```
Server schema versions supported:
    1.3.1.1
    1.4.1.1
Server capabilities for schema version 1.4.1.1:
<capServers xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
version="1.4.1">
  <capServer apiVers="1.4.1">
    <contact>
      <name>Laversab</name>
      <email>EDRsupport@laversab.com</email>
      <phone>+1(281)325-8300</phone>
    </contact>
    <name>WITSML server</name>
    <description>Laversab WITSML Server Copyright 2017-2020
description>
    <vendor>Laversab</vendor>
    <version>5.3</version>
    <schemaVersion>1.4.1.1</schemaVersion>
    <changeDetectionPeriod>10</changeDetectionPeriod>
    <maxRequestLatestValues>720</maxRequestLatestValues>
    <growingTimeoutPeriod dataObject="log">20</growingTimeoutPeriod>
    <growingTimeoutPeriod dataObject="mudLog">20</</pre>
growingTimeoutPeriod>
    <growingTimeoutPeriod dataObject="trajectory">20</</pre>
growingTimeoutPeriod>
    <cascadedDelete>true</cascadedDelete>
    <supportUomConversion>false</supportUomConversion>
    <compressionMethod>none</compressionMethod>
    <function name="WMLS GetCap">
      <dataObject>capServer</dataObject>
    </function>
    <function name="WMLS GetFromStore">
      <dataObject>changeLog</dataObject>
      <dataObject maxDataNodes="1000" maxDataPoints="1000">log
dataObject>
      <dataObject maxDataNodes="10000">mudLog</dataObject>
      <dataObject maxDataNodes="10000">trajectory</dataObject>
      <dataObject>well</dataObject>
      <dataObject>wellbore</dataObject>
    </function>
    <function name="WMLS AddToStore">
      <dataObject maxDataNodes="1000" maxDataPoints="1000">log
dataObject>
      <dataObject maxDataNodes="10000">mudLog</dataObject>
      <dataObject maxDataNodes="10000">trajectory</dataObject>
      <dataObject>well</dataObject>
      <dataObject>wellbore</dataObject>
    </function>
```

```
<function name="WMLS UpdateInStore">
      <dataObject maxDataNodes="1000" maxDataPoints="1000">log
dataObject>
      <dataObject maxDataNodes="10000">mudLog</dataObject>
      <dataObject maxDataNodes="10000">trajectory</dataObject>
      <dataObject>well</dataObject>
      <dataObject>wellbore</dataObject>
    </function>
    <function name="WMLS DeleteFromStore">
      <dataObject maxDataNodes="1000" maxDataPoints="1000">log
dataObject>
      <dataObject maxDataNodes="10000">mudLog</dataObject>
      <dataObject maxDataNodes="10000">trajectory</dataObject>
      <dataObject>well</dataObject>
      <dataObject>wellbore</dataObject>
    </function>
    <function name="WMLS GetVersion"/>
    <function name="WMLS_GetBaseMsg"/>
  </capServer>
</capServers>
Results Summary
    Script:testsuite
                                                (Duration:271.85 sec)
        Script:test1a
                                              Pass (Duration:0.78
sec)
          Partial Pass: Selection by 'uid' succeeded
          Partial Pass: Selection by 'name' succeeded
          Partial Pass: Selection by 'dTimLastChange' succeeded
          Partial Pass: Newer well included in results of query by
dTimLastChange
          Partial Pass: Older well not included in results of guery
by dTimLastChange
        Script:test1b
                                              Pass
                                                    (Duration:0.39
sec)
                         Selection by 'numAPI' succeeded
          Partial Pass:
                                              Pass
                                                   (Duration:0.36
        Script:test1c
sec)
                         Selection by 'numGovt' succeeded
          Partial Pass:
        Script:test2
                                              Pass (Duration:0.17
sec)
          Partial Pass: '1.4.1.x' exists in the returned string
        Script:test3
                                              Pass (Duration:0.17
sec)
          Partial Pass:
                         correct apiVers returned
                                              Pass (Duration:0.16
        Script:test4
```

sec)

Partial Pass: correct version returned

Script:test5 Pass (Duration:0.53 sec) Partial Pass: Server supports case-insensitive comparisons Pass (Duration:0.63 Script:test8 sec) Partial Pass: Server supports requesting data subset for a point index object Script:test9a Pass (Duration:0.44 sec) Partial Pass: Server returned a log whose content is consistent Partial Pass: Server returned a log whose content is consistent Server returned a subset of log data rows as Partial Pass: expected. Script:test9b Pass (Duration:0.41 sec) Partial Pass: Server returned a log whose content is consistent Partial Pass: Server returned a subset of log data rows as expected. Partial Pass: Server returned a log whose content is consistent (Duration:0.17 Script:test10 Pass sec) Partial Pass: Server returned the expected log Curve mnemonics. Script:test11 Pass (Duration:0.20 sec) Partial Pass: Server supports the item ObjectGrowing and returns only logs that are growing Script:test14 Pass (Duration:0.41 sec) Partial Pass: The dTimLastChange in the well object matches the dTimChange in the latest changeHistory of the changeLog. Script:test15 Pass (Duration:0.20 sec) Single well was returned Partial Pass: uid returned Partial Pass: Partial Pass: name returned Partial Pass: dTimLastChange returned Partial Pass: Minimum attributes and elements returned for requestObjectSelectionCapability met (Duration:0.18 Script:test16 Pass sec) Partial Pass: Received correct Schema Version Script:test17 Pass (Duration:0.16 sec) Partial Pass: Data schema versions are returned in order from oldest to newest.

Pass (Duration:0.56 Script:test18 sec) Partial Pass: Server constrains GetFromStore requests according to maxReturnNodes Script:test20 (Duration:0.80 Pass sec) Partial Pass: Server did return a well with a newer dTimLastChange Partial Pass: Server did not return a well with a matching dTimLastChange Partial Pass: Server did not return a well with an older dTimLastChange Script:test21 Pass (Duration:2.77 sec) Partial Pass: Server preserves uid case for AddToStore Script:test22 Pass (Duration:5.97 sec) Partial Pass: DeleteFromStore with cascadedDelete succeeded. Well has been cascadeDeleted Partial Pass: Partial Pass: Wellbore has been cascadeDeleted Partial Pass: Log has been cascadeDeleted Script:test23 Pass (Duration:0.29 sec) Partial Pass: GetFromStore optionsIn id-only is supported for a Trajectory Script:test24a Pass (Duration:0.36 sec) Partial Pass: SQ-010 and SQ-015 indexes match Partial Pass: SQ-015 logData indexes are consistent with startIndex and endIndex Script:test24b Pass (Duration:0.39 sec) Partial Pass: minIndex and maxIndex match from both queries Partial Pass: SQ-015 logData indexes are consistent with SQ-010 minIndex and maxIndex Script:test25a Pass (Duration:0.51 sec) Partial Pass: Return code +2 received Partial Pass: startIndex matches in the two gueries Partial Pass: endIndex in second query is smaller that endIndex in first query Partial Pass: Server did not return more points than maxDataPoints Partial Pass: Server truncated data correctly (Duration:0.77 Script:test25b Pass sec) Partial Pass: Return code +2 received Partial Pass: startIndex matches in the two gueries Partial Pass: endIndex in second query is smaller that

endIndex in first query Partial Pass: Server did not return more nodes than maxDataNodes Partial Pass: Server truncated data correctly (Duration:0.70 Script:test25c Pass sec) Partial Pass: Return code +2 received Partial Pass: startDateTimeIndex matches in the two queries Partial Pass: endDateTimeIndex in second query is earlier than endDateIndex in first query Partial Pass: Server did not return more points than maxDataPoints Partial Pass: Server truncated data correctly Pass (Duration:0.79 Script:test25d sec) Partial Pass: Return code +2 received Partial Pass: startDateTimeIndex matches in the two gueries Partial Pass: endDateTimeIndex in second query is earlier than endDateIndex in first query Partial Pass: Server did not return more nodes than maxDataNodes Partial Pass: Server truncated data correctly Pass (Duration:0.74 Script:test26 sec) Partial Pass: WMLS_AddToStore succeeded well WMLS_GetFromStore succeeded Partial Pass: Partial Pass: Object retrieved matches object loaded Script:test27 (Duration:0.77 Pass sec) Partial Pass: retrieved well name Partial Pass: WMLS AddToStore succeeded wellbore Partial Pass: WMLS_GetFromStore succeeded Partial Pass: Object retrieved matches object loaded Pass (Duration:1.02 Script:test30 sec) Partial Pass: retrieved well/wellbore name Partial Pass: WMLS AddToStore succeeded log Partial Pass: WMLS_GetFromStore succeeded log Object retrieved matches object loaded Partial Pass: Script:test32 Pass (Duration:0.87 sec) Partial Pass: retrieved well/wellbore name Partial Pass: WMLS AddToStore succeeded trajectory WMLS_GetFromStore succeeded trajectory Partial Pass: Partial Pass: Object retrieved matches object loaded (Duration:0.90 Script:test34 Pass sec) retrieved well/wellbore name Partial Pass: WMLS AddToStore succeeded mudLog Partial Pass: Partial Pass: WMLS_GetFromStore succeeded mudLog

Partial Pass: Object retrieved matches object loaded Script:test56 Pass (Duration:0.41 sec) AddToStore succeeded Partial Pass: Partial Pass: Server generate uid for new well Partial Pass: One well returned and uid is ok Script:test57 Pass (Duration:0.21 sec) Partial Pass: Have more than 1 wellbore under desired well Partial Pass: All mandatory properties exist in all wellbores Partial Pass: All wellbores have the correct uidWell Script:test59 Pass (Duration:0.67 sec) Partial Pass: Received change history entry for well Received change history entry for wellbore Partial Pass: Server supports SQ-017 What has been added to Partial Pass: the server since a specified time Script:test60 Pass (Duration:4.32 sec) Partial Pass: Received change history entry for well Script:test61 Pass (Duration:14.30 sec) The correct changeLog object received Partial Pass: Two 'update' changeHistory entries received Partial Pass: Partial Pass: dTimChange of first changeHistory entry is correct Partial Pass: dTimChange of second changeHistory entry is correct Script:test62 Pass (Duration:0.16 sec) Partial Pass: growingTimeoutPeriod is defined in the GetCap response for log Script:test63 Pass (Duration:0.16 sec) Partial Pass: growingTimeoutPeriod is defined in the GetCap response for mudLog Script:test64 (Duration:0.17 Pass sec) Partial Pass: growingTimeoutPeriod is defined in the GetCap response for trajectory Script:test65a Pass (Duration:1.64 sec) Partial Pass: Server ignored attempt to change dTimCreation. Script:test65b Pass (Duration:1.68 sec) Partial Pass: Server did not modify dTimCreation upon updates to a well object. Script:test66 Pass (Duration:1.39

sec) Partial Pass: The server ignores attempts to change objectGrowing. Script:test67 Pass (Duration:0.40 sec) Partial Pass: dTimCreation set within the last 10 minutes Script:test68 Pass (Duration:0.48 sec) Partial Pass: Server returned growing trajectory Server did not return non-growing trajectory Partial Pass: (Duration:0.16 Script:test69 Pass sec) Partial Pass: Server does register support for ChangeLog object Pass (Duration:0.38 Script:test70 sec) Partial Pass: nameWell in changeLog is correct nameWellbore in changeLog is correct Partial Pass: Partial Pass: nameObject in changeLog is correct uidWell in changeLog is correct Partial Pass: uidWellbore in changeLog is correct Partial Pass: Partial Pass: uidObject in changeLog is correct Pass (Duration:0.20 Script:test71 sec) Partial Pass: Latest changeType matches latest entry in changeHistory Partial Pass: Latest changeInfo matches latest entry in changeHistory Partial Pass: LastChangeType and lastChangeInfo match latest changeType and changeInfo in changeHistory (Duration:1.86 Script:test72 Pass sec) Partial Pass: Add to store succeeded Partial Pass: Clearing range for curve is based on curve data received in update Script:test73 Pass (Duration:0.90 sec) Partial Pass: trajectory objects received All required elements are included Partial Pass: Partial Pass: trajectoryStation is not included (Duration:0.38 Script:test76a Pass sec) GetFromStore (requestLatestValues = 1) Partial Pass: returned successfully. Partial Pass: log_verify_check_requestLatestValue_header_and_data_returned successfully. Partial Pass: GetFromStore header-only returned successfully. Partial Pass: log_verify_check_log_header_only returned

successfully. Partial Pass: Server returned the correct maxDateTimeIndex for each curve between queries Script:test76b Pass (Duration:0.60 sec) Partial Pass: Add to store succeeded Partial Pass: Server returned the latest values for each curve Partial Pass: Server returned one value for each curve Script:test77 Pass (Duration:0.20 sec) Partial Pass: maxRequestLatestValues is included in response. Partial Pass: maxRequestLatestValues is greater or equal to 1 Script:test78 Pass (Duration:34.00 sec) ObjectGrowing stays false when a new log is Partial Pass: added Partial Pass: ObjectGrowing is set to true when new row is added to a curve with index value greater than original Partial Pass: ObjectGrowing returns to false after growingTimeoutPeriod has elapsed. The server supports growingTimeoutPeriod for Partial Pass: Logs. Pass (Duration:61.26 Script:test79a sec) ObjectGrowing stays false when adding a new Partial Pass: log Partial Pass: ObjectGrowing stays false when adding a new curve to an existing log Partial Pass: ObjectGrowing stays false when the interior portion of the log is updated Partial Pass: ObjectGrowing stays false when updating the logCurveInfo for one of the curves. Partial Pass: ObjectGrowing is set to true when adding a new row to a curve with index value less than the minimum index for the log curve. Partial Pass: Append behavior for ObjectGrowing functionality for logs has been verified Script:test79b Pass (Duration: 36.61 sec) ObjectGrowing stays false when adding a new Partial Pass: log Partial Pass: ObjectGrowing stays false when deleting a curve of an existing log Partial Pass: ObjectGrowing stays false when deleting a row from a log Partial Pass: Delete behavior for ObjectGrowing functionality for logs has been verified

Script:test80 Pass (Duration:36.72 sec) Partial Pass: ObjectGrowing stays false when adding a new trajectory with a trajectoryStation Partial Pass: ObjectGrowing stays false when updating a trajectory station Partial Pass: ObjectGrowing turns true when adding a new trajectory station ObjectGrowing functionality for append Partial Pass: behaviour of trajectories has been verified. Script:test81 Pass (Duration: 7.92 sec) Partial Pass: Add to store succeeded for well with maximum size uid Add to store succeeded for wellbore with Partial Pass: maximum size uid Partial Pass: Add to store succeeded for log with maximum size uid Partial Pass: Maximum uid length supported for well Maximum uid length supported for wellbore Partial Pass: Partial Pass: Maximum uid length supported for log Script:test81b Pass (Duration:7.98 sec) Add to store succeeded for well with minimum Partial Pass: size uid Add to store succeeded for wellbore with Partial Pass: minimum size uid Partial Pass: Add to store succeeded for log with minimum size uid Partial Pass: Minimum uid length supported for well Partial Pass: Minimum uid length supported for wellbore Partial Pass: Minimum uid length supported for log (Duration:2.14 Script:test85 Pass sec) Partial Pass: Add to store succeeded Partial Pass: Data received after the update is correct Script:test86 Pass (Duration:1.79 sec) Partial Pass: AddToStore succeeds and a uid is returned in SuppMsq0ut Partial Pass: The first GetFromStore returns success and returns the expected well. Partial Pass: DeleteFromStore was successful. Partial Pass: The second GetFromStore request returns success and returns no wells. Server properly deletes an object Partial Pass: Script:test87 Pass (Duration:1.87 sec) Partial Pass: Add to store succeeded Partial Pass: One well returned and wells/well/wellDatum/

datumName[@code] is ok Partial Pass: wells/well/wellDatum/datumName[@code] is deleted Script:test88 (Duration:2.11 Pass sec) Partial Pass: GetFromStore contains a log with all the expected curves. Partial Pass: GetFromStore contains a log without deleted curve. Partial Pass: The server supports proper deletion of a curve. Script:test89 Pass (Duration:0.64 sec) AddToStore is successful. Partial Pass: Partial Pass: GetFromStore is successful. Partial Pass: Log is decreasing. Partial Pass: minIndex/maxIndex values are being set to the MATHEMATICAL min/max index for a decreasing log. Script:test90 Pass (Duration:0.23 sec) Partial Pass: Expected wellbores in the data model received Partial Pass: Only expected attributes and elements received for each wellbore (Duration:0.20 Script:test91 Pass sec) Partial Pass: Correct wellbore was returned Partial Pass: Wellbore validates against write schema Script:test92a Pass (Duration:2.60 sec) Partial Pass: Only trajectoryStation are included in each trajectory Partial Pass: All mandatory elements and attributes included for all trajectoryStation Script:test92b Pass (Duration:0.26 sec) Partial Pass: Only geologyInterval and parameter are included in each mudLog Partial Pass: All mandatory elements and attributes included for all geologyInterval Partial Pass: All mandatory elements and attributes included for all parameter Script:test92c Pass (Duration:0.26 sec) Partial Pass: Only logData is included in each log Partial Pass: Correct elements included for logData (Duration:3.83 Script:test93 Pass sec) Partial Pass: Only trajectoryStation are included in each trajectory Partial Pass: All mandatory elements and attributes

included for all trajectoryStation Partial Pass: Only station-location-only elements returned in each trajectoryStation Pass (Duration:3.38 Script:test94a sec) Partial Pass: WMLS AddToStore succeeded well Partial Pass: GetFromStore changeLogs after Add succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: well changeLog with only Add in lastChangeType succeed Partial Pass: well changeLog with only add has dTimLastChange succeed Partial Pass: UpdateInStore well succeeded Partial Pass: GetFromStore changeLogs after Update succeeded Partial Pass: changeLogs returned are write schema valid No changeHistory in changeLogs exist, succeed Partial Pass: Partial Pass: well changeLog with only update in lastChangeType succeed Partial Pass: well changeLog with only update has dTimLastChange succeed Partial Pass: well changeLog with only update dTimLastChange > changeLog with Add succeed Partial Pass: DeleteFromStore well succeeded Partial Pass: GetFromStore changeLogs after Delete succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: well changeLog with only delete in lastChangeType succeed Partial Pass: well changeLog with only delete has dTimLastChange succeed Partial Pass: well changeLog with only delete dTimLastChange > changeLog with update succeed Script:test94b Pass (Duration:3.48 sec) Partial Pass: WMLS GetFromStore succeeded well WMLS AddToStore succeeded wellbore Partial Pass: Partial Pass: GetFromStore changeLogs after Add succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: wellbore changeLog with only Add in lastChangeType succeed Partial Pass: wellbore changeLog with only add has dTimLastChange succeed Partial Pass: UpdateInStore wellbore succeeded Partial Pass: GetFromStore changeLogs after Update succeeded Partial Pass: changeLogs returned are write schema valid

Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: wellbore changeLog with only update in lastChangeType succeed Partial Pass: wellbore changeLog with only update has dTimLastChange succeed wellbore changeLog with only update Partial Pass: dTimLastChange > changeLog with Update succeed Partial Pass: DeleteFromStore wellbore succeeded Partial Pass: GetFromStore changeLogs after Delete succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed wellbore changeLog with only delete in Partial Pass: lastChangeType succeed Partial Pass: wellbore changeLog with only delete has dTimLastChange succeed Partial Pass: wellbore changeLog with only delete dTimLastChange > changeLog with update succeed Script:test94c Pass (Duration:3.42 sec) Partial Pass: WMLS GetFromStore succeeded wellbore Partial Pass: WMLS AddToStore succeeded trajectory Partial Pass: GetFromStore changeLogs after Add succeeded changeLogs returned are write schema valid Partial Pass: Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: trajectory changeLog with only Add in lastChangeType succeed Partial Pass: trajectory changeLog with only add has dTimLastChange succeed Partial Pass: UpdateInStore trajectory succeeded Partial Pass: GetFromStore changeLogs after Update succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: trajectory changeLog with only update in lastChangeType succeed Partial Pass: trajectory changeLog with only update has dTimLastChange succeed Partial Pass: trajectory changeLog with only update dTimLastChange > changeLog with Update succeed DeleteFromStore trajectory succeeded Partial Pass: Partial Pass: GetFromStore changeLogs after Delete succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: trajectory changeLog with only delete in lastChangeType succeed Partial Pass: trajectory changeLog with only delete has dTimLastChange succeed Partial Pass: trajectory changeLog with only delete

dTimLastChange > changeLog with update succeed Script:test94d Pass (Duration:3.48) sec) Partial Pass: WMLS GetFromStore succeeded wellbore Partial Pass: WMLS AddToStore succeeded log Partial Pass: GetFromStore changeLogs after Add succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: log changeLog with only Add in lastChangeType succeed Partial Pass: log changeLog with only add has dTimLastChange succeed Partial Pass: UpdateInStore log succeeded Partial Pass: GetFromStore changeLogs after Update succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: log changeLog with only update in lastChangeType succeed log changeLog with only update has Partial Pass: dTimLastChange succeed Partial Pass: log changeLog with only update dTimLastChange > changeLog with Update succeed Partial Pass: DeleteFromStore log succeeded Partial Pass: GetFromStore changeLogs after Delete succeeded Partial Pass: changeLogs returned are write schema valid No changeHistory in changeLogs exist, succeed Partial Pass: Partial Pass: log changeLog with only delete in lastChangeType succeed log changeLog with only delete has Partial Pass: dTimLastChange succeed Partial Pass: log changeLog with only delete dTimLastChange > changeLog with update succeed Script:test94e Pass (Duration: 3.40 sec) Partial Pass: WMLS GetFromStore succeeded wellbore Partial Pass: WMLS AddToStore succeeded mudLog GetFromStore changeLogs after Add succeeded Partial Pass: Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed Partial Pass: log changeLog with only Add in lastChangeType succeed Partial Pass: log changeLog with only add has dTimLastChange succeed Partial Pass: UpdateInStore mudLog succeeded Partial Pass: GetFromStore changeLogs after Update succeeded Partial Pass: changeLogs returned are write schema valid Partial Pass: No changeHistory in changeLogs exist, succeed

Partial Pass: log changeLog with only update in
lastChangeType succeed
Partial Pass: log changeLog with only update has
dTimLastChange succeed
Partial Pass: log changeLog with only update dTimLastChange
> changeLog with Update succeed
Partial Pass: DeleteFromStore mudLog succeeded
Partial Pass: GetFromStore changeLogs after Delete
succeeded
Partial Pass: changeLogs returned are write schema valid
Partial Pass: No changeHistory in changeLogs exist, succeed
Partial Pass: log changeLog with only delete in
lastChangeType succeed
Partial Pass: log changeLog with only delete has
dTimLastChange succeed
Partial Pass: log changeLog with only delete dTimLastChange
> changeLog with update succeed
Totals

Run	75
Pass	75
Fail	0
Skipped	0