Data Dictionary for
1:20,000-scale Geological Map Sheets 2-16 (Map Series HGM20S and HGM20, Second Edition)
Hong Kong Geological Survey

Explanatory Notes

- This document describes the data dictionary for all the twenty-one (21) geological datasets (see Table 1) pertaining to 15 sheets of the 1:20,000-scale solid and superficial geological map (Map Series HGM20, Second Edition) and 1:20,000-scale solid geological map (Map Series HGM20S, Second Edition), produced by the Hong Kong Geological Survey Section from 2008.

- 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 1:20,000-scale Second Edition Geological Maps

Order	Dataset	Data Type	Field for Symbology	Label on Map	Field for label
Solid and Superficial Geology (Map Series HGM20)					
1	Mining Areas	Point	TYPE	N	N/A
2	Fossils	Point	DISPLAY	N	N/A
3	Minerals	Point	DISPLAY	Y	ELEMENT
4	Structures	Point	TYPE	Y	INCLINATIO
5	Faults	Line	FAULT_ACC	N	N/A
6	Fold Axes	Line	FOLD_ACC	N	N/A
7	Alluvial Terraces	Line	N/A	N	N/A
8	Buried Channels	Line	LINE_TYPE	N	N/A
9	Fill	Polygon	N/A	Y	FILL_YEAR
10	Seabed Features	Polygon	TYPE	Y	N/A
11	Hang Hau Isopachs	Line	N/A	Y	THICKNESS
12	Offshore Superficial Isopachs	Line	N/A	Y	THICKNESS
13	Superficial Deposits	Polygon	SUP_CODE	Y	SUP_CODE
14	Mineral Veins	Line	VEINSTATUS	Y	VEINTYPE
15	Dykes	Line	SOLIDLINE	Y	SOLIDLINE
16	Solid Contacts	Line	CONTACTS	N	N/A
17	Metamorphism	Polygon	RuleID	N	N/A
18	Metamorphic Foliation	Line	RuleID	N	N/A
19	Textures	Polygon	TEXT_FEAT	N	N/A
20	Solid Geology	Polygon	STRATUNIT	Y	STRATUNIT

Solid Geology Only (Map Series HGMS20S)					
1	Mining Areas	Point	TYPE	N	N/A
2	Fossils	Point	DISPLAY	N	N/A
3	Minerals	Point	DISPLAY	Y	ELEMENT
4	Structures	Point	TYPE	Y	INCLINATIO
5	Faults	Line	FAULT_ACC	N	N/A
6	Fold Axes	Line	FOLD_ACC	N	N/A
9	Mineral Veins	Line	VEINSTATUS	Y	VEINTYPE
10	Dykes	Line	SOLIDLINE	Y	SOLIDLINE
11	Solid Contacts	Line	CONTACTS	N	N/A
12	Metamorphism	Polygon	RuleID	N	N/A
13	Metamorphic Foliation	Line	RuleID	N	N/A
14	Textures	Polygon	TEXT_FEAT	N	N/A
15	Subcrop	Polygon	STRATUNIT	N	STRATUNIT
16	Solid Geology	Polygon	STRATUNIT	Y	STRATUNIT

Data Dictionary

Mining Areas

Layer Name	MINING_AREAS		
Data Type	Geodatabase Feature Class		
Geometry Type	Point		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	NAME	String	Name of abandoned mining area '<Null>' for not applicable
	TYPE	String	Type of abandoned mines e.g. 'adit' or 'shaft'
	ROTATION	Long	Trend of mine adit in degrees, e.g. '320' 0 to 360 degrees (in geographic rotation style) '0' for shaft
Symbology	Value Field	TYPE	
		Reference symbols from HKGS symbol set	
Labels	Label Field	Not labelled	
	Style	N/A	

Fossils

Layer Name	FOSSILS		
Data Type	Geodatabase Feature Class		
Geometry Type	Point		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	ObjectID	Unique identifying code
	HK_ROCK_NO	String	HK Rock Collection number, e.g. 'HK109' '<Null>' for not applicable
	DATE_COL	String	Date of sample collection in dd/mm/yyyy, e.g. '06/04/1983' Blank for unknown
	LOCATION	String	Location of fossil sample, e.g. 'Tai Po Kau'
	FOS_AGE	String	Code of age of fossils, e.g. 'C1' for Early Carboniferous Blank for unknown
	FOS_GROUP	String	Fossil group, e.g. pollen
	FOS_NAME	String	Taxonomic name of fossil, e.g. *Punctatisporites punctatus* Blank for unidentified specimen
	FOSID_P	String	Person who identified the fossil Blank for unknown
	FOSID_ORG	String	Organisation of the person who identified the fossil, e.g. 'BGS' for British Geological Survey Blank for unknown
	FILE_NO	String	Internal file number, e.g. 'GCP 1/10/132 (15)', or publication reporting the fossil Blank for unknown

	DISPLAY	String	Display of fossil location on map? “Y”=Yes; “N”=No
Symbology	Value Field	DISPLAY	
		Reference symbol from HKGS point set	
Labels	Label Field	Not labelled	
	Style	N/A	

Minerals

Layer Name	MINERAL_OCCURRENCE		
Data Type	Geodatabase Feature Class		
Geometry Type	Point		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	ELEMENT	String	Code of mineral occurrence, e.g. ‘Al’
	LOCALITY	String	Location of mineral occurrence, e.g. ‘Ho Chung’
	REFERENCE	String	Mineral report reference, e.g. ‘Peng, 1978’ ‘<Null>’ for not applicable
	DISPLAY	String	Display of mineral occurrence on map? “Y”=Yes; “N”=No
Symbology	Value Field	DISPLAY	
		Reference symbols from HKGS symbol set	
Labels	Label Field	ELEMENT	
	Style	Arial, 6, Black	

Code	**Explanation**
Al	Wollastonite
Ag	Silver
Au	Gold
Be	Beryl
Cu	Chalcopyrite / Copper
Mal	Malachite
F	Fluorite
Fe	Magnetite
Lim	Limonite
Fsp	Feldspar
gr	Graphite
He	Haematite
K	Kaolin
Mo	Molybdenite
Pb	Galena
Py	Pyrite
q	Quartz
W	Wolframite
Zn	Sphalerite

Structures

<table>
<tr><td>Layer Name</td><td colspan="3">STRUCTURES</td></tr>
<tr><td>Data Type</td><td colspan="3">Geodatabase Feature Class</td></tr>
<tr><td>Geometry Type</td><td colspan="3">Point</td></tr>
<tr><td rowspan="5">Attributes</td><td>Attribute Name</td><td>Type</td><td>Description</td></tr>
<tr><td>OBJECTID</td><td>Object ID</td><td>Unique identifying code</td></tr>
<tr><td>TYPE</td><td>String</td><td>Code of the type of structure, e.g. ‘Bed_D’
<table>
<tr><th>Code</th><th>Explanation</th></tr>
<tr><td>Bed_D</td><td>Bedding - Dip in degrees</td></tr>
<tr><td>Bed_H</td><td>Bedding – Horizontal</td></tr>
<tr><td>Bed_O</td><td>Bedding – Overturned</td></tr>
<tr><td>Bed_V</td><td>Bedding - Vertical</td></tr>
<tr><td>Fault_L</td><td>Fault, left-lateral</td></tr>
<tr><td>Fault_R</td><td>Fault, right-lateral</td></tr>
<tr><td>Flow_D</td><td>Flow Banding - Dip in degrees</td></tr>
<tr><td>Flow_H</td><td>Flow Banding - Horizontal</td></tr>
<tr><td>Flow_V</td><td>Flow Banding - Vertical</td></tr>
<tr><td>FoldAxis_A</td><td>Fold Axis (anticline), plunge direction indicated by arrow, plunge in degrees</td></tr>
<tr><td>FoldAxis_S</td><td>Fold Axis (syncline), plunge direction indicated by arrow, plunge in degrees</td></tr>
<tr><td>Foli_D</td><td>Foliation - Dip in degrees</td></tr>
<tr><td>Foli_V</td><td>Foliation - Vertical</td></tr>
<tr><td>IntruCont_D</td><td>Intrusive Contact - Dip in degrees</td></tr>
<tr><td>IntruCont_V</td><td>Intrusive Contact - Vertical</td></tr>
<tr><td>Joint_D</td><td>Joint - Dip in degrees</td></tr>
<tr><td>Joint_H</td><td>Joint - Horizontal</td></tr>
<tr><td>Joint_V</td><td>Joint - Vertical</td></tr>
</table></td></tr>
<tr><td>AZIMUTH</td><td>Long</td><td>Dip direction or trend of structures in degrees, e.g. ‘230’
0 to 360 degrees (in geographic rotation style)</td></tr>
<tr><td>INCLINATIO</td><td>Long</td><td>Dip angle or plunge of structures in degrees, e.g. ‘60’
0 to 90 degrees</td></tr>
<tr><td rowspan="2">Symbology</td><td>Value Field</td><td colspan="2">TYPE</td></tr>
<tr><td></td><td colspan="2">Reference symbols from HKGS symbol set</td></tr>
<tr><td rowspan="2">Labels</td><td>Label Field</td><td colspan="2">INCLINATIO</td></tr>
<tr><td>Style</td><td colspan="2">Microsoft Sans Serif, 4, Black</td></tr>
</table>

Faults

<table>
<tr><td>Layer Name</td><td colspan="3">FAULTS</td></tr>
<tr><td>Data Type</td><td colspan="3">Geodatabase Feature Class</td></tr>
<tr><td>Geometry Type</td><td colspan="3">Line</td></tr>
<tr><td rowspan="2">Attributes</td><td>Attribute Name</td><td>Type</td><td>Description</td></tr>
<tr><td>OBJECTID</td><td>Object ID</td><td>Unique identifying code</td></tr>
</table>

	FAULT_ACC	String	Code of the type of geological structure, and its accuracy if any, e.g. 'F1'

Code	Explanation
CM	Crossmark showing downthrow side (for F1 to F4)
F1	Certain fault
F2	Approximate fault (e.g. onshore without superficial deposit cover)
F3	Concealed fault
F4	Inferred fault
GP	Photogeological lineament
ML	Offshore magnetic lineament
T1	Certain thrust fault
T2	Approximate thrust fault
T3	Concealed thrust fault
T4	Inferred thrust fault

Symbology	Value Field	FAULT_ACC
		Reference symbols from HKGS line set
Labels	Label Field	Not labelled
	Style	N/A

Fold Axes

Layer Name	FOLD_AXES		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	FOLD_ACC	String	Code of the type of major fold axis, e.g. 'FOLD_A'

Code	Explanation
FOLD_A	Major fold axis (Anticline)
FOLD_A_Appr	Approximate fold axis (Anticline)
FOLD_S	Major fold axis (Syncline)
FOLD_S_Appr	Approximate fold axis (Syncline)

Symbology	Value Field	FOLD_ACC
		Reference Symbols from HKGS line set
Labels	Label Field	Not labelled
	Style	N/A

Alluvial Terraces

Layer Name	ALLUVIAL_TERRACES
Data Type	Geodatabase Feature Class
Geometry Type	Line

Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	LOCALITY	String	Location of alluvial terraces, e.g. Lam Tsuen
Symbology	Value Field	N/A	
		Reference symbol from HKGS line set	
Labels	Label Field	Not labelled	
	Style	N/A	

Buried Channels

Layer Name	BURIED_CHANNELS		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	LINE_TYPE	String	Code of the buried channel feature type, e.g. 'CS' **Code** / **Explanation** CL1 — Centre line of buried channel indicating direction of fall of channel floor (type 1) CL2 — Centre line of buried channel (type 2) CS — Side of buried channel
Symbology	Value Field	LINE_TYPE	
		Reference symbol from HKGS line set	
Labels	Label Field	Not labelled.	
	Style	N/A	

Fill

Layer Name	FILL		
Data Type	Geodatabase Feature Class		
Geometry Type	Polygon		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	FILL_YEAR	String	Year of completion, e.g. '1964, Date in yyyy, '0' for unknown
	FILL_TYPE	String	Code of the type of fill body. Code / Explanation Fill_Slope — Large-scale fill slope Sanitary — Sanitary fill Reclam — Land reclamation Site_Form — Site formation fill body unknown — Fill body of unknown origin or without record of fill type
Symbology	Value Field	N/A	
		Reference fill symbol from HKGS fill set	

Labels	Label Field	FILL_YEAR (for FILL_TYPE = 'Reclam')
	Style	Arial, 6, RGB=138, 89, 69

Seabed Features

Layer Name	SEABED_FEAT		
Data Type	Geodatabase Feature Class		
Geometry Type	Polygon		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	TYPE	String	Code of the type of seabed features, e.g. 'ACOUSTIC'

Code	Explanation
ACOUSTIC	Acoustic turbidity (i.e. gas blanking)
BORROW	Borrow areas of offshore sand deposits
DUMPING	Dumping grounds of marine mud

Symbology	Value Field	TYPE
		Reference symbol from HKGS fill set
Labels	Label Field	No label
	Style	N/A

Hang Hau Isopachs

Layer Name	ISOPACH_OF_QHH		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	THICKNESS	Long	Isopach values of the thickness of offshore marine deposits of the Holocene Hang Hau Formation in meters at 5 m interval, e.g. '10'
Symbology	Value Field	N/A	
		Reference symbol from HKGS line set	
Labels	Label Field	THICKNESS	
	Style	Arial, 6, RGB=255, 61, 173	

Offshore Superficial Isopachs

Layer Name	ISOPACH_SUPERFICIAL		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code

	THICKNESS	Long	Isopach values of the Quaternary superficial deposits in meters at 5 m interval, e.g. '10'
Symbology	Value Field	N/A	
		Reference symbol from HKGS line set	
Labels	Label Field	THICKNESS	
	Style	Arial, 6, RGB=255, 143, 74	

Superficial Deposits

Layer Name	SUPERF_DEP		
Data Type	Geodatabase Feature Class		
Geometry Type	Point		
Attributes	Attribute Name	Type	Description
	OBJECT_ID	Object ID	Unique identifying code
	SUP_CODE	String	Code of the type of superficial deposits, e.g. 'Qd' Choose from **List of Superficial Units** in Table A3
Symbology	Value Field	SUP_CODE	
		Reference symbol from HKGS point set	
Labels	Label Field	SUP_CODE	
	Style	Microsoft Sans Serif, 7, Black	

Mineral Veins

Layer Name	MINERAL_VEINS		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	VEINTYPE	String	Code of quartz vein, i.e. 'q', required for labelling
	VEINSTATUS	String	Code of the certainty of quartz veins
Symbology	Value Field	VEINSTATUS	
		Reference symbols from HKGS line set	
Labels	Label Field	VEINTYPE	
	Style	Arial, 6, Black	

Code	**Explanation**
Appr	Approximate quartz vein
Obsv	Observed quartz vein

Dykes

Layer Name	DYKES		
Data Type	Geodatabase Feature Class		
Geometry Type	Line		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code

<table>
<tr><td></td><td>SOLIDLINE</td><td>String</td><td>Code of the type of minor dyke rock, e.g. ‘b’
<table>
<tr><th>Code</th><th>Explanation</th></tr>
<tr><td>Jh_rq</td><td>Hoi Tsui Rhyolite, Jurassic: quartzphyric rhyolite dykes</td></tr>
<tr><td>Jmm_rq</td><td>Chek Mun Rhyolite, Lamma Suite, Jurassic: quartzphyric rhyolite dykes</td></tr>
<tr><td>ap</td><td>Undifferentiated aplite dykes</td></tr>
<tr><td>b</td><td>Undifferentiated mafic to intermediate dykes, dominantly basaltic andesite and andesite</td></tr>
<tr><td>d</td><td>Undifferentiated dacite dykes</td></tr>
<tr><td>gd</td><td>Undifferentiated medium- and fine-grained granodiorite dykes</td></tr>
<tr><td>gf</td><td>Undifferentiated fine-grained granite dykes</td></tr>
<tr><td>gfg</td><td>Undifferentiated greisenised fine-grained granite dykes</td></tr>
<tr><td>p</td><td>Undifferentiated pegmatite dykes</td></tr>
<tr><td>rf</td><td>Undifferentiated feldsparphyric rhyolite dykes</td></tr>
<tr><td>rq</td><td>Undifferentiated quartzphyric rhyolite dykes</td></tr>
</table></td></tr>
<tr><td>Symbology</td><td>Value Field</td><td colspan="2">SOLIDLINE</td></tr>
<tr><td></td><td></td><td colspan="2">Reference symbols from HKGS line set</td></tr>
<tr><td>Labels</td><td>Label Field</td><td colspan="2">SOLIDLINE</td></tr>
<tr><td></td><td>Style</td><td colspan="2">Arial, 6, Black</td></tr>
</table>

Solid Contacts

<table>
<tr><td>Layer Name</td><td colspan="3">SOLID_CONTACTS</td></tr>
<tr><td>Data Type</td><td colspan="3">Geodatabase Feature Class</td></tr>
<tr><td>Geometry Type</td><td colspan="3">Line</td></tr>
<tr><td>Attributes</td><td>Attribute Name</td><td>Type</td><td>Description</td></tr>
<tr><td></td><td>OBJECTID</td><td>Object ID</td><td>Unique identifying code</td></tr>
<tr><td></td><td>CONTACTS</td><td>String</td><td>Code of the geological contact and its certainty, as described below:
<table>
<tr><th>Code</th><th>Explanation</th></tr>
<tr><td>G1</td><td>Certain geological contact</td></tr>
<tr><td>G2</td><td>Approximate geological contact</td></tr>
<tr><td>G3</td><td>Concealed geological contact</td></tr>
<tr><td>G4</td><td>Inferred geological contact</td></tr>
<tr><td>Null</td><td>Geological contact coincidental with fault</td></tr>
</table></td></tr>
<tr><td>Symbology</td><td>Value Field</td><td colspan="2">CONTACTS</td></tr>
<tr><td></td><td></td><td colspan="2">Reference symbols from HKGS line set</td></tr>
<tr><td>Labels</td><td>Label Field</td><td colspan="2">Not labelled</td></tr>
<tr><td></td><td>Style</td><td colspan="2">N/A</td></tr>
</table>

Metamorphism

<table>
<tr><td>Layer Name</td><td colspan="3">METAMORPHISM</td></tr>
<tr><td>Data Type</td><td colspan="3">Geodatabase Feature Class</td></tr>
<tr><td>Geometry Type</td><td colspan="3">Polygon</td></tr>
<tr><td rowspan="4">Attributes</td><td>Attribute Name</td><td>Type</td><td>Description</td></tr>
<tr><td>OBJECTID</td><td>Object ID</td><td>Unique identifying code</td></tr>
<tr><td>META_CODE</td><td>String</td><td>Code of the type of metamorphism, e.g. ‘at’
<table>
<tr><th>Code</th><th>Explanation</th></tr>
<tr><td>at</td><td>Thermally altered tuff</td></tr>
<tr><td>ats</td><td>Altered tuff and sedimentary rock</td></tr>
<tr><td>mh</td><td>Contact metamorphism</td></tr>
<tr><td>ml</td><td>Low-grade metamorphism</td></tr>
<tr><td>mmy</td><td>Mylonite</td></tr>
<tr><td>msc</td><td>Schist / Schistosity</td></tr>
<tr><td>slc</td><td>Silicification</td></tr>
</table></td></tr>
<tr><td>FOLIATION</td><td>Long</td><td>Where applicable, dip direction of foliation in degrees, e.g. ‘230’
0 to 360 degrees (in geographic rotation style)
‘<Null>’ for not applicable</td></tr>
<tr><td>RuleID</td><td>String</td><td>Representation code corresponding to the type of metamorphism, e.g. ‘mmy_140-320’
<table>
<tr><th>Code</th><th>Explanation</th></tr>
<tr><td>at</td><td>Thermally altered tuff</td></tr>
<tr><td>ats</td><td>Altered tuff and sedimentary rock</td></tr>
<tr><td>mh</td><td>Contact metamorphism</td></tr>
<tr><td>ml</td><td>Low-grade metamorphism</td></tr>
<tr><td>mmy_x-y</td><td>Mylonite. Azimuth of foliation in x-y where x and y are degrees from 0 to 360 and have a difference of 180 degrees, e.g. ‘140-320’ if foliation = 230</td></tr>
<tr><td>msc</td><td>Schist / Schistosity</td></tr>
<tr><td>slc</td><td>Silicification</td></tr>
</table></td></tr>
<tr><td rowspan="2">Symbology</td><td>Value Field</td><td colspan="2">RuleID</td></tr>
<tr><td></td><td colspan="2">Reference symbols from HKGS pattern set</td></tr>
<tr><td rowspan="2">Labels</td><td>Label Field</td><td colspan="2">Not labelled</td></tr>
<tr><td>Style</td><td colspan="2">N/A</td></tr>
</table>

Metamorphic Foliation

<table>
<tr><td>Layer Name</td><td colspan="3">METAMORPHIC_FOLIATION</td></tr>
<tr><td>Data Type</td><td colspan="3">Geodatabase Feature Class</td></tr>
<tr><td>Geometry Type</td><td colspan="3">Line</td></tr>
<tr><td rowspan="2">Attributes</td><td>Attribute Name</td><td>Type</td><td>Description</td></tr>
<tr><td>OBJECTID</td><td>Object ID</td><td>Unique identifying code</td></tr>
</table>

	META_CODE	String	Code of the type of metamorphism, e.g. ‘mmy’ **Code** / **Explanation** mmy / Mylonite msc / Schist / Schistosity
	RuleID	String	Representation code corresponding to the type of metamorphism, e.g. ‘mmy_line’ **Code** / **Explanation** mmy_line / Mylonite Msc_line / Schist / Schistosity
Symbology	Value Field	RuleID	
		Reference symbol from HKGS line set	
Labels	Label Field	Not labelled	
	Style	N/A	

Textures

Layer Name	TEXTURES		
Data Type	Geodatabase Feature Class		
Geometry Type	Polygon		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	TEXT_FEAT	String	Code of the igneous rock texture, e.g. ‘Ineq’ **Code** / **Explanation** Aut / Autobrecciated texture Ineq / Inequigranular texture Peg / Pegmatite
Symbology	Value Field	TEXT_FEAT	
		Reference symbols from HKGS set	
Labels	Label Field	Not labelled	
	Style	N/A	

Subcrop

Layer Name	SUBCROP		
Data Type	Geodatabase Feature Class		
Geometry Type	Polygon		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	STRATUNIT	String	Code of the pre-Quaternary stratigraphic unit (formation and member) name, with its associated lithological variety if any, e.g. ‘Csyl’ Choose from **List of Stratigraphic Units** in Table A4
	FORMUNIT	String	Code of the formation (and member) name, e.g. ‘Csym’ Choose from **List of Formations, Members and Intrusive Units** in Table A1

	LITHUNIT	String	Code of the lithology, e.g. ‘gc’ Choose from **List of Lithologies** in Table A2
Symbology	Value Field	STRATUNIT	
		Reference Symbols from HKGS set	
Labels	Label Field	STRATUNIT	
	Style	Microsoft Sans Serif, 7, Black	

Solid Geology

Layer Name	SOLID_GEOLOGY		
Data Type	Geodatabase Feature Class		
Geometry Type	Polygon		
Attributes	Attribute Name	Type	Description
	OBJECTID	Object ID	Unique identifying code
	STRATUNIT	String	Code of the pre-Quaternary stratigraphic unit (formation and member) name, and/or its associated lithological variety if any Choose from **List of Stratigraphic Units** in Table A4
	FORMUNIT	String	Code of the formation (and member) name, e.g. ‘Db’ Choose from **List of Formations, Members and Intrusive Units** in Table A1
	LITHUNIT	String	Code of the lithology, e.g. ‘gc’ Choose from **List of Lithologies** in Table A2
Symbology	Value Field	STRATUNIT	
		Reference Symbols from HKGS set	
Labels	Label Field	STRATUNIT	
	Style	Microsoft Sans Serif, 7, Black	

Appendix A Lists of Restricted Attribute Values

Table A1 List of Formations, Members and Intrusive Units

Code	Explanation
Cslm	Mai Po Member, Lok Ma Chau Formation, San Tin Group, Carboniferous
Cslt	Tai Shek Mo Member, Lok Ma Chau Formation, San Tin Group, Carboniferous
Csm	Ma On Shan Formation, San Tin Group, Carboniferous
Csyl	Long Ping Member, Yuen Long Formation, San Tin Group, Carboniferous
Csym	Ma Tin Member, Yuen Long Formation, San Tin Group, Carboniferous
Db	Bluff Head Formation, Devonian
Ep	Ping Chau Formation, Eocene
Jc	Tolo Channel Formation, Jurassic
Jkd	East Lantau Rhyodacite, Kwai Chung Suite, Jurassic
Jke	Shan Tei Tong Rhyodacite, Kwai Chung Suite, Jurassic
Jkl	South Lamma Granite, Kwai Chung Suite, Jurassic
Jkn	Needle Hill Granite, Kwai Chung Suite, Jurassic
Jko	East Lantau Rhyolite, Kwai Chung Suite, Jurassic
Jkp	Po Toi Granite, Kwai Chung Suite, Jurassic
Jks	Sham Chung Rhyolite, Kwai Chung Suite, Jurassic
Jkt	Sha Tin Granite, Kwai Chung Suite, Jurassic
Jll	Lai Chi Chong Formation, Jurassic
Jlu	Lantau Volcanic Group, undifferentiated, Jurassic
Jlpk	Pak Kok Member, Lantau Volcanic Group, Jurassic
Jlcs	Cheung Shan Member, Lantau Volcanic Group, Jurassic
Jlsp	Sunset Peak Member, Lantau Volcanic Group, Jurassic
Jma	Tai Lam Granite, Lamma Suite, Jurassic
Jml	Lantau Granite, Lamma Suite, Jurassic
Jms	Tsing Shan Granite, Lamma Suite, Jurassic
Jmt	Tai Po Granodiorite, Lamma Suite, Jurassic
Jo	Tai O Formation, Jurassic
Jp	Tai Po Granodiorite, Jurassic
Jtl	Sai Lau Kong Formation, Tsuen Wan Volcanic Group, Jurassic
Jtm	Tai Mo Shan Formation, Tsuen Wan Volcanic Group, Jurassic
Jts	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic
Jtsc	Cheung Shan Member, Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic
Jtsl	Shek Lung Kung Member, Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic
Jtsn	Ngau Liu Member, Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic
Jty	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic
Jua	Tuen Mun Andesite Member, Tuen Mun Formation, Jurassic
Jus	Siu Hang Tsuen Member, Tuen Mun Formation, Jurassic
Jut	Tin Shui Wai Member, Tuen Mun Formation, Jurassic
Kcs	Shui Chuen O Granite, Cheung Chau Suite, Cretaceous
Kcu	Undifferentiated granodiorite, Cheung Chau Suite, Cretaceous
Ki	Port Island Formation, Cretaceous
Kkh	High Island Formation, Kau Sai Chau Volcanic Group, Cretaceous
Kkw	Clear Water Bay Formation, Kau Sai Chau Volcanic Group, Cretaceous

Code	Explanation
Kkwl	Lan Nai Wan Member, Clear Water Bay Formation, Kau Sai Chau Volcanic Group, Cretaceous
Kkwt	Tai Tun Member, Clear Water Bay Formation, Kau Sai Chau Volcanic Group, Cretaceous
Klb	Mount Butler Granite, Lion Rock Suite, Cretaceous
Kld	D'Aguilar Quartz Monzonite, Lion Rock Suite, Cretaceous
Klk	Kowloon Granite, Lion Rock Suite, Cretaceous
Kll	Fan Lau Granite, Lion Rock Suite, Cretaceous
Kls	Sok Kwu Wan Granite, Lion Rock Suite, Cretaceous
Klt	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous
Ko	Kat O Formation, Cretaceous
Kp	Pat Sin Leng Formation, Cretaceous
Kra	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous
Krc	Che Kwu Shan Formation, Repulse Bay Volcanic Group, Cretaceous
Krd	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous
Krl	Long Harbour Formation, Repulse Bay Volcanic Group, Cretaceous
Krm	Mang Kung Uk Formation, Repulse Bay Volcanic Group, Cretaceous
Krn	Ngo Mei Chau Formation, Repulse Bay Volcanic Group, Cretaceous
Krp	Pan Long Wan Formation, Repulse Bay Volcanic Group, Cretaceous
Pt	Tolo Harbour Formation, Permian
Td	Deep Bay Granite, Triassic

Table A2 List of Lithologies

Code	Explanation
and	Andesite lava and andesitic coarse ash crystal tuff
as	Aegirine-bearing siltstone with dolomitic siltstone
az	Zeolite- and aegirine-bearing siltstone
br	Sedimentary breccia
bt	Block-bearing tuff and tuffite; tuff breccia
cat	Coarse ash crystal tuff
cg	Conglomerate
cs	Chert
d	Dacite; dacite to rhyodacite
dz	Dolomitic and calcareous siltstone
e	Eutaxitic tuff
fat	Fine ash crystal tuff
fvt	Fine ash vitric tuff
gc	Coarse-grained granite
gd	Granodiorite
gf	Fine-grained granite
gfg	Greisenised fine-grained granite
gfm	Fine- to medium-grained granite
gm	Medium-grained granite
gr	Graphite-bearing mudstone / schist
lq	Quartz latite
lt	Lapilli tuff
m	Marble
mono	Monomictic tuffaceous/epiclastic breccia, sandstone and siltstone
mq	Quartz monzonite
mqf	Fine-grained quartz monzonite
mzt	Mudstone and siltstone
poly	Polymictic tuffaceous/epiclastic conglomerate, sandstone and siltstone
qzt	Quartzite
r	Rhyolite
rdf	Feldsparphyric rhyodacite dykes
rf	Feldsparphyric rhyolite dykes
rh	Porphyritic rhyolite sill or lava
rq	Quartzphyric rhyolite dykes
st	Sandstone
tb	Tuff breccia
stm	Metasandstone
tt	Tuffite, including tuffaceous sandstone, siltstone and/or mudstone
ug	Microgranite
zst	Siltstone
zt	Sandstone, siltstone or mudstone
ztm	Metasiltstone

Table A3 List of Superficial Units

Code	Explanation
Qca	Alluvium, Chek Lap Kok Formation : Silt, sand, gravel and boulders
Qcd	Colluvium, Chek Lap Kok Formation : Sand, gravel, cobbles and boulders in silt matrix
Qct	Channel and transgressive deposits, Undifferentiated : Sand, some gravel and silt
Qd	Colluvium, Undifferentiated : Silt, sand and gravel with boulders
Qdt	Mixed colluvium and talus deposits, Undifferentiated : Boulders, cobbles, gravel, sand and silt
Qfa	Alluvium, Fanling Formation : Clay, slit, sand and gravel; well-sorted to semi-sorted
Qhb	Beach deposits, Hang Hau Formation : Sand
Qhbb	Beach deposits, Hang Hau Formation : Boulders
Qhbr	Beach deposits, Hang Hau Formation : Beach rock
Qhbs	Backshore deposits, Hang Hau Formation : Sand with gravel, cobbles and boulders
Qhi	Intertidal deposits, Hang Hau Formation : Silt, sand and clay
Qhm	Marine mud, Hang Hau Formation : Soft to very soft mud; some sand
Qhs	Marine sand, Hang Hau Formation : Sand; some gravel and sand
Qt	Talus (rockfall) deposits, Undifferentiated : Gravel, cobbles and boulders

Table A4 List of Stratigraphic Units and Major Lithologies

Code	Explanation
Csm_m	Ma On Shan Formation, San Tin Group, Carboniferous: Dominantly white to dark grey, finely crystalline marble
Cslm_gr	Mai Po Member, Lok Ma Chau Formation, San Tin Group, Carboniferous: Dominantly graphite schist with phyllite
Cslm_ztm	Mai Po Member, Lok Ma Chau Formation, San Tin Group, Carboniferous: Dominantly phyllite, metasiltstone with metasandstone and graphite schist
Cslt_cg	Tai Shek Mo Member, Lok Ma Chau Formation, San Tin Group, Carboniferous: Dominantly metaconglomerate
Cslt_stm	Tai Shek Mo Member, Lok Ma Chau Formation, San Tin Group, Carboniferous: Dominantly metasandstone with metaconglomerate and phyllite
Csyl	Long Ping Member, Yuen Long Formation, San Tin Group, Carboniferous: Dominantly grey to dark grey, fine- to medium-grained crystalline marble with minor chert
Csym	Ma Tin Member, Yuen Long Formation, San Tin Group, Carboniferous: Dominantly white and pale grey, medium- to coarse-grained crystalline marble
Db_st	Bluff Head Formation, Devonian: Dominantly pale grey, fine- to coarse-grained quartz sandstone
Db_zt	Bluff Head Formation, Devonian: Dominantly reddish brown and purple siltstone
Jc_zt	Tolo Channel Formation, Jurassic: Dominantly grey to black laminated siltstone and black mudstone
Jkd_rf	East Lantau Rhyodacite, Kwai Chung Suite, Jurassic: Feldsparphyric rhyodacite to porphyritic granite dykes
Jke_rdf	Shan Tei Tong Rhyodacite, Kwai Chung Suite, Jurassic: Feldsparphyric rhyodacite dykes
Jke_rf	Shan Tei Tong Rhyodacite, Kwai Chung Suite, Jurassic: Feldsparphyric rhyolite dykes
Jke_rq	Shan Tei Tong Rhyodacite, Kwai Chung Suite, Jurassic: Quartzphyric rhyolite dykes
Jkl_gf	South Lamma Granite, Kwai Chung Suite, Jurassic: Fine-grained biotite granite
Jkl_gfm	South Lamma Granite, Kwai Chung Suite, Jurassic: Fine- to medium-grained biotite granite
Jkn_gf	Needle Hill Granite, Kwai Chung Suite, Jurassic: Dominantly porphyritic fine-grained granite with some equigranular medium-grained granite
Jko_rq	East Lantau Rhyolite, Kwai Chung Suite, Jurassic: Quartzphyric rhyolite to porphyritic granite dykes
Jkp_gf	Po Toi Granite, Kwai Chung Suite, Jurassic: Fine-grained biotite granite
Jkp_gfm	Po Toi Granite, Kwai Chung Suite, Jurassic: Fine- to medium-grained biotite granite
Jkp_gm	Po Toi Granite, Kwai Chung Suite, Jurassic: Medium-grained biotite granite
Jks_rh	Sham Chung Rhyolite, Kwai Chung Suite, Jurassic: Flow-banded porphyritic rhyolite sill
Jkt_gc	Sha Tin Granite, Kwai Chung Suite, Jurassic: Coarse-grained biotite granite
Jkt_gf	Sha Tin Granite, Kwai Chung Suite, Jurassic: Fine-grained biotite granite
Jkt_gm	Sha Tin Granite, Kwai Chung Suite, Jurassic: Medium-grained biotite granite
Jma_gf	Tai Lam Granite, Lamma Suite, Jurassic: Equigranular to inequigranular fine-grained leucogranite
Jma_gfm	Tai Lam Granite, Lamma Suite, Jurassic: Inequigranular fine- to medium-grained leucogranite
Jma_gm	Tai Lam Granite, Lamma Suite, Jurassic: Medium-grained leucogranite
Jml_gc	Lantau Granite, Lamma Suite, Jurassic: Coarse-grained biotite granite

Code	Explanation
Jml_gfm	Lantau Granite, Lamma Suite, Jurassic: Fine- to medium-grained biotite granite
Jml_gm	Lantau Granite, Lamma Suite, Jurassic: Medium-grained biotite granite
Jms_gfm	Tsing Shan Granite, Lamma Suite, Jurassic: Equigranular to inequigranular fine- to medium-grained two-mica granite
Jmt_gd	Tai Po Granodiorite, Lamma Suite, Jurassic: Porphyritic medium- and fine-grained granodiorite
Jmt_rf	Tai Po Granodiorite, Lamma Suite, Jurassic: Feldsparphyric rhyolite dykes
Jo_zt	Tai O Formation, Jurassic: Dominantly grey to red, fine-grained sandstone and siltstone
Jo_gr	Tai O Formation, Jurassic: Dominantly graphite-bearing mudstone
Jp_gd	Tai Po Granodiorite, Jurassic: Porphyritic medium- and fine-grained granodiorite
Jp_d	Tai Po Granodiorite, Jurassic: Porphyritic dacite/rhyodacite
Jtm_cat	Tai Mo Shan Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly lapilli lithic-bearing coarse ash crystal tuff
Jtm_fvt	Tai Mo Shan Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly fine ash vitric tuff
Jtm_st	Tai Mo Shan Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffaceous sandstone
Jtm_zt	Tai Mo Shan Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffaceous siltstone
Jts_bt	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuff breccia
Jts_cat	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly lapilli lithic-bearing coarse ash crystal tuff
Jts_st	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Tuffaceous sandstone
Jts_tt	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffite
Jts_zt	Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffaceous siltstone
Jtsl_bt	Shek Lung Kung Member, Shing Mun Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuff breccia
Jty_br	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly sedimentary breccia
Jty_cat	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly lapilli lithic-bearing coarse ash crystal tuff
Jty_fat	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly lapilli lithic-bearing fine ash crystal tuff
Jty_st	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffaceous sandstone
Jty_tt	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffite
Jty_zt	Yim Tin Tsai Formation, Tsuen Wan Volcanic Group, Jurassic: Dominantly tuffaceous siltstone
Jua	Tuen Mun Andesite Member, Tuen Mun Formation, Jurassic: Dominantly andesite lava, autobreccia, lapilli lithic-bearing coarse ash crystal tuff and tuffite
Jus	Siu Hang Tsuen Member, Tuen Mun Formation, Jurassic: Dominantly polymictic tuffaceous conglomerate, sandstone and siltstone with minor andesitic peperite
Jut	Tin Shui Wai Member, Tuen Mun Formation, Jurassic: Dominantly monomictic tuffaceous breccia, sandstone, siltstone and marble breccia with minor andesitic peperite
Kcs_gc	Shui Chuen O Granite, Cheung Chau Suite, Cretaceous: Dominantly coarse-grained

Code	Explanation
	granite
Kcs_gf	Shui Chuen O Granite, Cheung Chau Suite, Cretaceous: Dominantly porphyritic fine-grained granite
Kcs_gm	Shui Chuen O Granite, Cheung Chau Suite, Cretaceous: Dominantly equigranular medium-grained granite with some porphyritic fine-grained granite
Kcu_gd	Undifferentiated Granodiorite, Cheung Chau Suite, Cretaceous: Porphyritic medium-grained granodiorite
Ko	Kat O Formation, Cretaceous: Dominantly calcareous breccia, conglomerate and coarse sandstone
Kkw_fvt	Clear Water Bay Formation, Kau Sai Chau Volcanic Group, Cretaceous: Dominantly eutaxitic fine ash vitric tuff
Kkw_rh	Clear Water Bay Formation, Kau Sai Chau Volcanic Group, Cretaceous: Dominantly flow-banded porphyritic rhyolite lava
Klb_gf	Mount Butler Granite, Lion Rock Suite, Cretaceous: Fine-grained granite
Klb_gfg	Mount Butler Granite,Lion Rock Suite, Cretaceous: Greisenised fine-grained granite
Klb_gfm	Mount Butler Granite, Lion Rock Suite, Cretaceous: Fine- to medium-grained granite
Kld_lq	D'Aguilar Quartz Monzonite, Lion Rock Suite, Cretaceous: Quartz latite
Kld_mq	D'Aguilar Quartz Monzonite, Lion Rock Suite, Cretaceous: Porphyritic fine- to medium-grained quartz monzonite
Klk_gf	Kowloon Granite, Lion Rock Suite, Cretaceous: Fine-grained biotite granite
Klk_gfm	Kowloon Granite, Lion Rock Suite, Cretaceous: Fine- to medium-grained biotite granite
Klk_gm	Kowloon Granite, Lion Rock Suite, Cretaceous: Medium-grained granite
Kls_gf	Sok Kwu Wan Granite, Lion Rock Suite, Cretaceous: Fine-grained biotite granite
Kls_gfm	Sok Kwu Wan Granite, Lion Rock Suite, Cretaceous: Fine- to medium-grained biotite granite
Kls_gm	Sok Kwu Wan Granite, Lion Rock Suite, Cretaceous: Medium-grained biotite granite
Klt_gf	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous: Fine-grained granite
Klt_lq	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous: Quartz latite
Klt_mq	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous: Quartz monzonite
Klt_mqf	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous: Fine-grained quartz monzonite
Klt_rf	Tei Tong Tsui Quartz Monzonite, Lion Rock Suite, Cretaceous: Feldsparphyric rhyolite
Kra_cat	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly coarse ash crystal tuff
Kra_e	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly eutaxitic, crystal-bearing fine ash vitric tuff
Kra_fvt	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly fine ash vitric tuff
Kra_mzt	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous mudstone and siltstone
Kra_st	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous sandstone (and siltstone)
Kra_tb	Ap Lei Chau Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuff breccia
Krc_e	Che Kwu Shan Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly eutaxitic crystal-bearing fine ash vitric tuff

Code	Explanation
Krc_fvt	Che Kwu Shan Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly eutaxitic fine ash vitric tuff
Krc_st	Che Kwu Shan Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous sandstone and siltstone
Krc_tb	Che Kwu Shan Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuff breccia
Krd_cat	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly coarse ash crystal tuff
Krd_e	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly eutaxitic crystal-bearing fine ash vitric tuff
Krd_rf	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Feldsparphyric rhyolite, mainly dykes
Krd_rq	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Quartzphyric rhyolite, mainly dykes
Krd_st	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous sandstone, siltstone and mudstone
Krd_tb	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuff breccia
Krd_zt	Mount Davis Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous siltstone
Krl_cat	Long Harbour Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly coarse ash crystal tuff
Krl_st	Long Harbour Formation, Repulse Bay Volcanic Group, Cretaceous: Dominantly tuffaceous sandstone
Pt_st	Tolo Harbour Formation, Permian: Dominantly pinkish to pale grey calcareous sandstone
Pt_zt	Tolo Harbour Formation, Permian: Dominantly pinkish to pale grey calcareous siltstone