykes

Field Title	**Field Format**	**Description**
FID	5 5 N 0	Unique identifying code
D_Type	10 10 C	Code of the dyke rock. Choose from **'List of Dykes'**

Subcrop

Field Title	Field Format	Description
FID	5 5 N 0	Unique identifying code
Sol_Type	10 10 C	Code of the formation name of subcrop. Choose from **'List of Subcrop'**

Geology

Field Title	Field Format	Description
FID	5 5 N 0	Unique identifying code
Geo_Type	10 10 C	Code of the formation or intrusion name, or the superficial deposit. Choose from **'List of Solid and Superficial Geology'**

Appendix A – Lists of Restricted Attribute Values

List of Minerals

M_Code	Explanation
C	Graphite (carbon)
F	Feldspar
K	Kaolin
Q	Quartz
Fe	Haematite (iron)
Pb	Galena (lead)
W	Wolframite (tungsten)

List of Structural Symbols

Stru_Type	Explanation
Bed_H	Bedding, horizontal
Bed_I	Bedding, inclined
Bed_O	Bedding, overturned
Bed_V	Bedding, vertical
Fabric_H	Volcanic layering (eutaxitic foliation, flow-banding), horizontal
Fabric_I	Volcanic layering (eutaxitic foliation, flow-banding), inclined
Fabric_V	Volcanic layering (eutaxitic foliation, flow-banding), vertical

List of Fault Lines

GSL_Type	Explanation
F	Fault
T	Thrust

List of Geological Lines

GSL_Type	Explanation
Sol	Geological contact (solid geology)
Sup	Geological contact (superficial deposits)

List of Fold Axes

GSL_Type	Explanation
FOLD-A	Anticline, axial trace
FOLD-S	Syncline, axial trace

List of Dykes

D_Type	Explanation
Jkh	Jurassic Hok Tsui Rhyolite, Kwai Chung Suite: quartzphyric rhyolite dykes
Jmm	Jurassic Chek Mun Rhyolite, Lamma Suite: quartzphyric rhyolite dykes
b	Mafic and intermediate dykes, mainly shoshonitic and lamprophyric in

	composition, variably oriented, mostly <2 m wide (dyke symbols on map face denote general orientations in zones of unusually high concentration); age based on isotope dating
q	Quartz dyke
rq	Quartzphyric rhyolite dykes

List of Subcrop

Sol_Type	Explanation
(Csl)	Inferred subcrop area of Carboniferous (and inferred Carboniferous) metasedimentary rocks, including marble
(Csy)	Inferred area (or isolated borehole occurrences) where marble-bearing units either subcrop, or occur, at shallow-depth
(Kk)	Area of Kat O Formation proven by borehole
(Pt)	Permian limestone and marble and other metasedimentary rocks (?Tolo Harbour Formation) occurring as xenoliths or in isolated boreholes
(Td)	Area of Deep Bay Granite proven by boreholes: equigranular fine-grained two-mica leucogranite

List of Solid and Superficial Geology

Geol_Type	Explanation
Csl	Carboniferous Lok Ma Chau Formation, San Tin Group: metamorphosed sandstone and carbonaceous siltstone with graphitic interbeds and conglomerate
Csy	Carboniferous Yuen Long Formation, San Tin Group: white to dark grey or black calcite and dolomite marble (not exposed at surface; equivalent to Ma On Shan Formation in Tolo Harbour area)
Db	Devonian Bluff Head Formation: pale grey fine- to coarse-grained quartz sandstone and reddish brown and purple siltstone, with greyish white quartz-pebble conglomerate
Ep	Eocene Ping Chau Formation: thinly-bedded dolomitic and calcareous siltstone with rare chert interbeds
Jc	Jurassic Tolo Channel Formation: grey laminated siltstone with interbedded Area of Subcrop fossiliferous black mudstone
Jkd	Jurassic East Lantau Rhyodacite, Kwai Chung Suite: feldsparphyric rhyodacite to porphyritic granite dykes
Jkl	Jurassic South Lamma Granite, Kwai Chung Suite: equigranular medium-grained biotite granite
Jkn	Jurassic Needle Hill Granite, Kwai Chung Suite: porphyritic fine-grained granite and equigranular medium-grained granite
Jko	Jurassic East Lantau Rhyolite, Kwai Chung Suite: feldsparphyric rhyolite to porphyritic granite dykes
Jks	Jurassic Sham Chung Rhyolite, Kwai Chung Suite: flow-banded porphyritic rhyolite sill
Jkt	Jurassic Sha Tin Granite, Kwai Chung Suite: equigranular coarse- and fine- to medium-grained biotite granite
Jll	Jurassic Lai Chi Chong Formation, Lantau Volcanic Group: dominantly coarse ash crystal tuff with intercalated mudstone, tuffaceous sandstone, rhyolite lava

	and minor conglomerate
Jlu	Jurassic Lantau Volcanic Group (Undifferentiated): dominantly fine ash vitric tuff and flow-banded rhyolite lava with minor eutaxitic coarse ash crystal tuff
Jma	Jurassic Tai Lam Granite, Lamma Suite: porphyritic medium-grained to equigranular fine-grained leucogranite
Jmc	Jurassic Chek Lap Kok Granite, Lamma Suite: equigranular fine-grained leucogranite
Jml	Jurassic Lantau Granite, Lamma Suite: megacrystic coarse-grained biotite granite
Jms	Jurassic Tsing Shan Granite, Lamma Suite: equigranular to inequigranular two-mica granite
Jmt	Jurassic Tai Po Granodiorite, Lamma Suite: porphyritic medium- and fine-grained granodiorite
Jo	Jurassic Tai O Formation: grey to red fine-grained sandstone and siltstone
Jtl	Jurassic Sai Kau Kong Formation, Tsuen Wan Volcanic Group: flow-banded dacite lava, minor vitric tuff, tuff breccia and intercalated siltstone
Jtm	Jurassic Tai Mo Shan Formation, Tsuen Wan Volcanic Group: lapilli lithic-bearing coarse ash crystal tuff
Jts	Jurassic Shing Mun Formation, Tsuen Wan Volcanic Group: lapilli lithic-bearing coarse ash crystal tuff and tuff breccia with intercalated siltstone
Jty	Jurassic Yim Tin Tsai Formation, Tsuen Wan Volcanic Group: lapilli lithic-bearing coarse ash crystal tuff
Ju	Jurassic Tuen Mun Formation: andesite lava and lapilli lithic-bearing fine ash crystal tuff with intercalated tuff breccia
Kcc	Cretaceous Chi Ma Wan Granite, Cheung Chau Suite: equigranular medium-grained biotite granite
Kcl	Cretaceous Luk Keng Quartz Monzonite, Cheung Chau Suite: megacrystic fine-grained quartz monzonite
Kcs	Cretaceous Shui Chuen O Granite, Cheung Chau Suite: porphyritic fine- to medium-grained granite
Kct	Cretaceous Shan Tei Tong Rhyodacite, Cheung Chau Suite: feldsparphyric rhyodacite to porphyritic granite dykes
Ki	Cretaceous Port Island Formation: reddish-brown thickly bedded conglomerate and sandstone, with thinly bedded reddish siltstone
Kk	Cretaceous Kat O Formation: dominantly calcareous breccia, conglomerate and coarse sandstone
Kkh	Cretaceous High Island Formation, Kau Sai Chau Volcanic Group: dominantly welded fine ash vitric tuff with minor tuff breccia and tuffaceous sandstone
Kku	Cretaceous Kau Sai Chau Volcanic Group (Undifferentiated): dominantly eutaxitic block- and lapilli-bearing vitric tuff with minor flow-banded rhyolite lava
Kkw	Cretaceous Clear Water Bay Formation, Kau Sai Chau Volcanic Group: flow-banded porphyritic rhyolite lava, rhyolite breccia and eutaxitic vitric tuff
Klb	Cretaceous Mount Butler Granite, Lion Rock Suite: equigranular fine- and fine- to medium-grained biotite granite
Kld	Cretaceous D'Aguilar Quartz Monzonite, Lion Rock Suite: porphyritic fine- to medium-grained quartz monzonite
Klf	Cretaceous Tong Fuk Quartz Monzonite, Lion Rock Suite: porphyritic fine-

	grained quartz monzonite
Klk	Cretaceous Kowloon Granite, Lion Rock Suite: equigranular medium-grained biotite granite
Kll	Cretaceous Fan Lau Granite, Lion Rock Suite: porphyritic fine-grained biotite granite
Klp	Cretaceous Po Toi Granite, Lion Rock Suite: megacrystic coarse-grained to equigranular fine-grained biotite granite
Kls	Cretaceous Sok Kwu Wan Granite, Lion Rock Suite: megacrystic medium-grained biotite granite
Klt	Cretaceous Tei Tong Tsui Quartz Monzonite, Lion Rock Suite: porphyritic fine- to medium-grained quartz monzonite
Kp	Cretaceous Pat Sin Leng Formation: reddish-brown thickly bedded conglomerate, greyish red sandstone and reddish purple siltstone
Kra	Cretaceous Ap Lei Chau Formation, Repulse Bay Volcanic Group: eutaxitic fine ash vitric tuff
Krc	Cretaceous Che Kwu Shan Formation, Repulse Bay Volcanic Group: eutaxitic crystal-bearing fine ash vitric tuff with minor tuff breccia
Krd	Cretaceous Mount Davis Formation, Repulse Bay Volcanic Group: dominantly coarse ash crystal tuff with intercalated tuffaceous siltstone and sandstone
Krl	Cretaceous Long Harbour Formation, Repulse Bay Volcanic Group: coarse ash crystal tuff
Krm	Cretaceous Mang Kung Uk Formation, Repulse Bay Volcanic Group: dominantly tuffaceous siltstone with minor crystal-bearing fine ash vitric tuff and tuff breccia
Krn	Cretaceous Ngo Mei Chau Formation, Repulse Bay Volcanic Group: dominantly eutaxitic fine ash vitric tuff, and lapilli tuff with minor intercalated siltstone and mudstone
Krp	Cretaceous Pan Long Wan Formation, Repulse Bay Volcanic Group: trachydacite lava
Pt	Permian Tolo Harbour Formation: pinkish to pale grey calcareous sandstone, siltstone and mudstone with interbedded conglomerate and limestone
Q	Quaternary superficial deposits: undivided, alluvium on valley floors and colluvium on valley sides
R	Reclamation deposits: dominantly composed of marine sand and rock