# Package: kwb.ogre (via r-universe)

August 21, 2024

**Title** Functions Used Within the OGRE Project at KWB

**Version** 0.0.0.9000

**Description** This package contains functions for: reading logger files.

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**URL** https://github.com/KWB-R/kwb.ogre

**BugReports** https://github.com/KWB-R/kwb.ogre/issues

**Imports** kwb.datetime, kwb.db, kwb.event, kwb.logger, kwb.monitoring, kwb.odm, kwb.quantum, kwb.read, kwb.utils, manipulate

**Suggests** covr

**Encoding** UTF-8

**LazyData** true

**Remotes** github::kwb-r/kwb.datetime, github::kwb-r/kwb.db, github::kwb-r/kwb.event, github::kwb-r/kwb.logger, github::kwb-r/kwb.monitoring, github::kwb-r/kwb.odm, github::kwb-r/kwb.quantum, github::kwb-r/kwb.read, github::kwb-r/kwb.utils

**RoxygenNote** 7.1.1

**Repository** https://kwb-r.r-universe.dev

**RemoteUrl** https://github.com/KWB-R/kwb.ogre

**RemoteRef** HEAD

**RemoteSha** fb4925fec89ea093a511732fe3917320ff196e5f

## Contents

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`checkLimsNumbers` *checkLimsNumbers*

---

## Description

check for duplicate LIMS numbers in sample information

## Usage

```
checkLimsNumbers(x)
```

## Arguments

| | |
|---|---|
| x | data frame as returned by `getInfoOnAnalysedSamplesFromExcel` or `getInfoOnAnalysedSamplesForS` |

## Value

duplicated entries (if any)

## downloadLatestPankeDataFromQuantum *Download Panke Data from Quantum*

### Description

Download latest Panke data from Quantum web portal

### Usage

```
downloadLatestPankeDataFromQuantum(target.dir)
```

### Arguments

| | |
|---|---|
| target.dir | full path to target directory |

### Value

full path(s) to downloaded csv file(s)

## ganttPlotSamples_v1 *Gantt Plot Samples (version 1)*

### Description

Gantt Plot Samples (version 1)

### Usage

```
ganttPlotSamples_v1(bottleEvents, endTimeOffsets)
```

### Arguments

| | |
|---|---|
| bottleEvents | data frame as returned by samplingEventsToBottleEvents, with begin and end of time intervals represented by an auto sampler's bottle. |
| endTimeOffsets | vector of integer offsets determining new end times for the bottle events by: bottleEvents$tEnd <- bottleEvents$tBeg + 60*endTimeOffsets - 1 |

### Value

ganttPlotSamples version 1

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`ganttPlotSamples_v2` *Gantt Plot Samples (version 2)*

---

## Description

Gantt Plot Samples (version 2)

## Usage

```
ganttPlotSamples_v2(bottleEvents, bottle, duration)
```

## Arguments

| | |
|---|---|
| `bottleEvents` | data frame as returned by `samplingEventsToBottleEvents`, with begin and end of time intervals represented by an auto sampler's bottle. |
| `bottle` | bottle number |
| `duration` | "duration" of "bottle event" |

## Value

ganttPlotSamples version 2

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`getCurrentFlowSubDirectory` *getCurrentFlowSubDirectory*

---

## Description

getCurrentFlowSubDirectory

## Usage

```
getCurrentFlowSubDirectory(flowDirectory, do.stop = TRUE)
```

## Arguments

| | |
|---|---|
| `flowDirectory` | full path to the directory |
| `do.stop` | if `TRUE` (default) the program will stop if there are unexpected files or folders, otherwise a warning is given |

## Value

path to most recent flow sub-directory

`getInfoOnAnalysedSamplesForStation` *getInfoOnAnalysedSamplesForStation*

## Description

Read information on analysed samples for one monitoring station from Excel file maintained by OGRE team

## Usage

```
getInfoOnAnalysedSamplesForStation(
  xls,
  station,
  dbg = FALSE,
  sheetPrefix = "data_"
)
```

## Arguments

| | |
|---|---|
| `xls` | full path to Excel file |
| `station` | three letter code of monitoring station for which data are to be read |
| `dbg` | if TRUE, debug messages are shown, else not |
| `sheetPrefix` | prefix of sheet names of sheets to be read (default: "data_") |

## Value

data frame with columns *station*, *LIMS_Nr*, *BAK_LIMS_Nr*, *firstSampling*, *lastSampling* and *Art_der_Probe*

## See Also

`getInfoOnAnalysedSamplesFromExcel`

`getInfoOnAnalysedSamplesFromExcel` *getInfoOnAnalysedSamplesFromExcel*

## Description

Read information on analysed samples from Excel file maintained by OGRE team

## Usage

```
getInfoOnAnalysedSamplesFromExcel(xls, dbg = FALSE, sheetPrefix = "data_")
```

### Arguments

| | |
|---|---|
| xls | full path to Excel file |
| dbg | if TRUE, debug messages are shown, else not |
| sheetPrefix | prefix of sheet names of sheets to be read (default: "data_") |

### Value

data frame with ...

### See Also

getInfoOnAnalysedSamplesForStation

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## OGRE_DICTIONARY_FILE *Default folder "dictionary" file*

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### Description

default "dictionary" file describing the folder structure to be used in OGRE

### Usage

```
OGRE_DICTIONARY_FILE()
```

### Value

path to OGRE path dictionary file

### Examples

```
OGRE_DICTIONARY_FILE()
```

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## OGRE_ODM_LABMETHODS *OGRE_ODM_LABMETHODS*

---

### Description

OGRE_ODM_LABMETHODS

### Usage

```
OGRE_ODM_LABMETHODS(stringsAsFactors = default.stringsAsFactors())
```

### Arguments

stringsAsFactors
: TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame()

### Value

data frame with labmethods

### Examples

```
str(OGRE_ODM_LABMETHODS())
```

---

OGRE_ODM_METHODS *OGRE_ODM_METHODS*

---

### Description

OGRE_ODM_METHODS

### Usage

```
OGRE_ODM_METHODS(stringsAsFactors = default.stringsAsFactors())
```

### Arguments

stringsAsFactors
: TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame()

### Value

data frame with methods

### Examples

```
str(OGRE_ODM_METHODS())
```

## OGRE_ODM_SAMPLE_TYPES *OGRE_ODM_SAMPLE_TYPES*

### Description

OGRE_ODM_SAMPLE_TYPES

### Usage

```
OGRE_ODM_SAMPLE_TYPES(stringsAsFactors = default.stringsAsFactors())
```

### Arguments

| | |
|---|---|
| stringsAsFactors | TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame() |

### Value

data frame with sample types

### Examples

```
str(OGRE_ODM_SAMPLE_TYPES())
```

## OGRE_ODM_SITES *OGRE_ODM_SITES*

### Description

TODO: further information on the sites (e.g. addresses need to be added manually within the database...)

### Usage

```
OGRE_ODM_SITES(stringsAsFactors = default.stringsAsFactors())
```

### Arguments

| | |
|---|---|
| stringsAsFactors | TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame() |

### Value

data frame with sources

### Examples

```
str(OGRE_ODM_SITES())
```

OGRE_ODM_SOURCES *OGRE_ODM_SOURCES*

## Description

OGRE_ODM_SOURCES

## Usage

```
OGRE_ODM_SOURCES(stringsAsFactors = default.stringsAsFactors())
```

## Arguments

| | |
|---|---|
| stringsAsFactors | TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame() |

## Value

data frame with sources

## Examples

```
str(OGRE_ODM_SOURCES())
```

OGRE_ODM_UNITS *OGRE_ODM_UNITS*

## Description

OGRE_ODM_UNITS

## Usage

```
OGRE_ODM_UNITS(stringsAsFactors = default.stringsAsFactors())
```

## Arguments

| | |
|---|---|
| stringsAsFactors | TRUE or FALSE (default: default.stringsAsFactors) passed on to data.frame() |

## Value

data frame with units

## Examples

```
str(OGRE_ODM_UNITS())
```

OGRE_RAIN_GAUGES *OGRE_RAIN_GAUGES*

## Description

OGRE_RAIN_GAUGES

## Usage

```
OGRE_RAIN_GAUGES()
```

## Value

data frame with rain gauges used in OGRE

OGRE_SITES *OGRE_SITES*

## Description

OGRE_SITES

## Usage

```
OGRE_SITES()
```

## Value

list of lists. One list element per Site, each of which is a list with exactly one list element: SiteID, holding the SiteID of the corresponding site

OGRE_TIMESERIES *OGRE_TIMESERIES*

## Description

OGRE_TIMESERIES

## Usage

```
OGRE_TIMESERIES()
```

## Value

list

OGRE_VARIABLES *OGRE_VARIABLES*

## Description

OGRE_VARIABLES

## Usage

```
OGRE_VARIABLES()
```

## Value

data frame with laboratory variables

## Examples

```
str(OGRE_VARIABLES())
```

openBottleSelector *Open Bottle Selecter*

## Description

Open Bottle Selecter

## Usage

```
openBottleSelector(bottleEvents, version = 2)
```

## Arguments

| | |
|---|---|
| bottleEvents | data frame as returned by samplingEventsToBottleEvents, with begin and end of time intervals represented by an auto sampler's bottle. |
| version | 1 or 2 (default: 2), used to switch between different plotting options |

## Value

opens bottle selector

## readOgreSamplerFileByName *readOgreSamplerFileByName*

### Description

readOgreSamplerFileByName

### Usage

```
readOgreSamplerFileByName(samplerFile, bottlesToConsider, siteCode = NA)
```

### Arguments

| | |
|---|---|
| samplerFile | full path to sampler file |
| bottlesToConsider | bottlesToConsider |
| siteCode | siteCode (default: NA) |

### Value

data frame with ???

## read_BWB_LaboratoryReportFromXls *read_BWB_LaboratoryReportFromXls*

### Description

NOTE: only rows are used in which parameter, LabMethodName and LabUnits are given

### Usage

```
read_BWB_LaboratoryReportFromXls(
  labResult.xls,
  sheetName = "Tabelle1",
  date.format = kwb.utils::underscoreToPercent("_d._m._Y"),
  methodRequired = FALSE,
  dbg = FALSE,
  open.on.error = TRUE
)
```

### Arguments

| | |
|---|---|
| labResult.xls | full path to Excel file |
| sheetName | name of sheet in Excel file. Default: "Tabelle1" |
| date.format | date format used in Excel file. Default: "%d.%m.%Y" |
| methodRequired | if TRUE, only those rows of the Excel file are considered in which a method is given in column "Methode". Default: FALSE |
| dbg | print debug messages (default: FALSE) |
| open.on.error | open on error (default: TRUE) |

### Value

data frame with columns *VariableCode*, *LabSampleCode*, *SamplingDate*, *SiteCode*, *DataValueText*, *LabMethodName*, *LabUnits*

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## read_hydraulics *read_hydraulics*

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### Description

read_hydraulics

### Usage

```
read_hydraulics(
  settings,
  dictionary = kwb.utils::selectElements(settings, "dictionary"),
  do.stop = TRUE
)
```

### Arguments

| | |
|---|---|
| settings | list of settings as returned by configure |
| dictionary | list of path definitions |
| do.stop | if TRUE (default) the program will stop if there are unexpected files or folders, otherwise a warning is given |

### Value

data frame with columns *DateTime* (POSIXct, UTC), *H*, *v*, *Q*, *T*

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`stopOnWrongSampleSite` *stopOnWrongSampleSite*

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## Description

stopOnWrongSampleSite

## Usage

```
stopOnWrongSampleSite(sampleData, siteCode, samplerFile = "<unknown>")
```

## Arguments

| | |
|---|---|
| `sampleData` | sampleData |
| `siteCode` | siteCode |
| `samplerFile` | samplerFile (default: "<unknown>") |

## Value

error if site_id not found

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`usePredictedFlowInTimeInterval` *usePredictedFlowInTimeInterval*

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## Description

usePredictedFlowInTimeInterval

## Usage

```
usePredictedFlowInTimeInterval(hydraulicData, firstTimestamp, lastTimestamp)
```

## Arguments

| | |
|---|---|
| `hydraulicData` | hydraulicData |
| `firstTimestamp` | firstTimestamp |
| `lastTimestamp` | lastTimestamp |

## Value

data frame with filtered hydraulic data (first - last timestamp)

# Index