



Data Interchange for Geotechnical and Geoenvironmental Specialists

DIGGSML v1.0a Data Dictionary

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This document details the DIGGSML v1.0a data dictionary as an advisory document for engineering use.

The current version of this document can always be found at <http://www.diggsml.com/manual>



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- Association of Geotechnical and Geoenvironmental Specialists (AGS)
- Bridge Software Institute at the University of Florida
- California Department of Transportation
- Connecticut Department of Transportation
- Consortium of Organizations for Strong-Motion Observation Systems (COSMOS)
- Construction Industry Research and Information Association (CIRIA)
- Delta Environmental Consultants, Inc.
- EarthSoft
- Federal Highway Administration (FHWA) - Office of Federal Lands Highway
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- Florida Department of Transportation
- Georgia Department of Transportation
- gINT Software Inc.
- Indiana Department of Transportation
- Kentucky Department of Transportation
- Keynetix Ltd
- Minnesota Department of Transportation
- Missouri Department of Transportation
- Mott MacDonald
- North Carolina Department of Transportation
- Ohio Department of Transportation
- Petrochemical Open Standards Consortium
- Tennessee Department of Transportation
- United Kingdom Highways Agency (UKHA)
- United States Army Corps of Engineers (USACE)
- United States Environmental Protection Agency (U.S. EPA)
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Objects

Environmental.Analysis

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Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | alliquotAmount | volumeMeasure | | |
| | basis | gml:CodeType | The Basis of the Analysis | Wet, Dry, NA |
| | column | DiggsString | Analytical instrument column | |
| | dilutionFactor | double | The factor by which the specimen is diluted. | 2 |
| | labType | gml:CodeType | | Wet, Dry, NA |
| | timing | ArbitraryTimeSpan | Date and Time of Analysis | |
| | type | gml:CodeType | Environmental Analysis Type | initial, reanalysis |
| | results | Result | | |

Environmental.DetectionLimit

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| Status | Heading | Unit | Description | Example |
|--------|------------|------------------------------------|------------------------------------------------------------------------|-------------------|
| | constraint | gml:CodeType | Is this the Upper boundary of detection or Lower boundard of detection | Upper, Lower |
| | type | gml:CodeType | Detection Limit Type | method, reporting |
| | value | generalMeasureType | | |

Environmental.EnvironmentalTest

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Derived from [Kernel.LaboratoryTest](#)

A general test imported from SEDD v5.1 (<http://www.epa.gov/superfund/programs/clp/sedd.htm>)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|-----------------------------------|------------------------------------------------------------------------------------------------|-------------------|
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | labType | gml:CodeType | Fixed, Mobile | Fixed, Mobile etc |
| | analyses | Analysis | | |

Environmental.FieldReading

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Derived from [Monitoring.GenericMeasurement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | dateTime | UnifiedDateTime | | |
| | value | generalMeasureType | | |
| | position | gml:PointType | Position of the Detector at this point in time | |
| | isParameterReportable | boolean | | |
| | methodName | gml:CodeType | | |
| | parameterName | DiggsString | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|------------------------------------|-------------|---------|
| | parameterValue | generalMeasureType | | |
| | detectionLimits | DetectionLimit | | |
| | qualifier | Qualifier | | |

Environmental.FieldReadingGroup

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Derived from [Monitoring.GenericMeasurementGroup](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | type | gml:CodeType | The type of Measurement conducted | Head of Water, Wind Speed, Wind Direction, Position of Station |
| | measurements | GenericMeasurement | | |
| | fieldReadings | FieldReading | | |

Environmental.Filtration

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Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | phase | gml:CodeType | Fraction phase retained to create the Specimen | |
| | poreSize | lengthMeasure | | |

Environmental.Installation

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Derived from [Monitoring.Sensor](#)

A Well or other Installation.

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | type | gml:CodeType | Type of Sensor | |
| | detectors | Detector | | |
| | events | MonitoringEvent | Events that occurred during Monitoring | |
| | datum | InstallationDatum | A number of Datums associated with this Well. | |
| | details | InstallationDetail | A number of Details associated with this Well. | |
| | purging | Purge | Purging associated with this Well | |
| | waterLevelReadings | WaterLevelReading | WaterLevelReadings associated with this Well. | |

Environmental.InstallationDatum

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Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | hasCRS | EngineeringCRS | | |
| | startDateTime | UnifiedDateTime | | |
| | groundLevel | gml:PointType | | |
| | topOfCasing | gml:PointType | | |
| | transitionType | gml:CodeType | | |

Environmental.InstallationDetail

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Derived from [Kernel.Feature](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | innerDiameter | lengthMeasure | Inner Diameter of Detail | |
| | material | gml:CodeType | The Material this detail is made from | |
| | outerDiameter | lengthMeasure | Outer Diameter of Detail | |
| | perforationSize | lengthMeasure | Size of Perforation in this Pipe | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |

| Status | Heading | Unit | Description | Example |
|--------|---------|--------------|----------------|---------|
| | type | gml:CodeType | Type of Detail | |

Environmental.Purge

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Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | casingVolume | volumeMeasure | Volume of Casing | |
| | isProductContainerised | boolean | Was Product removed in containers? | |
| | isWaterContainerised | boolean | Was the water removed in containers? | |
| | isWaterTreated | boolean | Was the water treated in containers? | |
| | productContainersLabeled | boolean | Were Product containers labeled? | |
| | pumpingTiming | ArbitraryTimeSpan | Time taken actually pumping to perform this Purge. | |
| | purgeToDry | boolean | Was this Purge to dry? | |
| | timing | ArbitraryTimeSpan | Time taken to perform this Purge in its entirety (including disposal etc). | |
| | totalPurgeVolume | volumeMeasure | Total volume of water removed in this Purge. | |

| Status | Heading | Unit | Description | Example |
|--------|--------------------|-----------------------------------|------------------------------------------------|---------|
| | type | gml:CodeType | Type of Purge | |
| | waterLevelReadings | WaterLevelReading | WaterLevelReadings associated with this Purge. | |

Environmental.Qualifier

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|--------------|-------------------|--------------------------|
| | type | gml:CodeType | Type of Qualifier | Lab, Validated, Reported |
| | value | gml:CodeType | | |

Environmental.QuantitationLimit

[Contents](#)

DELETED

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
| | type | | | |
| | value | | | |

Environmental.Result

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

A test result

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | basis | gml:CodeType | The Basis of the Analysis | Wet, Dry, NA |
| | expectedParameterValue | generalMeasureType | What was this Result expected to be. | |
| | isDetected | boolean | Was this determinand detected. | |
| | isReportable | boolean | Is this parameter reportable | |
| | parameter | gml:CodeType | The Name of this Parameter | |
| | parameterValue | generalMeasureType | The reported value, with Significant Figures AS REPORTED. | |
| | type | gml:CodeType | Type of the Result | TRG, TIC |
| | detectionLimits | DetectionLimit | | |
| | qualifiers | Qualifier | | |

Environmental.SpectralAnalysis

[Contents](#)

Derived from [Environmental.Analysis](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | alliquotAmount | volumeMeasure | | |
| | basis | gml:CodeType | The Basis of the Analysis | Wet, Dry, NA |
| | column | DiggsString | Analytical instrument column | |
| | dilutionFactor | double | The factor by which the specimen is diluted. | 2 |
| | labType | gml:CodeType | | Wet, Dry, NA |
| | timing | ArbitraryTimeSpan | Date and Time of Analysis | |
| | type | gml:CodeType | Environmental Analysis Type | initial, reanalysis |
| | results | Result | | |
| | wavelength | lengthMeasure | | |

Environmental.TICResult

[Contents](#)

Derived from [Environmental.Result](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | basis | gml:CodeType | The Basis of the Analysis | Wet, Dry, NA |
| | expectedParameterValue | generalMeasureType | What was this Result expected to be. | |
| | isDetected | boolean | Was this determinand detected. | |
| | isReportable | boolean | Is this parameter reportable | |
| | parameter | gml:CodeType | The Name of this Parameter | |
| | parameterValue | generalMeasureType | The reported value, with Significant Figures AS REPORTED. | |
| | type | gml:CodeType | Type of the Result | TRG, TIC |
| | detectionLimits | DetectionLimit | | |
| | qualifiers | Qualifier | | |
| | percentMatch | percentMeasure | | |
| | retentionTime | ArbitraryTimeSpan | | |

Environmental.TakenWaterLevelReading

[Contents](#)

DELETED

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Environmental.UntakenWaterLevelReading

[Contents](#)

DELETED

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Environmental.WaterLevelReading

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| Mandatory | captureQualifier | gml:CodeType | | |
| | isDry | boolean | | |
| | isReportable | boolean | Is this result reportable? | |
| | method | gml:CodeType | | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|-----------------------------------------------|-----------------------------------------------|------------|
| | productType | gml:CodeType | What type of Product was found? | No Product |
| | timing | ArbitraryTimeSpan | Timing during which this measurement applies. | |
| | type | gml:CodeType | Type of Reading | |
| | depths | WaterLevelReadingMeasurements | | |
| | elevations | WaterLevelReadingMeasurements | | |

Environmental.WaterLevelReadingMeasurements

[Contents](#)

Reading the various Water Levels down a Well.

| Status | Heading | Unit | Description | Example |
|--------|----------------|--------------------------------|-----------------------------------------------------------------------------|---------------|
| | hasCRS | EngineeringCRS | If overriding the default "Depth Down Well" CRS, specify your new CRS here. | |
| | bottom | gml:PointType | Measured Position of Bottom of Well | |
| | cRSType | gml:CodeType | What type of CRS does that define? | Top Of Casing |
| | product | gml:PointType | Position of Product | |
| | water | gml:PointType | Position of Water | 4.5 |
| | waterCorrected | gml:PointType | Position of Water (Corrected for Monitoring Drift (Diver)) | 4.51 |

Environmental._____Method

[Contents](#)

DELETED in faovor of Specification

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
| | code | | | |
| | source | | | |
| | type | | | |
| | version | | | |

Geotechnical.AggregateAbrasionValue

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Aggregate Abrasion Value | 8.32 |

Geotechnical.AggregateCrushingValue

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Aggregate Crushing Value | 16.5 |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.AggregateImpactValue

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|-----------|----------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | aggregateImpactValueDry | double | Aggregate Impact Value (dry sample) | 15 |
| | aggregateImpactValueSoaked | double | Aggregate Impact Value (soaked sample) | |
| | numberOfBlows | integer | Number of hammer blows | |
| | particleDensity | ParticleDensity | Particle density | |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.AtterbergLimits

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

An Atterberg test, conducted in a Laboratory

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | liquidLimit | percentMeasure | Liquid Limit | |
| | particleDensity | ParticleDensity | Particle density. measured or, (#) assumed | 2.65 |
| | plasticLimit | percentMeasure | Plastic Limit | |
| | grading | Grading | Percentage passing a given sieve. Can also be used for reporting the percentage retained on the 425 micron sieve, by calculation. | |

Geotechnical.Backfill

[Contents](#)

Derived from [Kernel.Feature](#)

Backfill into the Hole

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | classifications | Classification | A classification code for either the lithological material or the backfill material within the context of the descriptive system. The code and the specification or standard that defines it are taken from a codelist. | |

Geotechnical.BlowsAndPenetration

[Contents](#)

Derived from [Kernel.DiggsObject](#)

Blows and How Much Penetration?

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | blows | integer | How many Blows? | 4 |
| | incrementNumber | integer | Increment Number of this set of Blows | 1 |
| | penetration | lengthMeasure | How much Penetration? | 100 |
| | torque | momentOfForceMeasure | How much Torque? | |
| | delays | DelayEvent | Delays occurring during this increment. | |

Geotechnical.CBR

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | moistureContent | MoistureContentMeasurement | Natural moisture content | 20 |
| | moistureContentInitial | MoistureContentMeasurement | Initial moisture content | 21 |
| | totalSwell | lengthMeasure | Amount of total swell recorded | 3.0 |
| | details | CBRDetail | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| | retainedSizeFractions | Grading | Weight percentage of material retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=20 uom=mm |

Geotechnical.CBRDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|---------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | density | DensityMeasurement | Density | |
| | moistureContentBase | MoistureContentMeasurement | Moisture content at base | 14 |
| | moistureContentTop | MoistureContentMeasurement | Moisture content at top | 15 |
| | swell | lengthMeasure | Amount of swell recorded | 3 |
| | testNumber | integer | CBR test number | 1 |
| | valueBase | double | CBR at base | 5.2 |
| | valueTop | double | CBR at top | 6.4 |

Geotechnical.CPTCone

[Contents](#)

Derived from [Kernel.Equipment](#)

A CPT cone, including it's associated detectors.

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | class | gml:CodeType | A generic classification for the equipment type, taken from a codeList. | |
| | modelNumber | DiggsString | The equipment manufacturers model number | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|---------|
| | serialNumber | DiggsString | The equipment serial number either as issued by the manufacturer, or the asset serial number used by the operator. | |
| | calibrationAuditTrail | Calibration | Provides an audit trail of the equipment calibration and include metaData.xsds pre-use, in-use and post-use calibrations. | |
| | detectors | Detector | | |

Geotechnical.Casing

[Contents](#)

Derived from [Geotechnical.ConstructionEvent](#)

Casing inserted into this Hole.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |

| Status | Heading | Unit | Description | Example |
|-----------|------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |
| | diameter | lengthMeasure | Diameter of this Casing. | |

Geotechnical.ChalkTest

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | calciumCarbonateContent | double | Chalk calcium carbonate content | 42 |
| | chalkCrushingValue | generalMeasureType | Chalk crushing value as BS 1377 Part 4 Cl 6 | 3.5 |
| | retainedSizeFractions | Grading | Weight percentage of material retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=10 uom=mm |
| | resultNumber | integer | Chalk crushing test number | 1 |
| | moistureContent | MoistureContentMeasurement | Chalk natural moisture content | 20 |
| | saturatedMoistureContent | MoistureContentMeasurement | Chalk saturated moisture content | 25 |

Geotechnical.Chiselling

[Contents](#)

Derived from [Geotechnical.ConstructionEvent](#)

Chiselling conducted in this Hole.

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |

| Status | Heading | Unit | Description | Example |
|--------|---------|--------------|--------------------------------------------------------------------------------------------------------------------------|---------|
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |

Geotechnical.Classification

[Contents](#)

The classification of this Object.

| Status | Heading | Unit | Description | Example |
|-----------|---------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Mandatory | system | gml:CodeType | The system used to describe the Object. This is derived from a codelist of category Layer System. | |
| Mandatory | code | gml:CodeType | The value of the legend code for the pictorial representation of the material within the context of the descriptive system. The code and the specification or standard that defines it are taken from a codelist. | |

Geotechnical.Compaction

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | compactionMouldType | gml:CodeType | Compaction mould type | category = Compaction Mould Type class = AGS code = Standard |
| | compactionTestType | gml:CodeType | Compaction test type | category = Compaction Test Type class = AGS code = 2.5kg |
| | dryDensityMax | geotechnicalDensityMeasure | Maximum dry density | 2.06 |
| | moistureContentAtMaxDryDensity | MoistureContentMeasurement | Moisture content at maximum dry density | 14 |
| | particleDensity | ParticleDensity | Particle density measured or assumed (#) | #2.65 |
| | retainedSizeFractions | Grading | Weight percentage of material retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=20 uom=mm |
| | details | CompactionDetail | | |

Geotechnical.CompactionDetail

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | density | DensityMeasurement | Density at CMPT_MC moisture content | 1.85 |
| | moistureContent | MoistureContentMeasurement | Moisture content | 7.8 |
| | pointNumber | integer | Compaction point number | 1 |
| | sources | Reference | The sources that this stage was conducted on. | |

Geotechnical.Component

[Contents](#)

A Component of this Object.

| Status | Heading | Unit | Description | Example |
|-----------|-----------|-----------------------------|--------------------------------------------------------------------------|---------|
| | abundance | DiggsString | How abundant is this Detail. TODO: Make "CodeOrMeasure" type. | |
| Mandatory | system | gml:CodeType | The system used to describe the Object. This is derived from a codelist. | |

| Status | Heading | Unit | Description | Example |
|-----------|---------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Mandatory | code | gml:CodeType | The value of the legend code for the pictorial representation of the material within the context of the descriptive system. The code and the specification or standard that defines it are taken from a codelist. | |

Geotechnical.CompressiveStrength

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------------|-------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------|
| | cohesionEffectiveStress | pressureMeasure | Cohesion intercept associated with phiEffectiveStress | 2 |
| | cohesionTotalStress | pressureMeasure | Cohesion intercept associated with phiTotalStress | 2 |
| | phiEffectiveStress | planeAngleMeasure | Angle of friction for effective shear strength triaxial test | 32 |
| | phiTotalStress | planeAngleMeasure | Angle of friction for total shear strength triaxial test | 32 |
| | triaxialTestType | gml:CodeType | Test type | category = Compressive Strength Test Type class = AGS code = UU |
| | undrainedShearStrength | pressureMeasure | Value of undrained shear strength | 75 |
| | uniaxialCompressiveStrength | pressureMeasure | Uniaxial compressive strength | 16.8 |
| | uniaxialTensileStrength | pressureMeasure | Uniaxial tensile strength (by Brazilian method etc) | 50.1 |
| | details | CompressiveStrengthDetail | | |

Geotechnical.CompressiveStrengthDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | bValue | double | Pore pressure parameter B at end of saturation stage | |
| | degreeSaturation | double | Degree of saturation at start of shearing | |
| | deviatorStressAtFailure | pressureMeasure | Deviator stress at failure | 360 |

| Status | Heading | Unit | Description | Example |
|--------|----------------------------------|--------------------------------------------|-------------------------------------------------------------|------------------|
| | diameter | lengthMeasure | Specimen diameter | 38 |
| | endConsolidationDensity | DensityMeasurement | Calculated dry density at end of consolidation stage | |
| | endConsolidationMoistureContent | MoistureContentMeasurement | End Consolidation Moisture Content | |
| | failureMode | gml:CodeType | Mode of failure | Brittle, plastic |
| | finalDensity | DensityMeasurement | | |
| | finalMoistureContent | MoistureContentMeasurement | Final Moisture Content | |
| | height | lengthMeasure | Initial specimen height | 76 |
| | initialDensity | DensityMeasurement | Initial Density | 1.84 |
| | initialMoistureContent | MoistureContentMeasurement | Initial Moisture Content | |
| | modulus | gml:CodeType | Modulus | 0.32 |
| | poissonsRatio | double | Poisson's ratio | 0.32 |
| | porewaterPressureAtFailure | pressureMeasure | Porewater pressure at failure | 60 |
| | porewaterPressureAtStartShearing | pressureMeasure | Porewater pressure at start of shear stage | 50 |
| | stageUndrainedShearStrength | pressureMeasure | Value of Undrained Shear Strength for the specimen or stage | 180 |
| | strainAtFailure | generalMeasureType | Strain at failure | 9 |
| | strainRate | double | Rate of strain during shearing | |
| | stressRate | double | Rate of stress increase during shearing | |
| | tensileStrength | double | Uniaxial tensile strength | |
| | testStageNumber | integer | Triaxial test or stage number | 1 |
| | timeToFailure | ArbitraryTimeSpan | Time to failure | 1 |
| | totalCellPressureAtFailure | pressureMeasure | Total cell pressure at failure | 100 |
| | sources | Reference | The sources that this stage was conducted on. | |

Geotechnical.Consolidation

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|----------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | assessedInsituStress | pressureMeasure | Assessed insitu vertical effective stress at depth of test specimen | 230 |
| | coefficientVolumeCompressibility | generalMeasureType | Coefficient of volume compressibility (mv) over mvStressRange | 0.36 |
| | compressionIndex | generalMeasureType | Compression index | |
| | consolidationTestType | gml:CodeType | Oedometer or Rowe, primary or secondary consolidation | category = Consolidation Test Type class = AGS code = Oed |
| | diameter | lengthMeasure | Test specimen diameter | 75 |
| | finalDegreeOfSaturation | double | Final degree of saturation | 99 |
| | finalDensity | DensityMeasurement | Final Density, both Dry and Bulk | 1.74 |

| Status | Heading | Unit | Description | Example |
|--------|---------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------|
| | finalMoistureContent | MoistureContentMeasurement | Final Moisture Content | Tested in natural condition, as received |
| | finalVoidsRatio | double | Final voids ratio | 0.79 |
| | height | lengthMeasure | Test specimen height | 19 |
| | initialDegreeOfSaturation | double | Initial degree of saturation | 98 |
| | initialDensity | DensityMeasurement | Initial Density, both Dry and Bulk | 1.75 |
| | initialMoistureContent | MoistureContentMeasurement | Initial Moisture Content | Tested in natural condition, as received |
| | initialVoidsRatio | double | Initial voids ratio | 0.80 |
| | mvStressRangeMax | pressureMeasure | Maximum value of defined stress range over which coeff of volume compressibility has been determined (mv) | 200 |
| | mvStressRangeMin | pressureMeasure | Minimum value of defined stress range over which coeff of volume compressibility has been determined (mv) | 100 |
| | particleDensity | ParticleDensity | Particle density | 2.65 |
| | preconsolidationPressure | pressureMeasure | Assessed preconsolidation pressure | |
| | recompressionIndex | generalMeasureType | Recompression index | |
| | saturationHeightChange | double | Height change of specimen on saturation as percentage of original height | +1.1 |
| | swellingIndex | generalMeasureType | Swelling index | |
| | swellingPressure | pressureMeasure | Swelling pressure | 100 |
| | details | ConsolidationDetail | | |

Geotechnical.ConsolidationDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | coefficientConsolidationIncrement | generalMeasureType | | |
| | coefficientSecondaryCompressionIncrement | generalMeasureType | Coefficient of secondary compression over stress increment | 0.12 |
| | coefficientTertiaryCompressionIncrement | generalMeasureType | Coefficient of tertiary compression over stress increment | |
| | coefficientVolumeCompressibilityIncrement | generalMeasureType | | |
| | stressIncrementEnd | pressureMeasure | Stress at end of stress increment/decrement | 400 |
| | stressIncrementNumber | integer | Oedometer stress increment number | 3 |
| | voidsRatioIncrementEnd | double | Voids ratio at end of stress increment | 0.62 |
| | voidsRatioIncrementStart | double | Voids ratio at start of increment | 0.80 |
| | voidsRatioPrimaryEnd | double | Voids ratio at the end of primary consolidation for that increment | 0.64 |
| | sources | Reference | The sources that this stage was conducted on. | |

Geotechnical.ConstructionEvent

[Contents](#)

Derived from [Kernel.Feature](#)

Defines a part of how a Hole is Constructed.

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |

| Status | Heading | Unit | Description | Example |
|--------|---------|--------------|--------------------------------------------------------------------------------------------------------------------------|---------|
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |

Geotechnical.CylindricalConstruction

[Contents](#)

Derived from [Geotechnical.ConstructionEvent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|-----------|-----------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |
| Mandatory | diameter | lengthMeasure | The Diameter of this | 2 |

Geotechnical.Density

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | details | DensityMeasurement | Density Values | |

Geotechnical.DensityMeasurement

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------|
| | bulkDensity | geotechnicalDensityMeasure | Bulk density | uom= datatype= value=1.66 |
| | dryDensity | geotechnicalDensityMeasure | Dry density | uom= datatype= value=1.06 |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural density | true |
| | particleDensity | ParticleDensity | Particle Density | uom= datatype= value=1.06 |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | Tested in natural condition, as received |

Geotechnical.Description

[Contents](#)

The Description of an Object within a descriptive system.

| Status | Heading | Unit | Description | Example |
|-----------|---------|-----------------------------|--------------------------------------------------------------------------------------------------|---------|
| | system | gml:CodeType | The system used to describe the layer. This is derived from a codelist of category Layer System. | |
| Mandatory | value | DiggsString | The value of this Description. | |

Geotechnical.Detail

[Contents](#)

Derived from [Kernel.Feature](#)

A Minor Detail found in this Hole

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|-----------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | top | gml:PointType | Measured depth or distance to the top of detail as measured along the hole path. | 1.3 |
| | abundance | DiggsString | How abundant is this Detail. TODO: Make "CodeOrMeasure" type. | |
| | base | gml:PointType | Measured depth or distance to the base of detail. If the depth is unknown because it occurs below the depth of investigation, set to the base of the hole. If detail is a point depthBase should be set equal to depthTop, or depthBase may be left blank. | 1.6 |
| | classifications | Classification | Classification of this detail | |
| | components | Component | Components of this Detail | |
| | descriptions | Description | A description of the Detail within the context of the descriptive system | |

Geotechnical.Dilatometer

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | bladeMembraneOrientation | DiggsString | The orientation of the blade membrane during the sounding. | facing retaining wall |
| | frictionReducerDiameter | generalMeasureType | The diameter of the friction reducer. | 100 |
| | frictionReducerLocation | generalMeasureType | The location of the friction reducer relative to the center of the dilatometer membrane. | mm |
| | membraneType | DiggsString | The thickness or type of thin flat dilatometer circular steel membrane used for testing. Typical types include metaData.xsd soft, standard or hard and very hard. Typical thickness for the standard membranes is 0.20 mm and 0.25 mm for the very hard membranes. | |
| | penetrationType | DiggsString | The method used to advance the dilatometer to test depth. Methods include metaData.xsd quasi-static thrust using drill rig or cone penetrometer truck, driven using an SPT hammer or, other methods of penetration. | |

| Status | Heading | Unit | Description | Example |
|--------|---------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------|
| | pushRodType | DiggsString | The type of pushing rods used for dilatometer penetration. Standard nomenclature can be used such as A-rod or N-rod | |
| | rateOfPenetration | velocityMeasure | The rate of penetration used to advance the flat dilatometer to test depth. | 20 |
| | thrustLoadCellRange | generalMeasureType | The range of the load cell used to measure the penetration thrust applied during blade insertion. | kN |
| | details | DilatometerDetail | | |

Geotechnical.DilatometerDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| Mandatory | depth | gml:PointType | Depth of measurement measured from the center of the dilatometer membrane. | |
| | horizontalCoefficientOfConsolidation | generalMeasureType | The horizontal coefficient of consolidation derived from the dissipation test data. | 1.2E-03 |
| | p0Reading | generalMeasureType | A-Reading corrected for the DA membrane stiffness at 0.05 mm expansion, the 0.05 mm expansion itself and the gauge pressure deviation from zero. This corrected pressure is referred to as p0. | |

| Status | Heading | Unit | Description | Example |
|--------|-----------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| | p1Reading | generalMeasureType | B-Reading corrected for the DB membrane stiffness at 1.10 mm expansion and the gauge pressure deviation from zero. This corrected pressure is referred to as p1. | |
| | p2Reading | generalMeasureType | C-Reading corrected for the DA membrane stiffness at 0.05 mm expansion and the gauge pressure deviation from zero. This corrected pressure is referred to as p2. | |
| | thrust | generalMeasureType | Thrust force required to advance the dilatometer and measured at the test depth. In accordance to ASTM, this force is exclusive of soil or other friction along the push rods. This thrust is referred to as qd. | |
| | timing | ArbitraryTimeSpan | The date this activity was completed | 2005-10-25 |

Geotechnical.Discontinuity

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|---------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | top | gml:PointType | Depth to top in hole, or distance to start on traverse, of discontinuity zone, or discontinuity | 1.3 |
| | apertureMeasurement | lengthMeasure | Discontinuity aperture measurement | 200 |
| | apertureObservation | DiggsString | Discontinuity aperture observation | |
| Mandatory | base | gml:PointType | Depth to base in hole, or distance to end on traverse, of discontinuity zone | 1.5 |
| | dipAngle | planeAngleMeasure | Dip of discontinuity | |
| | dipDirection | planeAngleMeasure | Dip direction of discontinuity | |
| | discontinuityNumber | integer | Discontinuity number | |
| | fractureSetNumber | DiggsString | Discontinuity set reference number | |
| | infillMaterial | DiggsString | Infilling material | |
| | jointRoughnessCoefficient | double | Joint Roughness Coefficient | |
| | persistence | double | Persistence measurement | |
| | planarity | DiggsString | Intermediate scale planarity (ISRM 1978) | |
| | roughness | DiggsString | Small scale roughness (ISRM 1978) | |
| | seepageRating | DiggsString | Seepage rating (ISRM 1978) | |
| | surfaceAppearance | DiggsString | Surface appearance | |
| | termination | DiggsString | Discontinuity termination (lower, upper) (ISRM 1978) | |
| | type | gml:CodeType | Type of discontinuity | |
| | wallStrength | generalMeasureType | Discontinuity wall strength | |
| | wallWeathering | DiggsString | Discontinuity wall weathering | |
| | waterFlow | volumeFlowRateMeasure | Water flow estimate | |
| | wavinessAmplitude | lengthMeasure | Large scale waviness, amplitude (ISRM 1978) | 1.2 |
| | wavinessWavelength | lengthMeasure | Large scale waviness, wavelength (ISRM 1978) | 1.3 |

Geotechnical.DrivenPenetrationTest

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |

| Status | Heading | Unit | Description | Example |
|--------|------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | anvilDamperType | DiggsString | Type of anvil damper | None |
| | catheadDiameter | lengthMeasure | The diameter of the cathead used to pull the rope attached to the hammer. Typical diameters range from 6 to 10 inches (150 to 250 mm). | |
| | coneAngle | planeAngleMeasure | Cone angle | 90 |
| | coneBaseDiameter | lengthMeasure | Cone base diameter | 43 |
| | depthTip | gml:PointType | Depth of cone if left in ground | 8 |
| | drivenPenetrationTestEquipmentType | gml:CodeType | Type of driven test equipment | SPT |
| | dropHeight | lengthMeasure | The hammer drop height for SPT penetration. The standard procedure requires a drop of 30 inches (0.76 m). | |
| | energy | DiggsString | A description of the equipment used to measure energy during the SPT penetration. | |
| | hammerMass | massMeasure | The hammer mass used to drive the split-spoon sampler. The standard mass is 140 lb (63.5 kg). | |
| | hammerRelease | gml:CodeType | The mechanism used to lift and drop the hammer or drive-weight assembly. Typical hammer release mechanisms | rope and cathead' 'trip' 'semi-automatic' 'automatic' |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| | | | include metaData.xsd the following: a) rope and cathead, b) trip, c) semi-automatic, d) automatic, or e) other. | |
| | hammerType | gml:CodeType | The type of hammer or drive-weight assembly used for the sampling and penetration. Typical hammer types include metaData.xsd the following: a) donut, b) safety, or c) other. | donut, safety |
| | rodExternalDiameter | lengthMeasure | The external diameter of the sampling rods used for SPT penetration. | |
| | rodType | DiggsString | The type of sampling rods used for SPT penetration. Standard nomenclature can be used such as A-rod or N-rod. | |
| | rodWeight | massMeasure | The drive rod weight per unit length - typically given per meter ('/m') or per foot('/ft'). | |
| | ropeNumberTurns | double | The number of rope turns on the cathead for performing the SPT. Maximum allowed number of turns is 2 1/4. | |
| | samplerInternalDiameter | lengthMeasure | The inside diameter of the split-spoon sampler. | |
| | samplerLength | lengthMeasure | The length of the split-spoon sampler barrel. Standard lengths are 18 inches (450 mm) and 24 inches (600 mm). | |

| Status | Heading | Unit | Description | Example |
|--------|---------------------|-------------------------------------|------------------------------------------------------------------------------------------|---------|
| | blowsAndPenetration | BlowsAndPenetration | A complex type giving the number of blows and penetration for each penetration increment | |

Geotechnical.ElongationIndex

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Aggregate Elongation Index | 12 |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.FlakinessIndex

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests on different size fractions of the same specimen | |
| | value | double | Aggregate Flakiness Index | 9 |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.FlameIonisationDetector

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | value | generalMeasureType | | |

Geotechnical.Flush

[Contents](#)

Derived from [Geotechnical.ConstructionEvent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |

| Status | Heading | Unit | Description | Example |
|-----------|-----------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------|
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |
| | colour | DiggsString | Colour of Flush Return | Brown |
| | return | percentMeasure | Flush Return | uom="20%" |

Geotechnical.FractureSpacing

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | top | gml:PointType | Depth to top in hole, or distance to start on traverse, of the zone | 1.3 |
| | averageFractureSpacing | lengthMeasure | Average Fracture Spacing (mm) over zone | |

| Status | Heading | Unit | Description | Example |
|--------|--------------------|-------------------------------|--------------------------------------------------------------------|---------|
| | base | gml:PointType | Depth to base in hole, or distance to end on traverse, of the zone | 1.4 |
| | fractureSetNumber | DiggsString | Fracture set reference number | |
| | fracturesPerMetre | DiggsString | Fracture Index over zone (fractures per metre) | |
| | maxFractureSpacing | lengthMeasure | Maximum Fracture Spacing (mm) over zone | |
| | minFractureSpacing | lengthMeasure | Minimum Fracture Spacing (mm) over zone | |
| | discontinuities | Discontinuity | | |

Geotechnical.FrostSusceptibility

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------------------|------------------------------------------------------------------------------------------------|---------|
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | density | DensityMeasurement | Density | 1.96 |
| | heaveMean | generalMeasureType | Mean heave | 13.2 |
| | details | FrostSusceptibilityDetail | | |
| | moistureContent | MoistureContentMeasurement | Moisture Content | 112 |

Geotechnical.FrostSusceptibilityDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | heave | generalMeasureType | Frost heave | 12.5 |
| | resultNumber | integer | Result number to report each of the results on the multiple subspecimens that constitute a single test | 1 |

Geotechnical.Grading

[Contents](#)

Derived from [Kernel.DiggsBase](#)

A Particle Size Distributing Grading

| Status | Heading | Unit | Description | Example |
|-----------|-----------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| Mandatory | percentPassing | generalMeasureType | Amount of sample passing thru this sieve | 3.0 |
| | sieveSize | lengthMeasure | Size of this sieve | 10.0 |
| | sieveNumber | gml:CodeType | Sieve Number of This Sieve | 40 |
| | type | gml:CodeType | The type of grading measurement conducted | WS, DS, PIP, HYDRO, Laser Granulometer |

Geotechnical.HandVane

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |

| Status | Heading | Unit | Description | Example |
|--------|------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | peakShearStrength | pressureMeasure | Hand vane undrained shear strength (peak) | 40 |
| | remouldedShearStrength | pressureMeasure | Hand vane undrained shear strength (remoulded) | 15 |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests at the same location and date, each of which will have the same hole reference information | 2 |

Geotechnical.Hole

[Contents](#)

Derived from [Kernel.Location](#)

An Exploratory Hole

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | gml:PointType | The depth of the top of this observation | 1.3 |
| | base | gml:PointType | The depth of the base of this observation | 1.5 |
| | type | gml:CodeType | The reason these Samples have been created | |
| | insituTesting | Test | InSitu testing conducted on this hole | |
| | purpose | DiggsString | Freeform description of primary purpose of the hole | |
| | backfills | Backfill | Backfill. | |
| | construction | ConstructionEvent | | |
| | discontinuities | Discontinuity | | |
| | fractureSpacing | FractureSpacing | | |
| | layerSystems | LayerSystem | Descriptions of LayerSystems associated with this item of data | |
| | locations | Location | Descriptions of locations associated with this item of data | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------|---------|
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | pumping | Pumping | | |
| | sensors | Sensor | A number of Sensors can belong to one MonitoringLocation (semantically each Sensor the DataLogger is monitoring) | |

Geotechnical.InsituCBR

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |

| Status | Heading | Unit | Description | Example |
|--------|-------------------|--------------------------------------------|-----------------------------------------|---------|
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | penetration | lengthMeasure | The penetration at the quoted CBR value | |
| | seatingForce | forceMeasure | Seating force | 10 |
| | surchargePressure | generalMeasureType | Surcharge Pressure relating to test | |
| | value | double | CBR value | 1.2 |
| | moistureContent | MoistureContentMeasurement | Moisture content relating to test | 25 |

Geotechnical.InsituDensity

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |

| Status | Heading | Unit | Description | Example |
|--------|------------------|--------------------------------------------|---------------------------------------------------------|---------|
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | density | DensityMeasurement | In situ density | 1.86 |
| | moistureContent | MoistureContentMeasurement | Moisture Content | 1.86 |

Geotechnical.InsituPermeability

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|------------------------------------------|-----------------------------------------------------------------------------|--------------------------------|
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | averageFlow | volumeFlowRateMeasure | Average flow during test stage | 2.3 |
| | depthWaterAssumed | generalMeasureType | Depth to assumed standing water level | 10.0 |
| | depthWaterPrior | generalMeasureType | Depth to water in borehole or piezometer immediately prior to test | 10.60 |
| | depthWaterStart | generalMeasureType | Depth to water at start of test | 5.40 |
| | diameterCasing | lengthMeasure | Diameter of standpipe or casing | 0.019 |
| | diameterTestZone | lengthMeasure | Diameter of test zone | 0.150 |
| | permeability | velocityMeasure | Permeability | 5E-9 |
| | stageNumber | integer | Stage number of multistage packer test | 1 |
| | totalWaterHeadApplied | generalMeasureType | Applied total head of water during test stage at centre of packer test zone | 20.5 |
| | transmissivity | volumeFlowRateMeasure | Transmissivity | |
| | type | gml:CodeType | Type of test | Rising, Falling, Constant Head |
| | details | InsituPermeabilityDetail | Permeability Details for this test. | |

Geotechnical.InsituPermeabilityDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | depthWater | generalMeasureType | Depth to water below ground | 12.5 |
| | flowRate | volumeFlowRateMeasure | Pumping rate from hole | 0.8 |
| | timing | ArbitraryTimeSpan | Date and time of reading | 2005-10-24T14:15:00 |

Geotechnical.InsituTest

[Contents](#)

Derived from [Kernel.Test](#)

An Test conducted InSitu

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |

Geotechnical.LaboratoryPocketPenetrometer

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | depth | gml:PointType | Depth to top of test | 0.50 |
| | value | MeasureOrString | Pocket penetrometer undrained shear strength | 40 |

Geotechnical.LaboratoryVelocity

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | dynamicElasticModulus | generalMeasureType | Dynamic Elastic Modulus | 20 |
| | pWaveVelocity | generalMeasureType | P-wave velocity | 3000 |
| | shearModulus | generalMeasureType | Shear modulus derived from ROCK_SWAV | 8 |
| | sWaveVelocity | generalMeasureType | S-wave velocity | 1800 |

Geotechnical.Layer

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

A DIGGS Layer IdentifiedFeature

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| Mandatory | top | gml:PointType | Measured depth or distance to the top of Layer as measured along the hole path. | 1.3 |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | base | gml:PointType | Measured depth or distance to the base of Layer. If the depth is unknown because it occurs below the depth of investigation, set to the base of the hole. If Layer is a point depthBase should be set equal to depthTop, or depthBase may be left blank. | 1.6 |
| | baseBoundary | LayerBoundary | A description of the Boundary at the bottom of this layer | |
| | reference | DiggsString | Stratum Reference | A |
| | classifications | Classification | Classification of this Layer | |
| | components | Component | Components of this Layer | |
| | descriptions | Description | A description of the Layer within the context of the descriptive system | |

Geotechnical.LayerBoundary

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | description | DiggsString | Freeform description of the nature of the boundary | |
| | dipAngle | generalMeasureType | The inclination angle of the boundary surface, as measured downward from the horizontal. | |
| | dipDirection | generalMeasureType | The direction of the true dip of the boundary surface, as measured clockwise with respect to true north. | |
| | distinctness | DiggsString | A code value that defines how distinctly the boundary between layers is defined, as governed by both the contrast between adjacent layers and by the width of the boundary. This is a complex type, | |
| | methodOfDetermination | DiggsString | A string identifying the means by which the boundary was observed | |
| | origin | DiggsString | A code value that defines the specific nature or origin of the boundary. This is a complex type. | |

| Status | Heading | Unit | Description | Example |
|--------|------------|-----------------------------|---------------------------------------------------------------------------------------------------|---------|
| | topography | DiggsString | A code value that defines the shape of the boundarysurface between layers. This is a complex type | |

Geotechnical.LayerSystem

[Contents](#)

Derived from [Kernel.DiggsObject](#)

A LayerSystem for Description and Classification of strata within a hole.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | type | gml:CodeType | What type of LayerSystem is this? | Engineering Geology |
| | details | Detail | | |
| | layers | Layer | | |

Geotechnical.LosAngelesAbrasion

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-----------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | losAngelesAbrasionCoefficient | double | Los Angeles abrasion coefficient | 15 |
| | losAngelesAbrasionPercentageWear | double | Los Angeles abrasion percentage of wear | |
| | losAngelesAbrasionUniformityOfWearRatio | double | Los Angeles abrasion uniformity of wear ratio | |
| | abrasiveChargeGrading | Grading | Grading of the abrasive charge | |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.MCV

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | calibrationLineIntercept | double | MCV-moisture content relationship test calibration line intercept | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| | calibrationLineSensitivity | double | MCV-moisture content relationship test calibration line sensitivity | |
| | calibrationLineSlope | double | MCV-moisture content relationship test calibration line slope | |
| | precalibratedMoistureConditionValue | DiggsString | MCV precalibrated value as BS 1377 Part 4 | 10 |
| | details | MCVDetail | | |
| | moistureContent | MoistureContentMeasurement | Moisture Content | |
| | retainedSizeFractions | Grading | Weight percentage of material retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=20 uom=mm |

Geotechnical.MCVDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|---------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | density | DensityMeasurement | Bulk density related to the MCVT_RELK MCV | 2.0 |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | true |
| | moistureConditionValue | double | MCV value at MCVT_MC moisture content | 12.3 |
| | moistureConditionValueSaturated | double | MCV value for saturated material | |
| | moistureContent | MoistureContentMeasurement | Moisture Content | |

| Status | Heading | Unit | Description | Example |
|--------|---------------------------|---------------------------|------------------------------------------------------------------------------------------------------------|---------|
| | resultNumber | integer | MCV result number when multiple MCVs are determined at different moisture contents for a relationship test | 1 |
| | strongerThanPrecalibrated | boolean | If the measured MCV is stronger than the precalibrated value this field is true. | true |
| | sources | Reference | The sources that this stage was conducted on. | |

Geotechnical.MoistureContent

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|--------------------------------------------|------------------------------------------------------------------------------------------------|---------|
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | details | MoistureContentMeasurement | Moisture Content | |

Geotechnical.MoistureContentMeasurement

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------|--------------------------------|------------------------------------------------------------------------------------|---------|
| | result | percentMeasure | Moisture Content | 14 |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content | true |

Geotechnical.NonCylindricalConstruction

[Contents](#)

Derived from [Geotechnical.ConstructionEvent](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | timing | ArbitraryTimeSpan | Timing of this event. | 2007-02-24T12:00 |
| Mandatory | top | gml:PointType | Depth to top of section | 0 |
| | base | gml:PointType | Depth to base of section | 1.6 |
| | stability | DiggsString | Stability | Stable during excavation |
| | type | gml:CodeType | A code identifying the system used to describe the construction type or event. Codelist of category Construction System. | |
| Mandatory | length | lengthMeasure | The length of this Trialpit | 5 |
| | shoring | DiggsString | Shoring/Support Used | Waling |
| Mandatory | width | lengthMeasure | The width of this Trialpit | 2 |

Geotechnical.ParticleSize

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | clayFraction | double | The percentage of clay by weight | 12.3 |
| | coefficientOfCurvature | double | A coefficient describing the degree of curvature of the grain size distribution. | |
| | coefficientOfUniformity | double | The coefficient of uniformity | |
| | d10 | generalMeasureType | Grain diameter corresponding to 10 percent passing | 2.34 |
| | d30 | generalMeasureType | Grain diameter corresponding to 30 percent passing | 4.76 |
| | d50 | generalMeasureType | Grain diameter corresponding to 50 percent passing | 10.32 |
| | d60 | generalMeasureType | Grain diameter corresponding to 60 percent passing | 23.65 |
| Mandatory | details | Grading | A complex type that defines a series of particle size and percentage passing data pairs | |

Geotechnical.Permeability

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|---------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | degreeOfSaturationFinal | double | Final degree of saturation | 98 |
| | degreeOfSaturationInitial | double | Initial degree of saturation | 72 |
| | diameter | lengthMeasure | Diameter of test sample | 102 |
| | finalDensity | DensityMeasurement | Final density (bulk and dry) of test sample | 1.87 |
| | height | lengthMeasure | Length of test sample | 200 |

| Status | Heading | Unit | Description | Example |
|--------|------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| | initialDensity | DensityMeasurement | Initial Density (dry and bulk) of test sample | 2.24 |
| | meanEffectiveStress | pressureMeasure | Mean effective stress at which permeability measured (when measured in triaxial cell). | 112 |
| | particleDensity | ParticleDensity | Particle density, measured or (#) assumed | 2.65 |
| | resultNumber | integer | Permeability result number if it is necessary to report multiple results for the same test | 2 |
| | value | generalMeasureType | Coefficient of permeability | 4E-6 |
| | voidsRatio | double | Voids ratio of test sample | 0.37 |
| | moistureContentInitial | MoistureContentMeasurement | Initial Moisture Content | |
| | retainedSizeFractions | Grading | Weight percentage of material too coarse for testing retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=20 uom=mm |

Geotechnical.PhotoIonisationDetector

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | value | generalMeasureType | | |

Geotechnical.PocketPenetrometer

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |

| Status | Heading | Unit | Description | Example |
|-----------|------------------|-----------------------------------|---------------------------------------------------------------------------|-----------------------------|
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | value | MeasureOrString | Pocket penetrometer undrained shear strength | 40 |

Geotechnical.PointLoad

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |

| Status | Heading | Unit | Description | Example |
|--------|------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | pointLoadSizeCorrected | generalMeasureType | Size corrected point load index (Is 50) | 2.5 |
| | pointLoadTestType | gml:CodeType | Point load test type (A, D, L or P) | A+L (see Appendix 1) |
| | pointLoadUncorrected | generalMeasureType | Uncorrected point load (Is) | 2.3 |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests at the same location, depth and date, each of which will have the same hole reference information | |
| | moistureContent | MoistureContentMeasurement | Moisture Content | |

Geotechnical.PolishedStoneValue

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |

| Status | Heading | Unit | Description | Example |
|-----------|-------------|-----------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Aggregate Polished Stone Value | 67 |

Geotechnical.PorewaterPressureMeasure

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|------------|---------------------------------|-------------|---------|
| | cellNumber | integer | | |
| | pressure | pressureMeasure | | |

Geotechnical.Porosity

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Rock porosity | 17 |
| | density | DensityMeasurement | Density | |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests at the same location, depth and date, each of which will have the same hole reference information | |

Geotechnical.Pressuremeter

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | diameterUninflated | lengthMeasure | Uninflated diameter of pressuremeter | 82.9 |
| | type | gml:CodeType | Pressuremeter type | SBP |
| | details | PressuremeterDetail | | |

Geotechnical.PressuremeterDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|--------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|------------|
| | remarks | Remark | Any general remarks about this Object | |
| | testNumber | DiggsString | Reference number of test. To be used for linking to this test from the pressuremeterDetailLoops table | 1 |
| Mandatory | top | gml:PointType | Depth of test | 2.70 |
| | base | gml:PointType | | |
| | dateTimeCompleted | UnifiedDateTime | The date this activity was completed | 2005-10-25 |
| | estimatedHorizontalStressAxis1 | pressureMeasure | Estimated horizontal stress, axis 1 or volumetric | 700 |
| | estimatedHorizontalStressAxis2 | pressureMeasure | Estimated horizontal stress, axis 2 | 700 |
| | estimatedHorizontalStressAxis3 | pressureMeasure | Estimated horizontal stress, axis 3 | 700 |
| | estimatedHorizontalStressAxisAverage | pressureMeasure | Estimated horizontal stress, average | 700 |
| | initialModulusAxis1 | pressureMeasure | Initial shear modulus axis 1 or volumetric pressuremeter modulus | 70 |
| | initialModulusAxis2 | pressureMeasure | Initial shear modulus, axis 2 | 70 |
| | initialModulusAxis3 | pressureMeasure | Initial shear modulus, axis 3 | 70 |
| | initialModulusAxisAverage | pressureMeasure | Initial shear modulus, average | 70 |
| | undrainedStrengthAxis1 | pressureMeasure | Undrained shear strength, axis 1 or volumetric | 420 |
| | undrainedStrengthAxis2 | pressureMeasure | Undrained shear strength, axis 2 | 420 |
| | undrainedStrengthAxis3 | pressureMeasure | Undrained shear strength, axis 3 | 420 |
| | undrainedStrengthAxisAverage | pressureMeasure | Undrained shear strength, average | 420 |
| | limitPressureAxis1 | pressureMeasure | Limit pressure, axis 1 or volumetric | 3400 |
| | limitPressureAxis2 | pressureMeasure | Limit pressure, axis 2 | 3400 |
| | limitPressureAxis3 | pressureMeasure | Limit pressure, axis 3 | 3400 |
| | limitPressureAxisAverage | pressureMeasure | Limit pressure, average | 3400 |
| | frictionAngleAxis1 | planeAngleMeasure | Angle of friction, axis 1 or volumetric | 39 |
| | frictionAngleAxis2 | planeAngleMeasure | Angle of friction, axis 2 | 39 |
| | frictionAngleAxis3 | planeAngleMeasure | Angle of friction, axis 3 | 39 |
| | frictionAngleAxisAverage | planeAngleMeasure | Angle of friction, average | 39 |
| | dilationAngleAxis1 | planeAngleMeasure | Angle of dilation, axis 1 or volumetric | 10 |

| Status | Heading | Unit | Description | Example |
|--------|---------------------------------------|------------------------------------------|-------------------------------------------------------------------------|---------|
| | dilationAngleAxis2 | planeAngleMeasure | Angle of dilation, axis 2 | 10 |
| | dilationAngleAxis3 | planeAngleMeasure | Angle of dilation, axis 3 | 10 |
| | dilationAngleAxisAverage | planeAngleMeasure | Angle of dilation, average | 10 |
| | frictionAngleConstantVolume | planeAngleMeasure | Angle of friction at constant volume (*cv) used | 35 |
| | isMeasuredFrictionAngleConstantVolume | boolean | Angle of friction at constant volume measures (True) or assumed (False) | |
| | coefficientConsolidation | generalMeasureType | Horizontal coefficient of consolidation from holding | |
| | loops | PressuremeterDetailLoops | | |

Geotechnical.PressuremeterDetailData

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|--------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | sequenceNumber | integer | Sequence number of the data point within this unload/reload loop | 1 |
| | volumeChange | generalMeasureType | Volume change in test cell | 2.6 |
| | totalPressureAxis1 | pressureMeasure | The total pressure on Axis 1 | 1.0 |
| | totalPressureAxis2 | pressureMeasure | The total pressure on Axis 2 | 1.0 |
| | totalPressureAxis3 | pressureMeasure | The total pressure on Axis 3 | 1.0 |
| | totalPressure | pressureMeasure | The total pressure overall | 1.0 |
| | porePressureA | pressureMeasure | Pore Pressure A | 1.0 |
| | porePressureB | pressureMeasure | Pore Pressure B | 1.0 |
| | displacementAxis1 | lengthMeasure | Arm (pair) 1 displacement | 1.0 |

| Status | Heading | Unit | Description | Example |
|--------|-------------------|-------------------------------|---------------------------|---------|
| | displacementAxis2 | lengthMeasure | Arm (pair) 2 displacement | 1.0 |
| | displacementAxis3 | lengthMeasure | Arm (pair) 3 displacement | 1.0 |

Geotechnical.PressuremeterDetailLoops

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | loopNumber | integer | Unload/Reload loop number | 1 |
| | stressBottomLoop | generalMeasureType | Stress level at the bottom of the unload/reload loop | |
| | stressClosureLoop | generalMeasureType | Stress level at the top closure of the unload/reload loop | |
| | unloadReloadModulusAxis1 | pressureMeasure | Unload/reload shear modulus, axis 1 or omnidirectional | 70 |
| | unloadReloadModulusAxis2 | pressureMeasure | Unload/reload shear modulus, axis 2 | 70 |
| | unloadReloadModulusAxis3 | pressureMeasure | Unload/reload shear modulus, axis 3 | 70 |
| | unloadReloadModulusAxisAverage | pressureMeasure | Unload/reload shear modulus, average | 70 |
| | details | PressuremeterDetailData | | |

Geotechnical.ProgressRecord

[Contents](#)

Derived from [Kernel.DiggsObject](#)

Progress within a Hole.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | dateTime | UnifiedDateTime | DateTime this ProgressRecord occurred. | |
| | casingBase | gml:PointType | Depth to Base of Casing | 0 |
| | holeBase | gml:PointType | Depth to Base of Hole | 0 |
| | waterTop | gml:PointType | Depth to top of Water | 0 |
| | other | ValueOf | Other associated values | |

Geotechnical.RedoxPotential

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | pH | double | pH | 7.0 |
| | value | generalMeasureType | Redox potential | 400 |

Geotechnical.RelativeDensity

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | dryDensityMax | DensityMeasurement | Maximum dry density as BS 1377 part 4 cl 4 | 2.15 |
| | dryDensityMin | DensityMeasurement | Minimum dry density as BS 1377 part 4 cl 4 | 1.65 |
| | retainedSizeFractions | Grading | Weight percentage of material retained on a given sieve size or sizes, converted to a percentage passing the given sieve size. | percentPassing=25 uom=% sieveSize=2 uom=mm |

Geotechnical.Resistivity

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | value | generalMeasureType | Result | 2000 |

Geotechnical.SchmidtReboundHardness

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | hammerAxisAngle | planeAngleMeasure | Orientation of the hammer axis in the test. | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | perparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | schmidtHardnessValue | double | Schmidt hardness value | |
| | specimenClampingMethod | DiggsString | Method of clamping sample | |

Geotechnical.ShearBox

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | peakCohesion | generalMeasureType | Peak cohesion intercept | 5 |
| | peakFrictionAngle | planeAngleMeasure | Peak angle of friction | 26.5 |
| | residualCohesion | generalMeasureType | Residual cohesion intercept | 1 |
| | residualFrictionAngle | planeAngleMeasure | Residual angle of friction | 13.0 |
| | shearBoxTestType | gml:CodeType | Test type e.g. small shear box, large shear box, ring shear | Small shear box |
| | details | ShearBoxDetail | | |

Geotechnical.ShearBoxDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|--------|------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | density | DensityMeasurement | Density (bulk and dry) | 1.63 |
| | displacementRate | generalMeasureType | Displacement rate | 0.1 |
| | normalStress | pressureMeasure | Shear box normal stress | 100 |
| | particleDensity | ParticleDensity | Particle density. measured or, (#) assumed | 2.65 |
| | peakDisplacement | generalMeasureType | Displacement at peak shear strength | 2.35 |
| | peakShearStress | pressureMeasure | Shear box peak shear stress | 65.5 |
| | residualDisplacement | generalMeasureType | Displacement at residual shear strength | 12.41 |
| | residualShearStress | pressureMeasure | Shear box residual shear stress | 47.2 |
| | stageNumber | integer | Shear box stage number | 1 |
| | voidsRatioInitial | double | Initial voids ratio | 0.5 |
| | moistureContentFinal | MoistureContentMeasurement | Final Moisture Content | 0.5 |
| | moistureContentInitial | MoistureContentMeasurement | Initial Moisture Content | 0.5 |
| | sources | Reference | The sources that this stage was conducted on. | |

Geotechnical.ShoreHardness

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | numberOfTests | integer | Number of tests conducted | 20 |
| | orientationToBedding | generalMeasureType | Orientation of the test surface relative to bedding. | 90 |
| | shoreHardnessValue | double | Average Shore hardness value | 29.7 |

Geotechnical.Shrinkage

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | linearShrinkage | double | Linear shrinkage | 11 |
| | percentPassing425 | double | Percentage passing 425 micron sieve. Can also be used for reporting the percentage retained on the 425 micron sieve, by calculation. | 12 |
| | shrinkageLimit | double | Shrinkage limit | 17 |

Geotechnical.SlakeDurability

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|---------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | fragmentDescriptionPassing | DiggsString | Appearance of fragments passing through the drum | Fine particles in suspension with thin layer of larger particles in base of trough. |
| | fragmentDescriptionRetained | DiggsString | Appearance of fragments retained in the drum | All fragments showing partial disintegration |
| | slakeDurabilityIndexFirstCycle | double | Slake durability Index (first cycle) | 50.5 |
| | slakeDurabilityIndexSecondCycle | double | Slake durability Index (second cycle) | 23.2 |
| | slakingFluid | DiggsString | Nature and temperature of slaking fluid. | Tap water at 20degC |

Geotechnical.Soundness

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------|
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests on different size fractions of the same specimen | 1 |
| | soundnessValue | double | Soundness value | 95 |
| | testSolution | DiggsString | The saturated solution used for the test | Magnesium Sulphate |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.StandardPenetrationTest

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | basketWasUsed | boolean | The use of a basket retainer is permitted and should be noted. Values would be 'true' or 'false'. | |
| | blowsForSeatingDrive | integer | Number of blows for seating drive | 14 |
| | blowsForTestDrive | integer | Number of blows for main test drive | 35 |
| | delay | generalMeasureType | Duration of delay before increment started | 0000 |
| | depthCasing | gml:PointType | Casing depth at time of test | 12.00 |
| | linerWasUsed | boolean | The use of a liner to produce a constant inside diameter is permitted and should be noted. Values would be 'true' or 'false'. | |
| | nValue | integer | SPT 'N' value | 35 |
| | reportedTestResult | DiggsString | Reported result | 6,8/8,9,9,9 N=35 |
| | selfWeightPenetration | lengthMeasure | Amount of penetration of the tool under its own weight | 25 |
| | torque | momentOfForceMeasure | Maximum torque required to rotate rods | 75 |
| | totalPenetration | lengthMeasure | Total penetration for seating drive and test drive | 450 |
| | type | gml:CodeType | Type of test | S |

| Status | Heading | Unit | Description | Example |
|--------|---------------------|-------------------------------------|------------------------------------------------------------------------------------------|---------|
| | blowsAndPenetration | BlowsAndPenetration | A complex type giving the number of blows and penetration for each penetration increment | |

Geotechnical.StaticConeTest

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |

| Status | Heading | Unit | Description | Example |
|--------|------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | distanceTipToSleeve | lengthMeasure | The distance between the tip and the center of the friction sleeve. A unit of measure is required in the uom attribute. | |
| | frictionReducer | DiggsString | A description of the type, size and location of the friction reducer behind the base of the cone should be reported if used | |
| | frictionSleeveArea | generalMeasureType | The surface area of the friction sleeve located immediately behind the penetrometer tip. Typical values are 150 cm ² for the 10 cm ² and 200 cm ² for the 15 cm ² (cm ² = square centimetres). | |
| | netAreaRatioCorrection | double | The correction necessary to adjust the penetration cone resistance due to penetration water pressures acting behind the cone tip. | |
| | penetrationRate | generalMeasureType | The rate of advance of the penetrometer. Rate should be between 20 +/- 5 mm/second (uom="mm/s"). | |
| | piezoconeType | gml:CodeType | The type of Piezocone is defined in part by the position of the filter element. | |
| | poreCapacity | generalMeasureType | The capacity of the pore pressure load cell. | |
| | porousElementType | gml:CodeType | The type of material used as porous filter element. The following materials are typically used: a) plastic, b) sintered bronze, c) sintered steel, d) ceramic, or e) other. This value is extendable using Other: xx. | |
| | pushRodType | DiggsString | The type of pushing rods used for CPT penetration. Standard nomenclature can be used such as A-rod or N-rod | |
| | saturationFluid | gml:CodeType | The fluid used to saturate the porous filter element. The following deaired fluids are typically used: a) water, b) glycerin, c) silicon oil, or d) other This value is extendable using Other: xx. | |
| | saturationMethod | DiggsString | A description of the procedure used to saturate the porous filter element. | |
| | sleeveCapacity | generalMeasureType | The capacity of the sleeve load cell. | |
| | surfaceCapacity | generalMeasureType | The capacity of the surface load cell. | |
| | tipApexAngle | planeAngleMeasure | The apex angle of the conical point of the penetrometer tip. The standard value is 60 degrees. (uom="deg"). | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------|
| | tipArea | generalMeasureType | The conical base area of the penetrometer tip. Typical values are 10 cm2 and 15 cm2 (cm2 = square centimetres). | |
| | tipCapacity | generalMeasureType | The capacity of the tip load cell. | |
| | type | gml:CodeType | The type of static cone penetrometer used for testing. | |
| | tabularData | Table | Tabular Data | |

Geotechnical.Suction

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

A DIGGS Suction object

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

| Status | Heading | Unit | Description | Example |
|--------|--------------|------------------------------------|------------------------------------------------------------------------------------------------|---------|
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | suctionValue | generalMeasureType | Suction value | 50 |

Geotechnical.TenPercentFines

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |

| Status | Heading | Unit | Description | Example |
|--------|--------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------|---------|
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | resultNumber | integer | Result number, if it is required to carry out multiple tests on different size fractions of the same specimen | 1 |
| | tenPercentFinesDry | generalMeasureType | 10% fines values on dry aggregate | 70 |
| | tenPercentFinesWet | generalMeasureType | 10% fines value on wet aggregate | 60 |
| | particleSizeDetail | Grading | Particle size distribution of the tested specimen | |

Geotechnical.Vane

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |

| Status | Heading | Unit | Description | Example |
|--------|------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | diameter | lengthMeasure | The diameter of the four-bladed vane. | 30 |
| | height | lengthMeasure | The height of the four-bladed vane. | 60 |
| | shape | DiggsString | The shape of the four-bladed vane used for testing. Available vane shapes include metaData.xsd: a) rectangular, b) single tapered, c) double tapered, or d) other. | rectangular |
| | torqueDevice | DiggsString | The device used to apply torque to the vane. For example, geared drive, torque wrench, etc. | geared drive |
| | type | DiggsString | The type of field vane used for testing. For example, Vane Borer, miniature, etc. | vane borer |
| | details | VaneDetail | | |

Geotechnical.VaneDetail

[Contents](#)

Derived from [Kernel.DiggsBase](#)

| Status | Heading | Unit | Description | Example |
|-----------|------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| Mandatory | depth | gml:PointType | Depth of vane test | 13.50 |
| | peakShearStrength | generalMeasureType | Vane test peak shear strength result | |
| | remouldedShearStrength | generalMeasureType | Vane test remoulded shear strength result | 45 |

| Status | Heading | Unit | Description | Example |
|--------|--------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| | resultNumber | integer | Result number, if it is required to carry out multiple tests at the same location and date, each of which will have the same hole reference information | 1 |
| | rotationRate | generalMeasureType | The rate at which the vane is rotated during shear testing. The standard rate is 0.1 degree per second with an acceptable range of 0.05 to 0.2 degree/second. | 0.2 degree/second |
| | timing | ArbitraryTimeSpan | The date this activity was completed | 2005-10-25 |

Geotechnical.WaterAbsorption

[Contents](#)

Derived from [Kernel.LaboratoryTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|-----------------------------|--------------------------------------------------------------------------------------|---------|
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |
| | value | double | Aggregate water absorption | 2.6 |
| | voidIndex | double | Void index | |

Geotechnical.WaterStrike

[Contents](#)

Derived from [Geotechnical.InsituTest](#)

Struck water during construction of the Hole.

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | base | gml:PointType | Depth to Base of test | 0.55 |
| | number | integer | Test Number | 1 |
| | stratumReference | DiggsString | Stratum reference shown on trial pit or traverse sketch | 1 |

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------|---------|
| | top | gml:PointType | Depth to top of test | 0.50 |
| | progressRecords | ProgressRecord | Progress down the Hole by time. | |
| | depthSealed | gml:PointType | Depth this Waterstrike was sealed. | 0 |

Kernel.Address

[Contents](#)

Ported from the DIGGSML v0.5 schema

| Status | Heading | Unit | Description | Example |
|--------|------------|-----------------------------|-------------------------------------|---------|
| | name | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | street | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | city | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | state | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | province | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | county | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | country | DiggsString | Ported from the DIGGSML v0.5 schema | |
| | postalCode | DiggsString | Ported from the DIGGSML v0.5 schema | |

Kernel.AssociatedFile

[Contents](#)

A reference to an external file.

| Status | Heading | Unit | Description | Example |
|--------|---------------------|-------------------------------------|-----------------------------------|------------|
| | href | | Link to document | |
| | fileType | DiggsString | The File's Mime Type | image/png |
| | creatingApplication | SoftwareApplication | Parent program and version number | |
| | documentType | gml:CodeType | Document Type | GEN |
| | fileDate | UnifiedDateTime | The File's Modified DateTime | 2007-02-09 |

Kernel.BlockDetails

[Contents](#)

Derived from [Kernel.SampleDetails](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | height | lengthMeasure | Height | |
| | length | lengthMeasure | Length | |
| | width | lengthMeasure | Width | |

Kernel.BusinessAssociate

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

A Person, Company or Organisation

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | address | Address | Address of this Associate | |
| | emailAddress | Email | Email address | |
| | phoneNumber | PhoneNumber | Telephone number | |
| | contacts | BusinessAssociate | Relation to a BusinessAssociate object that is the contact for the business or person described by this object | |

Kernel.Calibration

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | date | UnifiedDateTime | The date on which the calibration was completed | 2007-03-09 |

Kernel.Column

[Contents](#)

Derived from [Kernel.DiggsObject](#)

A Column of data within a Table

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | index | | The Column Number within this table | |
| Mandatory | dataType | DiggsString | The DataType of this column | string, double, int, witsml:lengthMeasure |
| | meaning | gml:CodeType | The Meaning of this column | Measure, Index |
| | noDataValue | DiggsString | The value used to indicate No Data was available for this item. i.e. I was there, I tried to take a reading (and therefore it's billable) but couldn't because the equipment was damaged. | |
| | nullValue | DiggsString | The value used to indicate Null, i.e. No reading was attempted, there is no data for this item. | |
| | uom | DiggsString | The unit of measure applied to the data within this column (where applicable) | |
| | source | Reference | The source object this Column is defining | |

Kernel.Contract

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | type | DiggsString | | |
| | clients | BusinessAssociate | | |
| | contractors | BusinessAssociate | | |

Kernel.CylindricalDetails

[Contents](#)

Derived from [Kernel.SampleDetails](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | assumedBase | gml:PointType | Depth to the Assumed Base of the Sample | 2.3 |
| | assumedTop | gml:PointType | Depth to the Assumed Top of the Sample | 1.3 |
| | diameter | lengthMeasure | Diameter | |

| Status | Heading | Unit | Description | Example |
|--------|------------------------|--------------------------------|--------------------------|---------|
| | length | lengthMeasure | Length | |
| | recoveredLength | lengthMeasure | Recovered Length | |
| | rockQualityDesignation | percentMeasure | Rock Quality Designation | |
| | solidCoreRecovery | percentMeasure | Solid Core Recovery | |
| | totalCoreRecovery | percentMeasure | Total Core Recovery | |

Kernel.Database

[Contents](#)

The connection representing the Database this file was generated from

| Status | Heading | Unit | Description | Example |
|--------|-------------|-----------------------------|----------------------------------|------------|
| | catalog | DiggsString | Database Catalog (database) used | |
| | dBMS | DiggsString | Database Type | my DB |
| | dBMSVersion | DiggsString | DBMS Version Number | 2000, 2005 |
| | server | DiggsString | Database Server Name | |

Kernel.DelayEvent

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | |

Kernel.DepthRemark

[Contents](#)

Derived from [Kernel.Remark](#)

| Status | Heading | Unit | Description | Example |
|-----------|---------|---------------------------------|-----------------------------------------------|------------------------------|
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| Mandatory | content | DiggsString | The remark they wished to make. | This hole was not completed. |
| | when | UnifiedDateTime | When did they make it? | 2007-01-01 |
| | who | SimpleRole | Who made this remark? | Chris Bray |
| Mandatory | base | gml:PointType | The base this depth related remark relates to | 1.5 |
| Mandatory | top | gml:PointType | The top this depth related remark relates to | 1.2 |

Kernel.Diggs

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|--------------------|-----------------------------------|--------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are | |
| | businessAssociates | BusinessAssociate | A collection of BusinessAssociate elements referenced in this file | |
| | contracts | Contract | A collection of Contract elements referenced in this file | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------|
| | equipments | Equipment | Equipment relevant to this Object | |
| | groupings | Group | Logical Groups of Objects. | |
| | projects | Project | Defines the projects contained within this file | |
| | specifications | Specification | A link to the Specification that provides definitions of the procedure(s) used for this Object | |
| | tabularData | Table | Tabular Data | |
| Mandatory | transmissionInformation | TransmissionInformation | Stores Transmission Information details for this file | |

Kernel.DiggsBase

[Contents](#)

A base Object implementing Language, AttachedFiles and Remarks.

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

Kernel.DiggsObject

[Contents](#)

Derived from [Kernel.DiggsBase](#)

A base Object implementing Equipment, Specifications etc.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |

Kernel.DiggsString

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that this string is written in. As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | content | | The actual content of this string, in the given (optional) language | |

Kernel.Email

[Contents](#)

An email address (regex is "[\(\[A-z0-9_\.\\-\\+\]\)+@\(\(\(\[A-z0-9_\\-\]{2,}\)\\.\)+\[A-z0-9_\\-\]{2,}\)](#)")

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.Environment

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | barometricPressure | pressureMeasure | Barometric Pressure at the time. | |
| | gasFlow | volumeFlowRateMeasure | Flow of Gas at the time of assessment. | |
| | gasPressure | pressureMeasure | Gas Pressure at the time. | |
| | temperature | thermodynamicTemperatureMeasure | Temperature at the time. | |

Kernel.Equipment

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

An Exploratory Hole

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | class | gml:CodeType | A generic classification for the equipment type, taken from a codeList. | |
| | modelNumber | DiggsString | The equipment manufacturers model number | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|---------|
| | serialNumber | DiggsString | The equipment serial number either as issued by the manufacturer, or the asset serial number used by the operator. | |
| | calibrationAuditTrail | Calibration | Provides an audit trail of the equipment calibration and include metaData.xsds pre-use, in-use and post-use calibrations. | |

Kernel.Event

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | The timing of this event | 2007-03-12T12:10 |

Kernel.Feature

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |

Kernel.Geometry

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|----------|-------------------------|-------------|---------|
| | points | gml:MultiPointType | | |
| | lines | gml:MultiLineStringType | | |
| | polygons | gml:MultiPolygonType | | |

Kernel.Group

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

Groups a number of Objects together.

For example: *A Cluster of Holes or a geophysical array.*

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| Mandatory | type | gml:CodeType | The type of Group represented by this Object. TODO: Should we add Reason? | |
| | items | Reference | The Objects to be grouped. | |

Kernel.IdentifiedFeature

[Contents](#)

Derived from [Kernel.Feature](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |

| Status | Heading | Unit | Description | Example |
|-----------|---------|----------------------------|---------------------------------------|----------------|
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |

Kernel.IdentifiedObject

[Contents](#)

Derived from [Kernel.DiggsObject](#)

Adds an Id property to a base Object

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |

Kernel.Identifier

[Contents](#)

A Three Letter then Company Unique identifier (regex is "[A-Z]{1,4}-[A-z0-9_\.\\-]+")

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------------------|---------|
| | prefix | | Your company identifier | |

| Status | Heading | Unit | Description | Example |
|--------|---------|------|------------------------|---------|
| | iD | | Your unique identifier | |

Kernel.LaboratoryTest

[Contents](#)

Derived from [Kernel.Test](#)

A test conducted in a Laboratory

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |
| | isNatural | boolean | Flag to indicate if the initial specimen condition was at natural moisture content and density | |
| | preparation | DiggsString | Method of preparation if there are several alternative methods in the specification. | |

Kernel.Location

[Contents](#)

Derived from [Kernel.Observation](#)

A location samples are taken from and Insitu Tests are conducted, without actually creating a Borehole or Monitoring Instrument.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |

| Status | Heading | Unit | Description | Example |
|-----------|---------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | gml:PointType | The depth of the top of this observation | 1.3 |
| | base | gml:PointType | The depth of the base of this observation | 1.5 |
| | type | gml:CodeType | The reason these Samples have been created | |
| | insituTesting | Test | InSitu testing conducted on this hole | |

Kernel.MeasureOrString

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.Observation

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | gml:PointType | The depth of the top of this observation | 1.3 |
| | base | gml:PointType | The depth of the base of this observation | 1.5 |

Kernel.PercentMeasure

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.PhoneNumber

[Contents](#)

An telephone number (regex is "[0-9\-\+\(\)]{4,}")

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.PhoneTypeEnum

[Contents](#)

What type of Phone Number is this?

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.PointOrCode

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.Process

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | sources | Reference | The sources that this Sample was created from. | |
| | method | gml:CodeType | Method of production of this sample | |
| | numberOfBlows | integer | Number of blows required to extract this sample | |
| | preparation | DiggsString | | |

Kernel.Project

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

Project class, representing a Site Investigation Project

For example: *Quinley Gassworks DLR23099*

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| Mandatory | timing | ArbitraryTimeSpan | The timing of the Project. | |
| | assetId | DiggsString | The identifier of the Asset that this project relates to. | |
| | location | gml:CodeType | Descriptive Location use <location codeSpace="Street">High St</location>. | <location codeSpace="Street">High St</location> |
| | purpose | gml:CodeType | The purposes of data collection at this Project | |
| | contracts | Contract | Contracts in this project. | |
| | laboratoryTesting | LaboratoryTest | Laboratory based testing performed in this project. | |
| | locations | Observation | Subsurface entities contained in this Project. *RENAME*? They're not always "sub" surface, monitoring up a building for example. | Hole, Pile, Location |
| | samples | Sample | Samples taken from this Hole | |

Kernel.Pumping

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | readings | PumpingReading | Readings taken | |

Kernel.PumpingReading

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | depth | PointOrCode | Depth to Water | |
| Mandatory | rate | generalMeasureType | The rate of pumping. | |
| Mandatory | when | UnifiedDateTime | When was this reading taken? | 2007-03-12T14:24.56 |

Kernel.Reference

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Kernel.Remark

[Contents](#)

Derived from [Kernel.SimpleRemark](#)

A Remark Made by a Person

| Status | Heading | Unit | Description | Example |
|-----------|---------|---------------------------------|---------------------------------------|------------------------------|
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| Mandatory | content | DiggsString | The remark they wished to make. | This hole was not completed. |
| | when | UnifiedDateTime | When did they make it? | 2007-01-01 |
| | who | SimpleRole | Who made this remark? | Chris Bray |

Kernel.Role

[Contents](#)

Derived from [Kernel.SimpleRole](#)

Attributing a BusinessAssociate to a object identifying what Role they played.

| Status | Heading | Unit | Description | Example |
|-----------|---------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | timing | ArbitraryTimeSpan | Timing of the Activity. | |
| Mandatory | rolePerformed | gml:CodeType | The assigned role that the organisation or individual fulfills. This is a selected from a CodeList. | ENG |
| Mandatory | associates | Reference | The organisation or individual that performed the role. This links, via the gml:id, to the Business Associates table that is external to the structure, which gives the name, address and contact details of this person or organisation | |
| | remarks | SimpleRemark | Remarks relevant to this item | |

Kernel.Sample

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

Sample class.

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | process | Reference | The process that this Sample was created from. | |
| | sources | Reference | The sources that this Sample was created from. | |
| Mandatory | top | gml:PointType | Depth to the Top of the Sample | 1.3 |
| | base | gml:PointType | Depth to the Base of the Sample | 2.3 |
| | classification | gml:CodeType | A classification code for the lithological material. The code and the specification or standard that defines it are taken from a codelist. | |
| | condition | DiggsString | A description of the Sample condition | |
| | fraction | double | | |
| | matrix | gml:CodeType | | |
| | medium | gml:CodeType | Medium of the Sample (Gas, Water, Liquid) | Gas, Water, Liquid |

| Status | Heading | Unit | Description | Example |
|--------|----------------|-----------------------------------|------------------------------------|---------|
| | purpose | DiggsString | Purpose of taking this Sample. | |
| | reference | DiggsString | A reference given to this specimen | |
| | timing | ArbitraryTimeSpan | Time taken to extract this sample. | |
| | type | gml:CodeType | Type of sample and/or sampler | |
| | details | SampleDetails | | |
| | environment | Environment | | |
| | transportation | Transportation | | |

Kernel.SampleDetails

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |

Kernel.SimpleRemark

[Contents](#)

A Remark without a Role element to avoid the recursive tree structure.

| Status | Heading | Unit | Description | Example |
|-----------|---------|---------------------------------|---------------------------------------|------------------------------|
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| Mandatory | content | DiggsString | The remark they wished to make. | This hole was not completed. |
| | when | UnifiedDateTime | When did they make it? | 2007-01-01 |

Kernel.SimpleRole

[Contents](#)

A Role without a Remark element to avoid the recursive tree structure.

| Status | Heading | Unit | Description | Example |
|-----------|---------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | timing | ArbitraryTimeSpan | Timing of the Activity. | |
| Mandatory | rolePerformed | gml:CodeType | The assigned role that the organisation or individual fulfills. This is a selected from a CodeList. | ENG |
| Mandatory | associates | Reference | The organisation or individual that performed the role. This links, via the gml:id, to the Business Associates table that is external to the structure, which gives the name, address and contact details of this person or organisation | |

Kernel.SoftwareApplication

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|-----------------------------|----------------------------|----------------------------------------|
| | name | DiggsString | Application Name | EQUIS, HoleBASE, gINT, Adobe Photoshop |
| | version | DiggsString | Application Version Number | 5, 3.1, CS3 |

Kernel.Specification

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

Identifies a Specification document

For example: *BS 5930, Eurocode or ASTM Literature*

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | fullMethodName | DiggsString | The full name of the method | BS1377 Standard Chalk Crushing Test |
| | methodDescription | DiggsString | A brief description of the method, not the full specification | Measure effort required to crush chalk |
| | shortMethodName | DiggsString | A short description of the method used for reference elsewhere | Chalk Crushing Test |
| | standardClause | DiggsString | The specific method number or clause number | 6 |
| | standardPart | DiggsString | The part, volume or subsection of the specification document | 4 |
| | standardReferenceNumber | DiggsString | The standard or specification reference number | BS 1377-1:1990 |
| | standardTitle | DiggsString | The title of the standard or specification | Methods of test for soils for civil engineering purposes. General requirements and sample preparation. |
| | standardVersion | DiggsString | The version number or date of the standard or specification | 1999-1 |

Kernel.Table

[Contents](#)

Derived from [Kernel.DiggsObject](#)

A Table containing delimited data. A default table is delimited by "." for decimals, by "," for columns and by " " for rows. Hence it's data block would look like this "12.345 12.345 12 12.345,67.890 67.890 67 67.890"

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | columns | Column | The Columns of data this table defines | |
| | blockSeparator | DiggsString | The Separator between data in the rows of this table (end of line marker), defaults to a "," character | , |
| | decimalSeparator | DiggsString | The decimal Separator in this table, defaults to a . character | . |
| | tokenSeparator | DiggsString | The Separator between data in the columns of this table, defaults to a " " character | |
| | data | DiggsString | The actual data this table contains | 12.345 12.345 12 12.345,67.890 67.890 67 67.890 |

Kernel.Test

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

Kernel.Timing

[Contents](#)

A Duration of Time

| Status | Heading | Unit | Description | Example |
|--------|---------------|------|----------------|---------|
| | startDateTime | | The Start Time | |
| | endDateTime | | The End Time | |

| Status | Heading | Unit | Description | Example |
|--------|----------|------|--------------------|---------|
| | duration | | The length of time | |

Kernel.TransmissionInformation

[Contents](#)

Derived from [Kernel.DiggsObject](#)

Transmission Information for the data in this file

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | issueNumber | integer | Issue sequence number of the data within the project | 2 |
| Mandatory | diggsVersion | DiggsString | DIGGS Edition Number | 0.6 |
| | address | DiggsString | The intended destination of this transmission | chris@diggsml.com or ftp://uploaduser:password@ftp.diggsml.com/ auto_import |
| | destinationDatabase | Database | The Database this data is intended for. | |
| | destinationSoftware | SoftwareApplication | The Software application intended to read this file. | HoleBASE 3.1, Equis 5 |

| Status | Heading | Unit | Description | Example |
|--------|----------------|-------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| | disclaimer | DiggsString | From POSC. A free-form string that allows a disclaimer to accompany the information. | Data contained in this file are valid for the dates taken. Information may change with time. |
| | issueDate | UnifiedDateTime | Date of issue of the data | 2007-01-01 |
| | protocol | gml:CodeType | The means of electronic data delivery. | Email, FTP, HTTP, Mail, CDROM |
| | sourceDatabase | Database | The Database this data came from. | |
| | sourceSoftware | SoftwareApplication | The Software application producing this file. | HoleBASE 3.1, EQuIS 5, gINT |
| | transmissionId | DiggsString | A unique reference number for this data transmission | Geotechnical Data File Issue 2 |
| | audit | Event | A collection of Events relevant to this item. | |

Kernel.Transportation

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | chainOfCustodyId | DiggsString | Identifier used to track the bottles along the chain of custody | |
| | containerType | gml:CodeType | Method of Transport of the Sample | Jar, Bucket, Vial, Bag |
| | coolerId | DiggsString | A unique identifier of the cooler that the bottles are transported in. | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------|---------------------------------|-------------|---------|
| | dateReceivedByLab | UnifiedDateTime | | |
| | dateSentToLab | UnifiedDateTime | | |
| | preservative | gml:CodeType | | |

Kernel.ValueAtDepth

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------------------------------------|-------------|---------|
| | depth | gml:PointType | | |
| | value | generalMeasureType | | |

Kernel.ValueAtDepthByTime

[Contents](#)

Derived from [Kernel.ValueAtDepth](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------|------------------------------------|-------------|---------|
| | depth | gml:PointType | | |
| | value | generalMeasureType | | |
| | elapsedTime | DiggsString | | |

Kernel.ValueAtDepthWithReference

[Contents](#)

Derived from [Kernel.ValueAtDepth](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------------------------------------|-------------|---------|
| | depth | gml:PointType | | |
| | value | generalMeasureType | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------|---------------|-------------|---------|
| | reference | gml:PointType | | |

Kernel.ValueAtTime

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------|------------------------------------|-------------|---------|
| | elapsedTime | ArbitraryTimeSpan | | |
| | value | generalMeasureType | | |

Kernel.ValueOfType

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|-----------------------------|--------------------------------------------------|---------|
| | type | gml:CodeType | What does the associated value represent? | |
| | value | DiggsString | A Value associated with the Type of this Object. | |

Kernel._Base

[Contents](#)

Pseudo-class to make all classes include a _Base.xsd file

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
|--------|---------|------|-------------|---------|

Monitoring.Detector

[Contents](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <code>_predominantly_</code> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | <code>gml:CodeType</code> | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace <code>diggs:id</code> as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no <code>srsName</code> is specified for a <code>gml:pos</code> further down the tree than here then use this one. | |
| | geometry | <code>gml:MultiGeometryPropertyType</code> | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include <code>metaData.xsds</code> method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | hasCRS | AnyCRS | The location and coordinate system of this Detector | |
| | measurand | <code>gml:CodeType</code> | The Measurand this Detector is measuring | Piezometer, Annometer, Total Station |
| | position | <code>gml:PointType</code> | The Position of Detector | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------|-----------------------------------------|------------------------|--------------------------------------|
| | type | gml:CodeType | The type of Instrument | Piezometer, Annometer, Total Station |
| | measurementGroups | GenericMeasurementGroup | | |

Monitoring.GenericMeasurement

[Contents](#)

Derived from [Kernel.DiggsObject](#)

A Generic Measurement

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | dateTime | UnifiedDateTime | | |
| | value | generalMeasureType | | |
| | position | gml:PointType | Position of the Detector at this point in time | |

Monitoring.GenericMeasurementGroup

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | type | gml:CodeType | The type of Measurement conducted | Head of Water, Wind Speed, Wind Direction, Position of Station |
| | measurements | GenericMeasurement | | |

Monitoring.MonitoringEvent

[Contents](#)

Derived from [Kernel.Event](#)

An event occuring during Monitoring

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | The timing of this event | 2007-03-12T12:10 |
| | type | gml:CodeType | What type of event was this? | 2007-03-12T12:10 |

Monitoring.MonitoringLocation

[Contents](#)

Derived from [Kernel.Location](#)

The place at which Monitoring is occurring (semantically the location of the DataLogger).

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |

| Status | Heading | Unit | Description | Example |
|-----------|---------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | <code>gml:MultiGeometryPropertyType</code> | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | <code>gml:PointType</code> | The depth of the top of this observation | 1.3 |
| | base | <code>gml:PointType</code> | The depth of the base of this observation | 1.5 |
| | type | <code>gml:CodeType</code> | The reason these Samples have been created | |
| | insituTesting | Test | InSitu testing conducted on this hole | |
| | pumping | Pumping | | |
| | sensors | Sensor | A number of Sensors can belong to one MonitoringLocation (semantically each Sensor the DataLogger is monitoring) | |

Monitoring.Sensor

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <code>_predominantly_</code> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | type | gml:CodeType | Type of Sensor | |
| | detectors | Detector | | |
| | events | MonitoringEvent | Events that occurred during Monitoring | |

Piling.AreaLoad

[Contents](#)

Derived from [Piling.Load](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | axisOrientation | planeAngleMeasure | Orientation of the Axis the Load is applied along (Deg CCW from Grid) | 120 |
| | depth | gml:PointType | Load applied at what depth? | |
| | inclination | planeAngleMeasure | Inclination of the Load (Degrees from Vertical) | 0, 90, 45 |
| | orientation | planeAngleMeasure | Orientation of the Load (Deg CCW from Grid) | 120 |
| | source | gml:CodeType | | |
| | type | gml:CodeType | | Dead, Live, Wind, Hydrostatic, Ground, Berthing, Accident, Seismic |
| | value | generalMeasureType | The value itself | |
| | length | lengthMeasure | The length of the area to apply the load to | |
| | width | lengthMeasure | The width of the area to apply the load to | |

Piling.BoringMachine

[Contents](#)

Derived from [Kernel.Equipment](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | class | gml:CodeType | A generic classification for the equipment type, taken from a codeList. | |
| | modelNumber | DiggsString | The equipment manufacturers model number | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|---------|
| | serialNumber | DiggsString | The equipment serial number either as issued by the manufacturer, or the asset serial number used by the operator. | |
| | calibrationAuditTrail | Calibration | Provides an audit trail of the equipment calibration and include metaData.xsds pre-use, in-use and post-use calibrations. | |

Piling.Capacity

[Contents](#)

Derived from [Kernel.DiggsObject](#)

A pile capacity specification

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | side | forceMeasure | The Side component of this Capacity | |
| | tip | forceMeasure | The Tip component of this capacity. | |
| | type | gml:CodeType | Type of test required to assess capacity. | |
| | value | forceMeasure | The Total Value of this Capacity | |

Piling.CastShaft

[Contents](#)

Derived from [Piling.PileConstruction](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|-----------|------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | actualTipElevation | gml:PointType | | |
| | commencementElevation | gml:PointType | Ground Level at Pile Location at Commencement | |
| | contractNumber | DiggsString | | |
| | cover | lengthMeasure | Minimum Concrete Cover | |
| | cutoffElevation | gml:PointType | | |
| | embeddedLength | gml:PointType | | |
| | excavatedElevation | gml:PointType | | |
| | groundSurfaceElevation | gml:PointType | | |
| | hole | Hole | | |
| | minimumTipElevation | gml:PointType | | |
| | platformElevation | gml:PointType | | |
| | scourElevation | gml:PointType | | |
| | sequenceNumber | integer | | |
| | temperature | thermodynamicTemperatureMeasure | | |
| | templateElevation | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | Pre-tender, Tender, For Construction, As-built |
| | weather | DiggsString | | |
| | delays | DelayEvent | | |
| | insituTesting | InsituTest | | |
| | loadings | Load | | |
| | loadTests | LoadTest | | |
| | pilingMethods | PilingMethod | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------------|--------------------------------------|------------------------------------------------------------------|---------|
| | predictedCapacities | PredictedCapacity | | |
| | primaryConstituents | Constituent | | |
| | secondaryConstituents | Constituent | | |
| | sources | Reference | The sources that this was created from. | |
| | temporaryConstituents | Constituent | Constituents that are not left behind after creation of the Pile | |
| | averageShaftBottomElevation | gml:PointType | | |
| | averageShaftTopElevation | gml:PointType | | |
| | concretePlacement | MaterialPlacementLog | | |
| | insideWaterElevation | integer | | |
| | rockElevation | gml:PointType | | |
| | waterTableElevation | gml:PointType | | |
| | cleanouts | Cleanout | | |
| | drillingLogs | DrillingLog | | |
| | inspections | Inspection | | |
| | makeup | ShaftMakeup | | |
| | shaftSurvey | ShaftSurveyPoint | | |
| | soilDescription | Layer | | |

Piling.Cleanout

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | Start and End time | |

Piling.Constituent

[Contents](#)

Derived from [Kernel.Feature](#)

An Exploratory Hole

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |

| Status | Heading | Unit | Description | Example |
|--------|------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |

Piling.Cushion

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|--------------------------|--------------------------------------|-------------|---------|
| | coefficientOfRestitution | dimensionlessMeasure | | |
| | modulus | pressureMeasure | | |
| | thickness | lengthMeasure | | |
| | material | Specification | | |

Piling.CustomCrossSectionalConstituent

[Contents](#)

Derived from [Piling.Constituent](#)

A Sheet Constituent of a Pile

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |

| Status | Heading | Unit | Description | Example |
|-----------|--------------|-----------------|---------------------------------------|---------|
| Mandatory | crossSection | gml:PolygonType | The cross section of this Constituent | H, U, Z |

Piling.CylindricalConstituent

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |

| Status | Heading | Unit | Description | Example |
|--------|---------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------|
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | bottomInnerDiameter | lengthMeasure | | |
| | bottomOuterDiameter | lengthMeasure | | |
| | topInnerDiameter | lengthMeasure | | |
| | topOuterDiameter | lengthMeasure | | |

Piling.CylindricalRebarReinforcement

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |

| Status | Heading | Unit | Description | Example |
|--------|----------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | barDiameter | lengthMeasure | | |
| | barsPerGroup | integer | | |
| | cageDiameter | lengthMeasure | | |
| | checks | RebarReinforcementChecks | | |
| | groupCount | integer | | |
| | tertiaryConstituents | Constituent | | |

Piling.DrillingIncrement

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | top | gml:PointType | | |
| | base | gml:PointType | | |
| | drillResistance | generalMeasureType | | |
| | revolutions | double | | |
| | timing | ArbitraryTimeSpan | | |
| | torque | momentOfForceMeasure | | |

Piling.DrillingLog

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | casingBase | gml:PointType | | |
| | casingDiameter | lengthMeasure | | |
| | casingTop | gml:PointType | | |
| | casingType | gml:CodeType | | |
| | increments | DrillingIncrement | | |

Piling.DrivenPile

[Contents](#)

Derived from [Piling.PileConstruction](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |

| Status | Heading | Unit | Description | Example |
|-----------|------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | actualTipElevation | gml:PointType | | |
| | commencementElevation | gml:PointType | Ground Level at Pile Location at Commencement | |
| | contractNumber | DiggsString | | |
| | cover | lengthMeasure | Minimum Concrete Cover | |
| | cutoffElevation | gml:PointType | | |
| | embeddedLength | gml:PointType | | |
| | excavatedElevation | gml:PointType | | |
| | groundSurfaceElevation | gml:PointType | | |
| | hole | Hole | | |
| | minimumTipElevation | gml:PointType | | |
| | platformElevation | gml:PointType | | |
| | scourElevation | gml:PointType | | |
| | sequenceNumber | integer | | |
| | temperature | thermodynamicTemperatureMeasure | | |
| | templateElevation | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-----------------------------------|------------------------------------------------------------------|------------------------------------------------|
| | type | gml:CodeType | | Pre-tender, Tender, For Construction, As-built |
| | weather | DiggsString | | |
| | delays | DelayEvent | | |
| | insituTesting | InsituTest | | |
| | loadings | Load | | |
| | loadTests | LoadTest | | |
| | pilingMethods | PilingMethod | | |
| | predictedCapacities | PredictedCapacity | | |
| | primaryConstituents | Constituent | | |
| | secondaryConstituents | Constituent | | |
| | sources | Reference | The sources that this was created from. | |
| | temporaryConstituents | Constituent | Constituents that are not left behind after creation of the Pile | |
| | authorizedLength | lengthMeasure | | |
| | billableLength | gml:PointType | | |
| | deliveredLength | gml:PointType | | |
| | internalSoilElevation | gml:PointType | | |
| | pileCushion | Cushion | | |
| | drivingLogs | DrivingLog | | |

Piling.DrivingIncrement

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |

Piling.DrivingLog

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | installationAssistance | InstallationAssistance | | |
| | redrive | boolean | | |
| | drive | DrivingIncrement | | |

Piling.DynamicLoadTestIncrement

[Contents](#)

Derived from [Piling.LoadTestIncrement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | | |
| | instruments | Instrument | | |
| | appliedForce | forceMeasure | | |
| | staticEquivalent | StaticLoadTestIncrement | | |

Piling.FlightConstituent

[Contents](#)

Derived from [Piling.CylindricalConstituent](#)

A Displacement Auger Constituent

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | bottomInnerDiameter | lengthMeasure | | |
| | bottomOuterDiameter | lengthMeasure | | |

| Status | Heading | Unit | Description | Example |
|-----------|------------------|-------------------------------|----------------------------------|---------|
| | topInnerDiameter | lengthMeasure | | |
| | topOuterDiameter | lengthMeasure | | |
| Mandatory | flightDiameter | lengthMeasure | The outer diameter of the Flight | |
| Mandatory | flightPitch | lengthMeasure | The pitch of the Flight | |

Piling.FoundationGroup

[Contents](#)

Derived from [Kernel.Observation](#)

A collection of foundation elements. Collections can contain individual deep elements, test piles, or pier/bent groups.

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | <code>gml:CodeType</code> | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|-----------|-----------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | gml:PointType | The depth of the top of this observation | 1.3 |
| | base | gml:PointType | The depth of the base of this observation | 1.5 |
| | instances | FoundationGroupInstance | | |
| | loadings | Load | | |

Piling.FoundationGroupInstance

[Contents](#)

Derived from [Piling.FoundationGroup](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | timing | ArbitraryTimeSpan | The Timing for this Observation | 2007-01-01T13:00 |
| Mandatory | top | gml:PointType | The depth of the top of this observation | 1.3 |
| | base | gml:PointType | The depth of the base of this observation | 1.5 |
| | instances | FoundationGroupInstance | | |
| | loadings | Load | | |
| | application | gml:CodeType | The application of this pile, wall or bearing pile, wall with load? | |
| | structureName | DiggsString | Name of the structure this FoundationGroup applies to. | |
| | structureReference | DiggsString | Reference to the structure this FoundationGroup applies to. | |
| Mandatory | piles | PileConstruction | Instances of this pile at various stages of it's design and construction | |

Piling.HBeamReinforcement

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------|-----------------------------------|--------------------|---------|
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | flangeOrientation | integer | | |

Piling.Hammer

[Contents](#)

Derived from [Kernel.Equipment](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|-----------|-----------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | class | gml:CodeType | A generic classification for the equipment type, taken from a codeList. | |
| | modelNumber | DiggsString | The equipment manufacturers model number | |
| | serialNumber | DiggsString | The equipment serial number either as issued by the manufacturer, or the asset serial number used by the operator. | |
| | calibrationAuditTrail | Calibration | Provides an audit trail of the equipment calibration and include metaData.xsds pre-use, in-use and post-use calibrations. | |
| | ratedEnergy | momentOfForceMeasure | | |
| | hammerCushion | Cushion | | |

Piling.HelicalReinforcement

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | barDiameter | lengthMeasure | | |
| | pitch | lengthMeasure | | |

Piling.Impact

[Contents](#)

Derived from [Piling.DrivingIncrement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |
| | blowCount | integer | | |

Piling.Inspection

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | elevation | gml:MultiPointType | | |
| | estimatedShaftDiameter | lengthMeasure | | |
| | inspectionMethod | gml:CodeType | | |
| | timing | ArbitraryTimeSpan | | |

Piling.InstallationAssistance

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | base | gml:PointType | | |

| Status | Heading | Unit | Description | Example |
|--------|---------|-----------------------------------|-------------|---------|
| | top | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | |

Piling.Instrument

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | depth | gml:PointType | | |
| | type | gml:CodeType | | |
| | values | ValueAtTime | | |

Piling.Jack

[Contents](#)

Derived from [Piling.DrivingIncrement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |
| | force | integer | | |
| | pressure | integer | | |

Piling.Jetting

[Contents](#)

Derived from [Piling.InstallationAssistance](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | base | gml:PointType | | |
| | top | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | |
| | flowRate | volumeFlowRateMeasure | | |
| | pressure | pressureMeasure | | |

Piling.JoiningConstituent

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |

| Status | Heading | Unit | Description | Example |
|--------|------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | <code>gml:MultiGeometryPropertyType</code> | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | <code>gml:PointType</code> | | |
| | topPoint | <code>gml:PointType</code> | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | type | <code>gml:CodeType</code> | | |

Piling.Load

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | axisOrientation | planeAngleMeasure | Orientation of the Axis the Load is applied along (Deg CCW from Grid) | 120 |
| | depth | gml:PointType | Load applied at what depth? | |
| | inclination | planeAngleMeasure | Inclination of the Load (Degrees from Vertical) | 0, 90, 45 |
| | orientation | planeAngleMeasure | Orientation of the Load (Deg CCW from Grid) | 120 |
| | source | gml:CodeType | | |
| | type | gml:CodeType | | Dead, Live, Wind, Hydrostatic, Ground, Berthing, Accident, Seismic |
| | value | generalMeasureType | The value itself | |

Piling.LoadTest

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | bearing | planeAngleMeasure | | |
| | reportDate | UnifiedDateTime | | |
| | rating | Rating | | |
| | timing | ArbitraryTimeSpan | | |
| Mandatory | type | gml:CodeType | | |
| | increments | LoadTestIncrement | | |

Piling.LoadTestIncrement

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | | |
| | instruments | Instrument | | |

Piling.MaterialBatch

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | arrivalDateTime | UnifiedDateTime | | |

Piling.MaterialPlacementIncrement

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | base | gml:PointType | | |
| | deliveryDepth | gml:PointType | | |
| | pressure | pressureMeasure | | |
| | top | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | volume | volumeMeasure | | |
| | batch | MaterialBatch | | |

Piling.MaterialPlacementLog

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | dearingMethod | DiggsString | | |
| | lines | PlacementLine | | |
| | theoreticalVolume | volumeMeasure | | |
| | timing | ArbitraryTimeSpan | | |
| | totalVolumeDelivered | volumeMeasure | | |
| | wastage | volumeMeasure | | |
| | batch | MaterialBatch | | |
| | increments | MaterialPlacementIncrement | | |

Piling.MaterialTest

[Contents](#)

Derived from [Kernel.Test](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |

| Status | Heading | Unit | Description | Example |
|--------|---------|-----------------------------------|---------------------------------------------------------------------------|---------|
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

Piling.OverreamConstituent

[Contents](#)

Derived from [Piling.CylindricalConstituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but <i>*must not*</i> replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|--------|---------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | bottomInnerDiameter | lengthMeasure | | |
| | bottomOuterDiameter | lengthMeasure | | |
| | topInnerDiameter | lengthMeasure | | |
| | topOuterDiameter | lengthMeasure | | |

Piling.PileConstruction

[Contents](#)

Derived from [Kernel.IdentifiedFeature](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | actualTipElevation | gml:PointType | | |
| | commencementElevation | gml:PointType | Ground Level at Pile Location at Commencement | |
| | contractNumber | DiggsString | | |
| | cover | lengthMeasure | Minimum Concrete Cover | |
| | cutoffElevation | gml:PointType | | |
| | embeddedLength | gml:PointType | | |
| | excavatedElevation | gml:PointType | | |
| | groundSurfaceElevation | gml:PointType | | |
| | hole | Hole | | |
| | minimumTipElevation | gml:PointType | | |
| | platformElevation | gml:PointType | | |
| | scourElevation | gml:PointType | | |

| Status | Heading | Unit | Description | Example |
|--------|-----------------------|-------------------------------------------------|------------------------------------------------------------------|------------------------------------------------|
| | sequenceNumber | integer | | |
| | temperature | thermodynamicTemperatureMeasure | | |
| | templateElevation | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | Pre-tender, Tender, For Construction, As-built |
| | weather | DiggsString | | |
| | delays | DelayEvent | | |
| | insituTesting | InsituTest | | |
| | loadings | Load | | |
| | loadTests | LoadTest | | |
| | pilingMethods | PilingMethod | | |
| | predictedCapacities | PredictedCapacity | | |
| | primaryConstituents | Constituent | | |
| | secondaryConstituents | Constituent | | |
| | sources | Reference | The sources that this was created from. | |
| | temporaryConstituents | Constituent | Constituents that are not left behind after creation of the Pile | |

Piling.PileDriver

[Contents](#)

Derived from [Kernel.Equipment](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| Mandatory | id | Identifier | The unique identifier of this Feature | DIGGSINC-BH127 |
| | class | gml:CodeType | A generic classification for the equipment type, taken from a codeList. | |
| | modelNumber | DiggsString | The equipment manufacturers model number | |
| | serialNumber | DiggsString | The equipment serial number either as issued by the manufacturer, or the asset serial number used by the operator. | |
| | calibrationAuditTrail | Calibration | Provides an audit trail of the equipment calibration and include metaData.xsds pre-use, in-use and post-use calibrations. | |

Piling.PilingMethod

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | base | gml:PointType | | |
| | top | gml:PointType | | |

Piling.Piling_SoilDescription

[Contents](#)

DELETED in favor of using Geotechnical:Layer

| Status | Heading | Unit | Description | Example |
|--------|---------|------|-------------|---------|
| | top | | | |
| | base | | | |

Piling.PlacementLine

[Contents](#)

Derived from [Kernel.IdentifiedObject](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | length | lengthMeasure | | |
| | volume | volumeMeasure | | |

Piling.PreStressedRebarReinforcement

[Contents](#)

Derived from [Piling.CylindricalRebarReinforcement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | barDiameter | lengthMeasure | | |
| | barsPerGroup | integer | | |

| Status | Heading | Unit | Description | Example |
|--------|----------------------|------------------------------------------|-------------|---------|
| | cageDiameter | lengthMeasure | | |
| | checks | RebarReinforcementChecks | | |
| | groupCount | integer | | |
| | tertiaryConstituents | Constituent | | |
| | prestress | pressureMeasure | | |

Piling.Preboring

[Contents](#)

Derived from [Piling.InstallationAssistance](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | base | gml:PointType | | |
| | top | gml:PointType | | |
| | timing | ArbitraryTimeSpan | | |
| | type | gml:CodeType | | |
| | diameter | lengthMeasure | | |
| | spoilReturn | boolean | | |

Piling.PredictedCapacity

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | orientation | gml:CodeType | | |
| | predictionMethod | gml:CodeType | | |
| | sideResistance | generalMeasureType | | |
| | tipResistance | generalMeasureType | | |
| | type | gml:CodeType | | |
| | hole | Hole | | |

Piling.PressureHammer

[Contents](#)

Derived from [Piling.Impact](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |
| | blowCount | integer | | |
| | pressure | pressureMeasure | | |

Piling.Rating

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | settlement | lengthMeasure | | |
| | capacities | Capacity | Capacities | |

Piling.RebarCage

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------|-----------------------------------------------|-------------|---------|
| | mainReinforcement | CylindricalRebarReinforcement | | |

Piling.RebarReinforcementChecks

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |

| Status | Heading | Unit | Description | Example |
|--------|---------------------------------|--------------|-------------------------|-----------------------------|
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | hasProperNumberOfHorizontalBars | boolean | | |
| | hasProperNumberOfVerticalBars | boolean | | |
| | standoffSpacingMeasured | boolean | | |
| | tiesAndConnectionsConfirmed | boolean | | |

Piling.RectangularConstituent

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | geometry | <code>gml:MultiGeometryPropertyType</code> | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | <code>gml:PointType</code> | | |
| | topPoint | <code>gml:PointType</code> | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | lengthSide1 | lengthMeasure | | |
| | lengthSide2 | lengthMeasure | | |

Piling.RectangularRebarReinforcement

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | barDiameter | lengthMeasure | | |
| | barsPerGroup | integer | | |
| | cageLength | lengthMeasure | | |
| | cageWidth | lengthMeasure | | |
| | checks | RebarReinforcementChecks | | |
| | groupCount | integer | | |
| | tertiaryConstituents | Constituent | | |

Piling.Reinforcement

[Contents](#)

| Status | Heading | Unit | Description | Example |
|--------|----------|-------------------------------|-------------|---------|
| | base | <code>gml:PointType</code> | | |
| | top | <code>gml:PointType</code> | | |
| | material | Specification | | |

Piling.SecondaryBarReinforcement

[Contents](#)

Derived from [Piling.Constituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | <code>gml:CodeType</code> | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |

| Status | Heading | Unit | Description | Example |
|--------|-------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | <code>gml:MultiGeometryPropertyType</code> | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | <code>gml:PointType</code> | | |
| | topPoint | <code>gml:PointType</code> | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | barDiameter | lengthMeasure | | |
| | spacing | lengthMeasure | | |

Piling.ShaftMakeup

[Contents](#)

Derived from [Kernel.Feature](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSM Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | base | gml:PointType | | |
| | baseDiameter | lengthMeasure | | |
| | drillingMethod | gml:CodeType | | |
| | top | gml:PointType | | |
| | topDiameter | lengthMeasure | | |
| | temperature | thermodynamicTemperatureMeasure | | |
| | weather | DiggsString | | |

Piling.ShaftSurveyPoint

[Contents](#)

Derived from [Kernel.DiggsObject](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | angle | planeAngleMeasure | | |
| | depth | gml:PointType | | |

Piling.SheetConstituent

[Contents](#)

Derived from [Piling.Constituent](#)

A Sheet Constituent of a Pile

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are <u>_predominantly_</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| Mandatory | type | gml:CodeType | The type of this Sheet, H, U, Z | H, U, Z |

Piling.Shell

[Contents](#)

Derived from [Piling.CylindricalConstituent](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | primaryName | DiggsString | The Primary Name of this Feature, can be used as a descriptive identifier but *must not* replace diggs:id as the authoritative source of identity. | |
| | defaultCRS | AnyCRS | The default CRS to be used from this feature onwards, if no srsName is specified for a gml:pos further down the tree than here then use this one. | |
| | geometry | gml:MultiGeometryPropertyType | The geometry of this feature. Could be point, line, line string or polygon or collection of these. A 2D object in a 3D system. include metaData.xsds method of measurement, coordinate system and accuracy. | |
| | otherCRS | AnyCRS | Other CRS's that may be required further down the tree and have been explicitly referenced. A set of moving Well datums for example. | |
| | basePoint | gml:PointType | | |
| | topPoint | gml:PointType | | |
| | timing | ArbitraryTimeSpan | Start and End time | |
| | flushing | Flush | | |
| | material | Specification | | |
| | bottomInnerDiameter | lengthMeasure | | |
| | bottomOuterDiameter | lengthMeasure | | |

| Status | Heading | Unit | Description | Example |
|--------|------------------|-------------------------------|-------------|---------|
| | topInnerDiameter | lengthMeasure | | |
| | topOuterDiameter | lengthMeasure | | |
| | innerDiameter | lengthMeasure | | |
| | outerDiameter | lengthMeasure | | |

Piling.SlumpTest

[Contents](#)

Derived from [Piling.MaterialTest](#)

| Status | Heading | Unit | Description | Example |
|-----------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| Mandatory | id | Identifier | The unique identifier of this Object | DIGGSINC-BH127 |
| | sources | Reference | The sources that this test applies to. | |
| | timing | ArbitraryTimeSpan | Date and Time this test was conducted (start and optional duration / end) | |

Piling.StaticLoadTestIncrement

[Contents](#)

Derived from [Piling.LoadTestIncrement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | timing | ArbitraryTimeSpan | | |
| | instruments | Instrument | | |
| | loads | ValueAtDepth | | |

Piling.StrokedHammer

[Contents](#)

Derived from [Piling.Impact](#)

| Status | Heading | Unit | Description | Example |
|--------|-----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | lang | | The language that strings in this DIGGSML Object are _predominantly_ written in (this can be redifined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------|
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |
| | blowCount | integer | | |
| | stroke | lengthMeasure | | |

Piling.Vibrated

[Contents](#)

Derived from [Piling.DrivingIncrement](#)

| Status | Heading | Unit | Description | Example |
|--------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| | lang | | The language that strings in this DIGGSML Object are <u>predominantly</u> written in (this can be redefined on a per-property level). As per RFC3066 at http://www.ietf.org/rfc/rfc3066.txt | |
| | associatedFiles | AssociatedFile | Reference to a set of external files associated with this Object | |
| | remarks | Remark | Any general remarks about this Object | |
| | equipment | Reference | Equipment relevant to this Object | |
| | roles | Role | Business Associates (companies or individuals) who have a role in the activity described in this item | |
| | specificationReferences | Reference | A link to the Specification that provides definitions of the procedure(s) used for this Object | BS5930 |
| | status | gml:CodeType | The status of this item | Preliminary, Draft, Archive |
| | tipElevation | gml:PointType | | |
| | amplitude | double | | |
| | frequency | double | | |

Appendix 1 - Witsml Measurement Types

witsml:accelerationLinearMeasure

witsml:accelerationLinearMeasure has the following units defined:

- m/s²
- cm/s²
- ft/s²
- Gal
- mgn
- gn
- mGal

witsml:anglePerLengthMeasure

witsml:anglePerLengthMeasure has the following units defined:

- rad/m
- dega/30ft
- dega/ft
- dega/100ft
- dega/m
- dega/30m
- rad/ft

witsml:anglePerTimeMeasure

witsml:anglePerTimeMeasure has the following units defined:

- rad/s
- c/s
- dega/h
- dega/min
- dega/s
- rev/s
- rpm

witsml:areaMeasure

witsml:areaMeasure has the following units defined:

- m2
- acre
- b
- cm2
- ft2
- ha
- in2
- km2
- mi2
- miUS2
- mm2
- um2
- yd2

witsml:areaPerAreaMeasure

witsml:areaPerAreaMeasure has the following units defined:

- Euc
- %
- in2/ft2
- in2/in2
- m2/m2
- mm2/mm2

witsml:densityMeasure

witsml:densityMeasure has the following units defined:

- kg/m3
- 10Mg/m3
- dAPI
- g/cm3
- g/dm3
- g/galUK
- g/galUS
- g/L
- g/m3
- grain/ft3
- grain/galUS
- grain/100ft3
- kg/dm3
- kg/L
- Mg/m3
- lbm/10bbl

- lbm/bbl
- lbm/ft3
- lbm/galUK
- lbm/1000galUK
- lbm/galUS
- lbm/1000galUS
- lbm/in3
- lbm/Mbbl
- mg/dm3
- mg/galUS
- mg/L
- mg/m3
- ug/cm3

witsml:dimensionlessMeasure

witsml:dimensionlessMeasure has the following units defined:

- Euc
- %
- cEuc
- mEuc
- nEuc
- uEuc

witsml:dynamicViscosityMeasure

witsml:dynamicViscosityMeasure has the following units defined:

- Pa.s
- cP
- P
- psi.s
- dyne.s/cm2
- kgf.s/m2
- lbf.s/ft2
- lbf.s/in2
- mPa.s
- N.s/m2

witsml:electricCurrentMeasure

witsml:electricCurrentMeasure has the following units defined:

- A
- MA
- kA
- mA
- nA
- pA
- uA

witsml:electricPotentialMeasure

witsml:electricPotentialMeasure has the following units defined:

- V
- kV
- mV
- MV
- uV

witsml:energyPerAreaMeasure

witsml:energyPerAreaMeasure has the following units defined:

- N/m
- erg/cm²
- J/cm²
- J/m²
- kgf.m/cm²
- lbf.ft/in²
- mJ/cm²
- mJ/m²

witsml:equivalentPerMassMeasure

witsml:equivalentPerMassMeasure has the following units defined:

- eq/kg
- meq/g
- meq/100g

witsml:forceMeasure

witsml:forceMeasure has the following units defined:

- N
- daN
- dyne
- gf
- kdyne
- kgf
- klbf
- kN
- lbf
- Mgf
- mN
- MN
- ozf
- pdl
- tonfUK
- tonfUS
- uN

witsml:forcePerLengthMeasure

witsml:forcePerLengthMeasure has the following units defined:

- N/30m
- N/m
- dyne/cm
- kN/m
- kgf/cm
- lbf/100ft
- lbf/30m
- lbf/ft
- lbf/in
- mN/km
- mN/m
- pdl/cm
- tonfUK/ft
- tonfUS/ft

witsml:forcePerVolumeMeasure

witsml:forcePerVolumeMeasure has the following units defined:

- N/m³
- atm/100m
- atm/m
- bar/km

- bar/m
- GPa/cm
- kPa/100m
- kPa/m
- lbf/ft³
- lbf/galUS
- MPa/m
- psi/ft
- psi/100ft
- psi/kft
- psi/m
- Pa/m
- atm/ft

witsml:frequencyMeasure

witsml:frequencyMeasure has the following units defined:

- Hz
- c/s
- GHz
- kHz
- mHz
- MHz
- uHz
- 1/s
- 1/a
- 1/d
- 1/h
- 1/min
- 1/wk
- kEuc/s

witsml:illuminanceMeasure

witsml:illuminanceMeasure has the following units defined:

- lx
- lm/m²
- footcandle
- klx

witsml:lengthMeasure

witsml:lengthMeasure has the following units defined:

- m
- angstrom
- chBnA
- chBnB
- chCla
- chSe
- chUS
- cm
- dm
- fathom
- fm
- ft
- ftBnA
- ftBnB
- ftBr(65)
- ftCla
- ftGC
- ftInd
- ftInd(37)
- ftInd(62)
- ftInd(75)
- ftMA
- ftSe
- ftUS
- in
- in/10
- in/16
- in/32
- in/64
- inUS
- km
- lkBnA
- lkBnB
- lkCla
- lkSe
- lkUS
- mGer
- mi
- mil
- miUS
- mm
- Mm
- nautmi

- nm
- pm
- um
- yd
- ydBnA
- ydBnB
- ydCla
- ydIm
- ydInd
- ydInd(37)
- ydInd(62)
- ydInd(75)
- ydSe

witsml:lengthPerLengthMeasure

witsml:lengthPerLengthMeasure has the following units defined:

- %
- ft/100ft
- ft/ft
- ft/in
- ft/m
- ft/mi
- km/cm
- m/30m
- m/cm
- m/km
- m/m
- mi/in

witsml:magneticFieldStrengthMeasure

witsml:magneticFieldStrengthMeasure has the following units defined:

- A/m
- A/mm
- gamma
- Oe

witsml:magneticInductionMeasure

witsml:magneticInductionMeasure has the following units defined:

- T
- gauss
- mT
- mgauss
- nT
- uT

witsml:massConcentrationMeasure

witsml:massConcentrationMeasure has the following units defined:

- Euc
- %
- g/kg
- kg/kg
- kg/sack94
- mg/kg
- permil
- ppdk
- ppk
- ppm

witsml:massMeasure

witsml:massMeasure has the following units defined:

- kg
- ag
- ct
- cwtUK
- cwtUS
- g
- grain
- klbm
- lbm
- Mg
- mg
- oz(av)
- oz(troy)
- ozm
- sack94
- t
- tonUK
- tonUS
- ug

witsml:massPerLengthMeasure

witsml:massPerLengthMeasure has the following units defined:

- kg/m
- klbm/in
- lbm/ft
- Mg/in
- kg.m/cm2

witsml:momentOfForceMeasure

witsml:momentOfForceMeasure has the following units defined:

- J
- dN.m
- daN.m
- ft.lbf
- kft.lbf
- kgf.m
- kN.m
- lbf.ft
- lbf.in
- lbm.ft2/s2
- N.m
- pdl.ft
- tonfUS.ft
- tonfUS.mi

witsml:perLengthMeasure

witsml:perLengthMeasure has the following units defined:

- 1/m
- 1/angstrom
- 1/cm
- 1/ft
- 1/in
- 1/mi
- 1/mm
- 1/nm
- 1/yd

witsml:planeAngleMeasure

witsml:planeAngleMeasure has the following units defined:

- rad
- c
- ccgr
- cgr
- dega
- gon
- gr
- Grad
- krad
- mila
- mina
- mrad
- Mrad
- msec
- seca
- urad

witsml:powerMeasure

witsml:powerMeasure has the following units defined:

- W
- ch
- CV
- ehp
- GW
- hhp
- hp
- kcal/h
- kW
- MJ/a
- MW
- mW
- nW
- ton of refrigeration
- TW
- uW

witsml:pressureMeasure

witsml:pressureMeasure has the following units defined:

- Pa
- at
- atm
- bar
- cmH2O(4degC)
- dyne/cm2
- GPa
- hbar
- inH2O(39.2F)
- inH2O(60F)
- inHg(32F)
- inHg(60F)
- kgf/cm2
- kgf/mm2
- kN/m2
- kPa
- kpsi
- lbf/ft2
- lbf/100ft2
- lbf/in2
- mbar
- mmHg(0C)
- mPa
- MPa
- Mpsi
- N/m2
- N/mm2
- Pa(g)
- pPa
- psi
- psia
- psig
- tonfUS/ft2
- tonfUS/in2
- torr
- ubar
- umHg(0C)
- uPa
- upsi

witsml:relativePowerMeasure

witsml:relativePowerMeasure has the following units defined:

- %
- Btu/bhp.hr
- W/kW
- W/W

witsml:specificVolumeMeasure

witsml:specificVolumeMeasure has the following units defined:

- m3/kg
- bbl/tonUK
- bbl/tonUS
- cm3/g
- dm3/kg
- dm3/t
- ft3/kg
- ft3/lbm
- ft3/sack94
- galUS/sack94
- galUK/lbm
- galUS/lbm
- galUS/tonUK
- galUS/tonUS
- L/100kg
- L/kg
- L/t
- L/tonUK
- m3/g
- m3/t
- m3/tonUK
- m3/tonUS

witsml:thermodynamicTemperatureMeasure

witsml:thermodynamicTemperatureMeasure has the following units defined:

- K
- degC
- degF
- degR

witsml:timeMeasure

witsml:timeMeasure has the following units defined:

- s
- a
- cs
- d
- Ga
- h
- 100s
- Ma
- min
- ms
- ms/2
- ns
- ps
- us
- wk
- 100ka

witsml:velocityMeasure

witsml:velocityMeasure has the following units defined:

- m/s
- cm/a
- cm/s
- dm/s
- ft/d
- ft/h
- ft/min
- ft/ms
- ft/s
- ft/us
- in/a
- in/min
- in/s
- kft/h
- kft/s
- km/h
- km/s
- knot
- m/d
- m/h

- m/min
- m/ms
- mi/h
- mil/yr
- mm/a
- mm/s
- nm/s
- um/s

witsml:volumeMeasure

witsml:volumeMeasure has the following units defined:

- m3
- acre.ft
- bbl
- bcf
- cm3
- dm3
- flozUK
- flozUS
- ft3
- galUK
- galUS
- ha.m
- hL
- in3
- 1000ft3
- km3
- L
- Mbbbl
- Mcf
- M(ft3)
- mi3
- mL
- M(m3)
- mm3
- MMbbbl
- ptUK
- ptUS
- qtUK
- qtUS
- tcf
- um2.m
- yd3

witsml:volumeFlowRateMeasure

witsml:volumeFlowRateMeasure has the following units defined:

- m³/s
- bbl/d
- bbl/hr
- bbl/min
- cm³/30min
- cm³/h
- cm³/min
- cm³/s
- dm³/s
- ft³/d
- ft³/h
- ft³/min
- ft³/s
- galUK/d
- galUK/hr
- galUK/min
- galUS/d
- galUS/hr
- galUS/min
- kbbbl/d
- 1000ft³/d
- 1000m³/d
- 1000m³/h
- L/h
- L/min
- L/s
- m³/d
- m³/h
- m³/min
- Mbbbl/d
- M(ft³)/d
- M(m³)/d

witsml:volumePerVolumeMeasure

witsml:volumePerVolumeMeasure has the following units defined:

- Euc
- %
- permil
- ppdk

- ppk
- ppm
- bbl/acre.ft
- bbl/bbl
- bbl/ft3
- bbl/100bbl
- bbl/k(ft3)
- bbl/M(ft3)
- cm3/cm3
- cm3/m3
- dm3/m3
- ft3/bbl
- ft3/ft3
- galUS/kgalUS
- galUK/kgalUK
- galUK/ft3
- galUK/Mbbl
- galUS/bbl
- galUS/10bbl
- galUS/ft3
- galUS/Mbbl
- 1000ft3/bbl
- ksm3/sm3
- L/10bbl
- L/m3
- m3/ha.m
- m3/m3
- M(ft3)/acre.ft
- mL/galUK
- mL/galUS
- mL/mL
- MMbbl/acre.ft
- MMscf60/stb60
- Mscf60/stb60
- ptUK/Mbbl
- ptUS/10bbl
- pu
- scm15/stb60
- sm3/ksm3
- sm3/sm3
- stb60/MMscf60
- stb60/MMscm15
- stb60/Mscf60
- stb60/Mscm15
- stb60/scm15