

BoreholeView

The BoreholeView schema is used to constrain delivery of only simple borehole header information via WFS and WMS. Very few of the BoreholeView attributes are mandatory (only identifier, specification_uri, metadata_uri, and shape), but GGIC best practice is to populate as many of the schema attributes as possible.

GeoSciML Portrayal Version	Schema link	Documentation
v4.0	GeoSciML Portrayal Schema v4.0	Documentation

The Geoscience Portal tools will operate on the following attributes:

- name
- drillStartDate
- nvclCollection
- tenement
- project

so every effort should be made to populate *at least* those attributes where data exists.

Example BoreholeView:

```
<?xml version="1.0" encoding="UTF-8"?>
<wfs:FeatureCollection xmlns:gsmlp="http://xmlns.geosciml.org/geosciml-portrayal/4.0" xmlns:ggic="http://xmlns.geoscience.gov.au/ggic/1.0" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:gml="http://www.opengis.net/gml" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:wfs="http://www.opengis.net/wfs" xsi:schemaLocation="http://xmlns.geosciml.org/geosciml-portrayal/4.0 http://schemas.geoscience.gov.au/geosciml/4.0/geosciml-portrayal.xsd http://www.opengis.net/wfs http://schemas.opengis.net/wfs/1.1.0/wfs.xsd" timeStamp="2014-09-11T15:15:37.785+08:00" numberOfFeatures="1" gml:id="GA.borehole.123456">
  <gml:featureMembers>
    <!-- Note the use of GGIC-amended version of GeoSciML-Portrayal - http://schemas.geoscience.gov.au/geosciml/4.0/geosciml-portrayal.xsd - This is still a valid GeoSciML-Portrayal service. -->
    <gsmlp:BoreholeView gml:id="gsmlp.boreholeView.123456">
      <gsmlp:identifier>http://data.geoscience.gov.au/feature/ga/gsmlp/boreholeView/123456</gsmlp:
identifier>
      <!-- Mandatory. Ideally, the identifier is resolvable; else use a unique ID, Recommended format:
http://<HOSTNAME>/feature/<PROVIDER ACRONYM>/gsmlp/boreholeView/<DATABASEID> -->
      <gsmlp:name>Kingfisher 1A</gsmlp:name>
      <!-- Human readable name, not URI. -->
      <gsmlp:description>petroleum borehole; water bore</gsmlp:description>
      <!-- Free text description of the borehole. -->
      <gsmlp:purpose>petroleum - exploration; groundwater - hydrological</gsmlp:purpose>
      <!-- Free text. If there is more than one purpose, concatenate them with commas. If null in source
database, use "unknown". -->
      <gsmlp:status>plugged and abandoned</gsmlp:status>
      <!-- Free text, but can use a community-agreed vocabulary term. If null in source database, use
"unknown". -->
      <gsmlp:drillingMethod>core diamond, rotary drilling</gsmlp:drillingMethod>
      <!-- Free text, but can use community-agreed vocabulary term(s). If more than one drilling method,
concatenate them with commas. If null in source database, use "unknown". -->
      <gsmlp:operator>BHP Petroleum</gsmlp:operator>
      <!-- Owner/operator of the borehole. If null in source database, use "unknown". -->
      <gsmlp:driller>Smith's Drilling Contractors</gsmlp:driller>
      <!-- Drilling contractor. If null in source database, use "unknown". -->
      <gsmlp:drillStartDate>2013-12-27</gsmlp:drillStartDate>
      <!-- Best practice to use ISO date format (without time). If only a year is known, provide the year
only. If null in source database, use "unknown". -->
      <gsmlp:drillEndDate>2014-01-28</gsmlp:drillEndDate>
      <!-- Best practice to use ISO date format (without time). If only a year is known, provide the year
only. If null in source database, use "unknown". -->
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    <gsmlp:startPoint>offshore</gsmlp:startPoint>
    <!-- Free text, but can use a community-agreed vocabulary term. If null in source database, use
"unknown". -->
    <gsmlp:inclinationType>inclined down</gsmlp:inclinationType>
    <!-- Free text, but can use a community-agreed vocabulary term -->
    <gsmlp:boreholeMaterialCustodian>Geoscience Australia, Geological Survey of Western Australia <
/gsmlp:boreholeMaterialCustodian>
    <!-- Free text. Name of the agency or agencies that are custodians of borehole materials (eg, core,
cuttings). -->
    <gsmlp:boreholeLength_m>276.3</gsmlp:boreholeLength_m>
    <!-- Total length (ie, TD) of the borehole in metres. If null in source database, use "unknown". -->
    <gsmlp:elevation_m>56.7</gsmlp:elevation_m>
    <!-- Collar elevation in metres above the elevation datum supplied in elevation_srs. If null in
source database, use "unknown".-->
    <gsmlp:elevation_srs>EPSG:5711</gsmlp:elevation_srs>
    <!-- Vertical crs/datum used to located borehole collar. Australian Height Datum is EPSG:5711. If
null in source database, use "unknown".-->
    <gsmlp:positionalAccuracy>50 metres</gsmlp:positionalAccuracy>
    <!-- Free text. A description of the accuracy of the borehole location. (eg, accurate, approximate,
1 km, 50 metres) -->
    <gsmlp:source>National Offshore Petroleum Information System (NOPIMS)</gsmlp:source>
    <!-- Free text describing details or citations of source materials for the borehole. It may provide
URLs to reference material and publications describing the borehole. -->
    <gsmlp:metadata_uri>http://www.geoscience.gov.au/boreholes_metadata.html</gsmlp:metadata_uri>
    <!-- Mandatory. URL link to a location that provides more information about the borehole. If none
is available, use http://www.opengis.net/def/nil/OGC/0/missing. -->
    <gsmlp:genericSymbolizer/>
    <!-- Optional. This can be used to deliver a code or similar with which the feature can be
symbolised. Not used for Geoscience Portal purposes. Feel free to omit this attribute altogether. -->
    <gsmlp:shape>
      <!-- Mandatory. 2D or 3D location of borehole collar. ie, the point at which the borehole
enters the Earth surface. -->
      <gml:Point srsDimension="2" srsName="http://www.opengis.net/def/crs/EPSG/0/4283">
        <!-- eg, srsName = URL to GDA94 in OGC online repository. -->
        <gml:coordinates>125.3755328 -21.69853</gml:coordinates>
        <!-- Order of coordinates: longitude, then latitude. Negative latitude value for southern
hemisphere. -->
        </gml:Point>
      </gsmlp:shape>
      <!-- Insert any extra GGIC attributes hereafter... -->
      <gsmlp:nvclCollection>true</gsmlp:nvclCollection>
      <!-- A "true" or "false" term to indicate if a borehole has been Hylogger scanned and is in the
National Virtual Core Library collection. -->
      <gsmlp:nvclScanDate>2014-01-26</gsmlp:nvclScanDate>
      <!-- The date of borehole scanning for the National Virtual Core Library, if applicable. (eg, 2012-
09-27) -->
      <gsmlp:nvclInstrument>Hylogger 3-7</gsmlp:nvclInstrument>
      <!-- Identifier for the instrument used to scan the borehole material. (eg, Hylogger 3-7) -->
      <gsmlp:nvclSoftwareVersion>4.2</gsmlp:nvclSoftwareVersion>
      <!-- Version number of the scanned data processing software, if applicable. (eg, 4.2) -->
      <gsmlp:nvclDataProcessingDate>2014-03-29</gsmlp:nvclDataProcessingDate>
      <!-- Most recent date that data from Hylogger scanning was processed. (eg; 2014-03-27) -->
      <gsmlp:project>North-West Shelf Drilling Project - 2013</gsmlp:project>
      <!-- Optional name of an exploration or mining project with which the borehole is associated. (eg:
Kookynie Open Pit Expansion, 1994) -->
      <gsmlp:tenement>ELA7465</gsmlp:tenement>
      <!-- An optional name of a tenement with which the borehole is associated. (eg, EL4256) -->
    </gsmlp:BoreholeView>
  </gml:featureMembers>
</wfs:FeatureCollection>

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