Vegetation Map
093J064

BRITISH COLUMBIA
Ministry of Forests, Lands and Natural Resource Operations

Scale 1:20,000

0 0.25 0.5 0.75 1 Kilometers
0 0.25 0.5 Miles

Vegetation Data Source: MFLNRO - VRMS / Ownership
Base Map Source: TRIM / Terrain

This map is created from information stored digitally in the BC Geographic Warehouse. The map has been structured to display variables associated with the theme described in the accompanying report. Some of the information portrayed may not be complete and up to date. Cadastral, administrative boundaries and the Ownership colour theme are for reference purposes only. (Legend revisions June 2014).

Labels Projected To: January 1, 2016

MAP SYMBOLOGY

Forest Inventory Features:
- Forest Vegetation Polygons
- Sructure Opening in Vegetation
- Permanent Sample Plot (SYS)
- Research Installations

TRIM. Base Features:
- 4x Built Roads
- Forest Tenure Road Lines
- Paved Roads
- Rough Roads
- Trails/Cutlines
- Railways
- 3d Ferries
- Other lines
- Powerline
- Pipeline
- Buildings
- Misc Areas
- Misc Lines
- Water Lines
- Rivers/Streams - ESM
- Waterbodies - ESM
- Wetlands - ESM
- Ocean - ESM

Administrative Boundaries:
- BC Provincial Boundary
- DMID Region boundary
- Resource District boundary - FADM
- INV. Region-Compartment - FADM
- Provincial Forest area - FADM
- Timber Supply Area Block - FADM
- Tree Farm Licenses - FADM
- Land District boundary
- Administrative boundary
- Survey Parcels - Terrains
- Municipal boundary (< 1:500,000 ha - 15 % hatch)
- Municipal boundary (> 1:500,000 ha) - no hatch)
- National Parks
- First Nations
- Provincial Parks
- Ecological Reserves
- Protected Areas
- Recreation Areas

Other:
- BCGS Mapsheet Grid (1:20,000)

VEGETATION LABEL DETAILS

Example of a Vegetation Label:

```
LINE: DESCRIPTION
 1 Structure symbol and Opening Number
 2 Polygon Number and multi-layer stand indicator (L)
 3 Species Composition
     ex. the most important layer is described as Fd (Douglas Fir) and the (Western Hemlock).
 4 Age Class (1-10) and Site Index (SI) for the most important species. (SI=0 years / estimated SI)
     ex. stand is age class 2 (21-40 yrs), height class 1 (2.1-10.0m), crown closure class 1 (6-15%), SI 20m
 5 Vegetated Density Class (or Non-Forest/Productive Descriptor)
     ex. 1 = 6-15% stocked with trees, shrubs, herbs and graminoids, shrubs less that 2m.
 6 Disturbance History & year - ex. Logged in 1978
```

Line 1 - History Record Opening Number

`0123` - opening number valid for BCGS mapsheet `7123*` - opening number has not been assigned

Line 2 - Polygon No. / Multi-layer

VRMS Polygon Number - ranging from one to nine digits
L Multi-layered stand (a separate description of each layer is available in the data base, i.e. 1.2)

Line 3 - BC Tree Code List

Species Composition: Species are labeled in them order of predominance. Major first Minor in brackets.
The following codes are based on "The B.C. Ministry of Forests Tree Code List" version 4.0 dated January 2009.

NATIVE CONIFERS

Ac	Amabilis Fir
Cw	Western Red Cedar
Hw	Western Hemlock
Yc	Yellow Cedar
Bg	Grand Fir (Balsam)
Fd	Douglas Fir
Pld	Claded Douglas Fir
Pli	Interior Douglas Fir
Bl	Fir (Balsam)
Ba	Amabilis Fir
Bl	Subalpine Fir (Alpine)
Lw	Western Larch
Hm	Mountain Hemlock
Hmm	Mountain Hemlock
Hxm	Mountain x Western Hemlock hybrid
J	JUNIPER
Cx	Rocky Mtn. Juniper
Jr	Juniper scopul
L	LARCH
La	Subalpine larch
Lt	Tamarack
P	PINE
Pf	Limber Pine
Pl	Lodgepole Pine
Pli	Lodgepole Pine (contorta)
Plx	Lodgepole x Jack Pine hybrid
Py	Ponderosa Pine (yellow)
Pa	Whitebark Pine
Pw	Western White Pine
Pxj	Pine x Juniper
S	SPRUCE
Sb	Black Spruce
Se	Engelmann Spruce
Sx	Sitka Spruce
Sw	White Spruce
Sxw	Spruce hybrid
Sxe	Engelmann x White
Sxs	Sitka x White
Sxl	Other x unknown hybrid
Ss	Sitka Spruce
Te	Western Yew

NATIVE HARDWOODS

D	DECIDUOUS
Dr	Red Alder
Ep	APPLE
Eu	ASPEN, Coin Apple
At	ASPEN, COTTONWOOD or POPLAR
Act	Black Cottonwood
Atb	Balsam Poplar
Ate	Trembling Aspen
Ath	Hybrid Poplars
At	Trembling Aspen
Ax	Aspen hybrid
Ep	Arbutus
Ew	BIRCH
Ea	Alaska Paper Birch
Ew	Water Birch
Ewp	Paper Birch (Kenai)
Ew	Water Birch
Ey	Yellow Birch
Cw	Cascara
V	CHERRY
Vf	Fire Cherry
Vc	Choke Cherry
Vp	Pin Cherry
Vv	Bitter Cherry
Vm	Pacific Dogwood (western flowering)
Dw	Dogwood
Mb	Bigleaf Maple (broadleaf)
Mv	Vine Maple
Dm	OAK
Qg	Garry Oak
Qx	Oak hybrid
Ew	Bebb's Willow
Ma	Pacific Willow
Wp	Peach-leaf Willow (Bonsky's)
Wr	Prairy Willow (pipe dream)
Wx	Willow hybrid
Wf	Sitka Willow (tree-leaved)

UNKNOWNS - OTHER

X	UNKNOWN
Xc	unknown conifer
Xd	unknown deciduous
Xh	unknown broad-leaf (H)
Zc	other conifer
Zh	other broadleaf

EXOTICS

Ae	Apple
Ap	APEN, COTTONWOOD or POPLAR
Ab	Balsam Poplar
Ew	BIRCH
Ewg	Gray Birch
Ev	Silver Birch (exempt)
Ewv	Silver Birch
Cp	CHERRY
Vs	Sweet Cherry
Vu	Ussuri Plum
Vv	Pond Wild Cedar
Fb	FIR (Balsam)
Fg	Grand Fir
Fl	Noble Fir
Fn	Nikko Fir
Bc	White Fir
Fa	Alpine Fir
Ld	Tamarack Larch
Ld	Siberian Larch
Lk	Dahurian Larch
Mr	Red Alder
Mr	Norway Maple
Mp	Silver Maple
Mr	Red Maple
Oa	OAK
Qw	White Oak
Qr	Northern Red Oak
Qs	Truckee Oak
Qb	Giant Sequoia
Qc	Coast Redwood
Qe	European Mountain Ash
Qk	Siberian Elm (exotic)
Qp	Common Elm
Qg	Dragon Ash
Qf	Green Ash
Qf	Shagbarks Hickory
Qj	Japanese Oak
Qj	Japanese Walnut
Pe	PEAR
Pn	Austrian Pine
Pm	Red Pine
Pb	Scots Pine
Pc	Mugo Pine
Pp	Pine
Sn	Norway Spruce

Line 4

4a. AGE CLASS

CODE	LIMITS (years)
1	1-20
2	21-40
3	41-60
4	61-80
5	81-100
6	101-120
7	121-140
8	141-250
9	251 +

4b. HEIGHT CLASS

CODE	LIMITS (metres)
1	0.1 - 2.0
2	2.1 - 10.0
3	10.1 - 18.4
4	18.5 - 27.4
5	27.5 - 45.4
6	45.5 - 65.4
7	65.5 - 84.4
8	85.5 +

4c. CROWN CLOSURE CLASS

CODE	LIMITS (percentage)
1	0 - 5
2	6 - 15
3	16 - 25
4	26 - 35
5	36 - 45
6	46 - 55
7	56 - 65
8	66 - 75
9	76 - 85
0	86 - 100

4d SITE INDEX
All SI are shown in the nearest metric reference at 50 years Breast Height Age. SI is based on the age and height of the dominant and co-dominant trees in the uppermost layer. The age and height is estimated (E) or known after an ingress flag (I).

4e. ESTIMATED SITE INDEX
SI is estimated when site trees were present, e.g. young stands (<50yrs). It is denoted by a dash which always follows the tree species code. Refer to the Forest Inventory Type Group and SI Estimated source code.

Line 5 Vegetation records

VEGETATED NON-TREE CATEGORIES (for V and I require):

ac	SHRUB - Alpine
a	SHRUB - Low
b	SHRUB LTR
hf	HERB - Forbs
hg	HERB - Graminoids
hl	HERB - Lichens

- shrub with average shrub height < or = to two metres.
- shrub with average shrub height > two metres.
- herb with no distinction between forbs and graminoids
- herb with forbs > 50% of the herb cover
- herb with graminoids > 50% of the herb cover

NON-TREE MOSS

Sp	SPHAGNUM
Sm	SPHAGNUM - MOSS
M	BRYOID (LIVERW)

- bryoid with no distinction between mosses and lichens by cover
- sphagnum moss is dominant moss cover at 50% of the bryoid cover
- bryoid (liverworts) > 50% of the bryoid cover

NON-VEGETATED CATEGORIES (for V and I require):

ae	AVALANCHE	gl	GRAVEL PIT
b	BLUFF	h	LAVA BED
bl	BLOCKFIELD	la	LAKE
ds	DUNE SAND	ma	MARSH
ls	SURFICIAL SOILS	mi	MINE LAKE SEDIMENTS
ot	OUTBANK	mi	OPEN PIT MINE
rs	BEDROCK SOILS	mi	MINE
rock	BEDROCK	mo	MUSKEG PEAT DEPOSIT
mp	MUSKEAT SEGMENT	mr	RESERVOIR MARGIN
ms	RUBBLY MINE SPOILS	rs	RAILWAY SURFACE
oc	OCEAN	rs	RIVER SEGMENTS
sn	SNOW COVER	ro	ROAD SURFACE
rs	RESERVOIR	t	TALUS
s	SEDIMENT	ts	TAILINGS
w	WATER	w	WATER

- Water categories (w, la, rs) identified over 50 percent coverage.

NON-FOREST / NON-PRODUCTIVE DESCRIPTOR CODES (for F require):

A	ALPINE	NPB	NON-PRODUCTIVE BRUSH
C	CULTIVATED FOREST (Species)	NPBU	NON-PRODUCTIVE BURN
C	CULTIVATED	NPBS	NON-PRODUCTIVE SHRUB
G	GRASS	NT	NOT TYPING AVAILABLE
GR	GRAVEL BAR	NU	NON-COMMERCIAL
GR	GRAVEL PIT	NOB	NON COMMERCIAL BRUSH
M	MEADOW	NOM	NON COMMERCIAL MEADOW
M	MEADOWS	O	OPEN
MU	MUD FLAT	OBR	OPEN RANGE
S	SHRUB	SAND	SAND
SWAMP		TIDE	TIDAL FLAT
U	URBAN		
NSR	NOT SUFFICIENTLY RESTOCKED		
NTA	NO TYPING AVAILABLE		

Line 6 - Disturbance History

Disturbance type code preceeded by symbol, followed by earliest date
First character of disturbance type designates category, refer to official code list for sub-category descriptions.

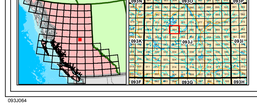
A	Animal Damage	L	Logging
C	Cultivation	N	Non-Biological Damage
D	Core and Seed Insects	N	Non-Biological Injuries
D	Diseases	P	Core and Seedling Fungal Pathogens
I	Insects		
R	Site Rehabilitation		
S	Silviculture		
U	Damage Unknown		
V	Problem Vegetation		

Example Opening History Details

Detailed Structure information is available on the BCGW utilizing either IMF or ArcMap. The MapView example is of the/next RESULTS data.

The Ministry of Forests, Mines and Lands web application http://www.for.gov.bc.ca/hts/ has a type of detailed information. Select the SILVICULTURE layer then click on "Display Silviculture Map" to turn on display values for -

OPENING
OPENING LABEL
SILVICULTURE ACTIVITY
ACTIVITY TREATMENT UNIT
STANDARDS UNIT
SILVICULTURE STRICT COVER
WILDFIRE TREE PATCH



082E	082F	082G	082H	082I	082J	082K	082L	082M	082N	082O	082P	092H	092I	092J	092K	092L	092M	092N	092O	092P	093A	093B	093C
082L	082M	082N	082O	082P	092H	092I	092J	092K	092L	092M	092N	092O	092P	093A	093B	093C	093D	093E	093F	093G	093H	093I	093J
092H	092I	092J	092K	092L	092M	092N	092O	092P	093A	093B	093C	093D	093E	093F	093G	093H	093I	093J	093K	093L	093M	093N	093O
092O	092P	093A	093B	093C	093D	093E	093F	093G	093H	093I	093J	093K	093L	093M	093N	093O	093P	094A	094B	094C	094D	094E	094F
093H	093I	093J	093K	093L	093M	093N	093O	093P	094A	094B	094C	094D	094E	094F	094G	094H	094I	094J	094K	094L	094M	094N	094O
093P	094A	094B	094C	094D	094E	094F	094G	094H	094I	094J	094K	094L	094M	094N	094O	094P	095A	095B	095C	095D	095E	095F	095G
094H	094I	094J	094K	094L	094M	094N	094O	094P	095A	095B	095C	095D	095E	095F	095G	095H	095I	095J	095K	095L	095M	095N	095O
094P	095A	095B	095C	095D	095E	095F	095G	095H	095I	095J	095K	095L	095M	095N	095O	095P	096A	096B	096C	096D	096E	096F	096G
095H	095I	095J	095K	095L	095M	095N	095O	095P	096A	096B	096C	096D	096E	096F	096G	096H	096I	096J	096K	096L	096M	096N	096O
095P	096A	096B	096C	096D	096E	096F	096G	096H	096I	096J	096K	096L	096M	096N	096O	096P	097A	097B	097C	097D	097E	097F	097G
096H	096I	096J	096K	096L	096M	096N	096O	096P	097A	097B	097C	097D	097E	097F	097G	097H	097I	097J	097K	097L	097M	097N	097O
096P	097A	097B	097C	097D	097E	097F	097G	097H	097I	097J	097K	097L	097M	097N	097O	097P	098A	098B	098C	098D	098E	098F	098G
097H	097I	097J	097K	097L	097M	097N	097O	097P	098A	098B	098C	098D	098E	098F	098G	098H	098I	098J	098K	098L	098M	098N	098O
097P	098A	098B	098C	098D	098E	098F	098G	098H	098I	098J	098K	098L	098M	098N	098O	098P	099A	099B	099C	099D	099E	099F	099G
098H	098I	098J	098K	098L	098M	098N	098O	098P	099A	099B	099C	099D	099E	099F	099G	099H	099I	099J	099K	099L	099M	099N	099O
098P	099A	099B	099C	099D	099E	099F	099G	099H	099I	099J	099K	099L	099M	099N	099O	099P	100A	100B	100C	100D	100E	100F	100G
099H	099I	099J	099K	099L	099M	099N	099O	099P	100A	100B	100C	100D	100E	100F	100G	100H	100I	100J	100K	100L	100M	100N	100O
099P	100A	100B	100C	100D	100E	100F	100G	100H	100I	100J	100K	100L	100M	100N	100O	100P	101A	101B	101C	101D	101E	101F	101G
100H	100I	100J	100K	100L	100M	100N	100O	100P	101A	101B	101C	101D	101E	101F	101G	101H	101I	101J	101K	101L	101M	101N	101O
100P	101A	101B	101C	101D	101E	101F	101G	101H	101I	101J	101K	101L	101M	101N	101O	101P	102A	102B	102C	102D	102E	102F	102G
101H	101I	101J	101K	101L	101M	101N	101O	101P	102A	102B	102C	102D	102E	102F	102G	102H	102I	102J	102K	102L	102M	102N	102O
101P	102A	102B	102C	102D	102E	102F	102G	102H	102I	102J	102K	102L	102M	102N	102O	102P	103A	103B	103C	103D	103E	103F	103G
102H	102I	102J	102K	102L	102M	102N	102O	102P	103A	103B	103C	103D	103E	103F	103G	103H	103I	103J	103K	103L	103M	103N	103O
102P	103A	103B	103C	103D	103E	103F	103G	103H	103I	103J	103K	103L	103M	103N	103O	103P	104A	104B	104C	104D	104E	104F	104G
103H	103I	103J	103K	103L	103M	103N	103O	103P	104A	104B	104C	104D	104E	104F	104G	104H	104I	104J	104K	104L	104M	104N	104O
103P	104A	104B	104C	104D	104E	104F	104G	104H	104I	104J	104K	104L	104M	104N	104O	104P	105A	105B	105C	105D	105E	105F	105G
104H	104I	104J	104K	104L	104M	104N	104O	104P	105A	105B	105C	105D	105E	105F	105G	105H	105I	105J	105K	105L	105M	105N	105O
104P	105A	105B	105C	105D	105E	105F	105G	105H	105I	105J	105K	105L	105M	105N	105O	105P	106A	106B	106C	106D	106E	106F	106G
105H	105I	105J	105K	105L	105M	105N	105O	105P	106A	106B	106C	106D	106E	106F	106G	106H	106I	106J	106K	106L	106M	106N	106O
105P	106A	106B	106C	106D	106E	106F	106G	106H	106I	106J	106K	106L	106M	106N	106O	106P	107A	107B	107C	107D	107E	107F	107G
106H	106I	106J	106K	106L	106M	106N	106O	106P	107A	107B	107C	107D	107E	107F	107G	107H	107I	107J	107K	107L	107M	107N	107O
106P	107A	107B	107C	107D	107E	107F	107G	107H	107I	107J	107K	107L	107M	107N	107O	107P	108A	108B	108C	108D	108E	108F	108G
107H	107I	107J	107K	107L	107M	107N	107O	107P	108A	108B	108C	108D	108E	108F	108G	108H	108I	108J	108K	108L	108M	108N	108O
107P	108A	108B	108C	108D	108E	108F	108G	108H	108I	108J	108K	108L	108M	108N	108O	108P	109A	109B	109C	109D	109E	109F	109G
108H	108I	108J	108K	108L	108M	108N	108O	108P	109A	109B	109C	109D	109E	109F	109G	109H	109I	109J	109K	109L	109M	109N	109O
108P	109A	109B	109C	109D	109E	109F	109G	109H	109I	109J	109K	109L	109M	109N	109O	109P	110A	110B	110C	110D	110E	110F	110G
109H	109I	109J	109K	109L	109M	109N	109O	109P	110A	110B	110C	110D	110E	110F	110G	110H	110I	110J	110K	110L	110M	110N	110O
109P	110A	110B	110C	110D	110E	110F	110G	110H	110I	110J	110K	110L	110M	110N	110O	110P	111A	111B	111C	111D	111E	111F	111G
110H	110I	110J	110K	110L	110M	110N	110O	110P	111A	111B	111C	111D	111E	111F	111G	111H	111I	111J	111K	111L	111M	111N	111O
110P	111A	111B	111C	111D	111E	111F	111G	111H	111I	111J	111K	111L	111M	111N	111O	111P	112A	112B	112C	112D	112E	112F	112G
111H	111I	111J	111K	111L	111M	111N	111O	111P	112A	112B	112C	112D	112E	112F	112G	112H	112I	112J	112K	112L	112M	112N	112O
111P	112A	112B	112C	112D	112E	112F	112G	112H	112I	112J	112K	112L	112M	112N	112O	112P	113A	113B	113C	113D	113E	113F	113G
112H	112I	112J	112K	112L	112M	112N	112O	112P	113A	113B	113C	113D	113E	113F	113G	113H	113I	113J	113K	113L	113M	113N	113O
112P	113A	113B	113C	113D	113E	113F	113G	113H	113I	113J	113K	113L	113M	113N	113O	113P	114A	114B	114C	114D	114E	114F	114G
113H	113I	113J	113K	113L	113M	113N	113O	113P	114A	114B	114C	114D	114E	114F	114G	114H	114I	114J	114K	114L	114M	114N	114O
113P	114A	114B	114C	114D	114E	114F	114G	114H	114I	114J	114K	114L	114M	114N	114O	114P	115A	115B	115C	115D	115E	115F	115G
114H	114I	114J	114K	114L	114M	114N	114O	114P	115A	115B	115C	115D	115E	115F	115G	115H	115I	115J	115K	115L	115M	115N	115O
114P	115A	115B	115C	115D	115E	115F	115G	115H	115I	115J	115K	115L	115M	115N	115O	115P	116A	116B	116C	116D	116E	116F	116G
115H	115I	115J	115K	115L	115M	115N	115O	115P	116A	116B	116C	116D	116E	116F	116G	116H	116I	116J	116K	116L	116M	116N	116O
115P	116A	116B	116C	116D	116E	116F	116G	116H	116I	116J	116K	116L	116M	116N	116O	116P	117A	117B	117C	117D	117E	117F	117G
116H	116I	116J	116K	116L	116M	116N	116O	116P	117A	117B	117C	117D	117E	117F	117G	117H	117I	117J	117K	117L	117M	117N	117O
116P	117A	117B	117C	117D	117E	117F	117G	117H	117I	117J	117K	117L	117M	117N	117O	117P	118A	118B	118C	118D	118E	118F	118G
117H	117I	117J	117K	117L	117M	117N	117O	117P	118A	118B	118C	118D	118E	118F	118G	118H	118I	118J	118K	118L	118M	118N	118O
117P	118A	118B	118C	118D	118E	118F	118G	118H	118I	118J	118K	118L	118M	118N	118O	118P	119A	119B	119C	119D	119E	119F	119G
118H	118I	118J	118K	118L	118M	118N	118O	118P	119A	119B	119C	119D	119E	119F	119G	119H	119I	119J	119K	119L	119M	119N	119O
118P	119A	119B	119C	119D	119E	119F	119G	119H	119I	119J	119K	119L	119M	119N	119O	119P	120A	120B	120C	120D	120E	120F	120G
119H	119I	119J	119K	119L	119M	119N	119O	119P	120A	120B	120C	120D	120E	120F	120G	120H	120I	120J	120K	120L	120M	120N	120O
119P	120A	120B	120C	120D	120E	120F	120G	120H	120I	120J	120K	120L	120M	120N	120O	120P	121A	121B	121C	121D	121E	121F	121G
120H	120I	120J	120K	120L	120M	120N	120O	120P	121A	121B	121C	121D	121E	121F	121G	121H	121I	121J	121K	121L	121M	121N	121O
120P	121A	121B	121C	121D	121E	121F	121G	121H	121I	121J	121K	121L	121M	121N	121O	121P	122A	122B	122C	122D	122E	122F	122G
121H	121I	121J	121K	121L	121M	121N	121O	121P	122A	122B	122C	122D	122E	122F	122G	122H	122I	122J	122K	122L	122M	122N	122O
121P	122A	122B	122C	122D	122E	122F	122G	122H	122I	122J	122K	122L	122M	122N	122O	122P	123A	123B	123C	123D	123E	123F	123G
122H	122I	122J	122K	122L	122M	122N	122O	122P	123A	123B	123C	123D	123E	123F	123G	123H	123I	123J	123K	123L	123M	123N	123O
122P	123A	123B	123C	123D	123E	123F	123G	123H	123I	123J	123K	123L	123M	123N	123O	123P	124A	124B	124C	124D	124E	124F	124G
123H	123I	123J	123K	123L	123M	123N	123O	123P	124A	124B	124C	124D	124E	124F	124G	124H	124I	124J	124K	124L	124M	124N	124O
123P	124A	124B	124C	124D	124E	124F	124G	124H	124I	124J	124K	124L	124M	124N	124O	124P	125A	125B	125C	125D	125E	125F	125G
124H	124I	124J	124K	124L	124M	124N	124O	124P	125A	125B	125C	125D	125E	125F	125G	125H	125I	125J	125K	125L	125M	125N	125O
124P	125A	125B	125C	125D	125E	125F	125G	125H	125I	125J	125K	125L	125M	125N	125O	125P	126A	126B	126C	126D	126E	126F	126G
125H	125I	125J	125K	125L	125M	125N	125O	125P	126A	126B	126C	126D	126E	126F	126G	126H	126I	126J	126K	126L	126M	126N	126O
125P	126A	126B	126C	126D	126E	126F	126G	126H	126I	126J	126K	126L	126M	126N	126O	126P	127A	127B	127C	127D	127E	127F	127G
126H	126I	126J	126K	126L	126M	126N	126O	126P	127A	127B	127C	127D	127E	127F	127G	127H	127I	127J	127K	127L	127M	127N	127O
126P	127A	127B	127C	127D	127E	127F	127G	127H	127I	127J	127K	127L	127M	127N	127O	127P	128A	128B	128C	128D	128E	128F	128G
127H	127I	127J	127K	127L	127M	127N	127O	127P	128A	128B	128C	128D	128E	128F	128G	128H	128I	128J	128K	128L	128M	128N	128O
127P	128A	128B	128C	128D	128E	128F	128G	128H	128I	128J	128K	128L	128M	128N	128O	128P	129A	129B	129C	129D	129E	129F	129G
128H	128I	128J	128K	128L	128M	128N	128O	128P	129A	129B	129C	129D	129E	129F	129G	129H	129I	129J	129K	129L	129M	129N	129O
128P	129A	129B	129C	129D	129E	129F	129G	129H	129I	129J	129K	129L	129M	129N	129O	129P	130A	130B	130C	130D	130E	130F	130G
129H	129I	129J	129K	129L	129M	129N	129O	129P	130A	130B	130C	130D	130E	130F	130G	130H	130I	130J	130K	130L	130M	130N	130O
129P	130A	130B	130C	130D	130E	130F	130G	130H	130I	130J	130K	130L	130M	130N	130O	130P	131A	131B	131C	131D	131E	131F	131G
130H	130I	130J	130K	130L	130M	130N	130O	130P	131A	131B	131C	131D	131E	131F	131G	131H	131I	131J	131K	131L	131M	131N	131O
130P	131A	131B	131C	131D	131E	131F	131G	131H	131I	131J	131K	131L	131M	131N	131O	131P	132A	132B	132C	132D	132E	132F	132G
131H	131I	131J	131K	131L	131M	131N	131O	131P	132A	132B	132C	132D	132E	132F	132G	132H	132I	132J	132K	132L	132M	132N	132O
131P	132A	132B	132C	132D	132E	132F	132G	132H	132I	132J	132K	132L	132M	132N	132O	132P	133A	133B	133C	133D	133E	133F	133G
132H	132I	132J	132K	132L	132M	132N	132O	132P	133A	133B	133C	133D	133E	133F	133G	133H	133I	133J	133K	133L	133M	133N	133O
132P	133A	133B	133C	133D	133E	133F	133G	133H	133I	133J	133K	133L	133M	133N	133O	133P	134A	134B	134C	134D	134E	134F	134G
133H	133I	133J	133K	133L	133M	133N	133O	133P	134A	134B	134C	134D	134E	134F	134G	134H	134I	134J	134K	134L	134M	134N	134O
133P	134A	134B	134C	134D	134E	134F	134G	134H	134I	134J	134K	134L	134M	134N	134O	134P	135A	135B	135C	135D	135E	135F	135G
134H	134I	134J	134K	134L	134M	134N	134O	134P	135A	135B	135C	135D	135E	135F	135G	135H	135I	135J	135K	135L	135M	135N	135O
134P	135A	135B	135C	135D	135E	135F	135G	135H	135I	135J	135K	135L	135M	135N	135O	135P	136A	136B	136C	136D	136E	136F	136G
135H	135I	135J	135K	135L	135M	135N	135O	135P	136A	136B	136C	136D	136E	136F	136G	136H	136I	136J	136K	136L	136M	136N	136O
135P	136A	136B	136C	136D	136E	136F	136G	136H	136I	136J	136K	136L	136M	136N	136O	136P	137A	137B	137C	137D	137E	137F	137G
136H	136I	136J	136K	136L	136M	136N	136O	136P	137A	137B	137C	137D	137E	137F	137G	137H	137I	137J	137K	137L	137M	137N	137O
136P	137A	137B	137C	137D	137E	137F	137G	137H	137I	137J	137K	137L	137M	137N	137O	137P	138A	138B	138C	138D	138E	138F	138G
137H	137I	137J	137K	137L	137M	137N	137O	137P	138A	138B	138C	138D	138E	138F	138G	138H	138I	138J	138K	138L	138M	138N	138O
137P	138A	138B	138C	138D	138E	138F	138G	138H	138I	138J	138K	138L	138M	138N	138O	138P	139A	139B	139C	139D	139E	139F	139G
138H	138I	138J	138K	138L	138M	138N	138O	138P	139A	139B	139C	139D	139E	139F	139G	139H	139I	139J	139K	139L	139M	139N	139O
138P	139A	139B	139C	139D	139E	139F	139G	139H	139I	139J	139K	139L	139M	139N	139O	139P	140A	140B	140C	140D	140E	140F	140G
139H	139I	139J	139K	139L	139M	139N	139O	139P	140A	140B	140C	140D	140E	140F	140G	140H	140I	140J	140K	140L	140M	140N	140O
139P	140A	140B	140C	140D	140E	140F	140G	140H	140I	140J	140K	140L	140M	140N	140O	140P	141A	141B	141C	141D	141E	141F	141G
140H	140I	140J	140K	140L	140M	140N	140O	140P	141A	141B	141C	141D	141E	141F	141G	141H	141I	141J	141K	141L	141M	141N	141O
140P	141A	141B	141C	141D	141E	141F	141G	141H	141I	141J	141K	141L	141M	141N	141O	141P	142A	142B	142C	142D	142E	142F	142G
141H	141I	141J	141K	141L	141M	141N	141O	141P	142A	142B	142C	142D	142E	142F	142G	142H	142I	142J	142K	142L	142M	142N	142O
141P	142A	142B	142C	142D	142E	142F	142G	142H	142I	142J	142K	142L	142M	142N	142O	142P	143A	143B	143C	143D	143E