Another case of segfault-on-exit

QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsproviderregistry.cpp: 237: (clean) [0ms] cleanup:spatialite
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsproviderregistry.cpp: 237: (clean) [0ms] cleanup:virtual
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsproviderregistry.cpp: 237: (clean) [0ms] cleanup:wcs
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsproviderregistry.cpp: 237: (clean) [0ms] cleanup:wms
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/auth/qgsauthmethodregistry.cpp: 154: (~QgsAuthMethodRegistry) [0ms] cleanup: Basic
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/auth/qgsauthmethodregistry.cpp: 154: (~QgsAuthMethodRegistry) [0ms] cleanup: Identity-Cert
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/auth/qgsauthmethodregistry.cpp: 154: (~QgsAuthMethodRegistry) [0ms] cleanup: PKI-PKCS#12
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/auth/qgsauthmethodregistry.cpp: 154: (~QgsAuthMethodRegistry) [0ms] cleanup: PKI-Paths
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsmaprenderercustompainterjob.cpp: 41: (~QgsMapRendererCustomPainterJob) [1ms] QPAINTER destruct
QDEBUG : TestQgsDiagram::cleanupTestCase() src/core/qgsmaprenderercustompainterjob.cpp: 41: (~QgsMapRendererCustomPainterJob) [0ms] QPAINTER destruct
QFATAL : TestQgsDiagram::cleanupTestCase() Received signal 11
FAIL! : TestQgsDiagram::cleanupTestCase() Received a fatal error.
   Loc: [Unknown file(0)]
Totals: 3 passed, 1 failed, 0 skipped
********* Finished testing of TestQgsDiagram *********
Aborted (core dumped)

See also #14176

Last tested with commit:490236f2f2e02e4222f842ea144e8ea3968e63da

It actually seem to be the same issue of #14176 as this is valgrind finding:

==15933== Invalid read of size 8
The ref/unref management in QgsOgrFeatureIterator is not clear to me, and surely doesn't seem to be RAII compliant.

What are ref/unref calls needed for? I'd rather just drop them completely.

I confirm removing the ref / unref methods and calls fixes the crash.

Also, valgrind shows no additional leak

--- Pull Request or Patch supplied changed from No to Yes

Patch for review: https://github.com/qgis/QGIS/pull/2755
The suggested fix in pull 2755 reverts changed meant to fix #13082 -- I'll look at that ticket to see if it breaks.

Ticket #13082 does not break. The shapefile is closed some time after the layer is closed. This is based on an expiration time for connections in the now-centralized connection pool (it seems to be an hard-coded 60 seconds).

I cannot reproduce as of commit:b6c71ac20ea595e6b3136ae8fae0520acbe5f
Assuming fixed by commit:051253888810b06bf05bfeaf7a7c6a09e3fd