# Report of Analysis

**Client:** Opti-Lube
**Job Location:** Memphis, TN, USA
**Our Reference Number:** US280-0014663
**Client Reference Number:** N/A

**Sample ID:** 2014-MEMP-000685-001
**Sample Designated As:** ULSD
**Vessel/Location:** Orem, UT
**Representing:** Pump Diesel Fuel
**Date Taken:** 02-July-2014
**Date Submitted:** 02-July-2014
**Date Tested:** 02-July-2014
**Drawn By:** Client

| Method | Test | Result | Units |
|---|---|---|---|
| ASTM D6079 | Lubricity by the High-Frequency Reciprocating Rig (HFRR) | | |
| | Major Axis | 580 | µm |
| | Minor Axis | 440 | µm |
| | Wear Scar Diameter | 510 | µm |

**Sample ID:** 2014-MEMP-000685-002
**Sample Designated As:** ULSD
**Vessel/Location:** Orem, UT
**Representing:** Pump Diesel Fuel w/ XPD 1:512
**Date Taken:** 02-July-2014
**Date Submitted:** 02-July-2014
**Date Tested:** 02-July-2014
**Drawn By:** Client

| Method | Test | Result | Units |
|---|---|---|---|
| ASTM D6079 | Lubricity by the High-Frequency Reciprocating Rig (HFRR) | | |
| | Major Axis | 440 | µm |
| | Minor Axis | 330 | µm |
| | Wear Scar Diameter | 380 | µm |

**Sample ID:** 2014-MEMP-000685-003
**Sample Designated As:** ULSD
**Vessel/Location:** Orem, UT
**Representing:** Pump Diesel Fuel w/ XL 1:512
**Date Taken:** 02-July-2014
**Date Submitted:** 02-July-2014
**Date Tested:** 02-July-2014
**Drawn By:** Client

| Method | Test | Result | Units |
|---|---|---|---|
| ASTM D6079 | Lubricity by the High-Frequency Reciprocating Rig (HFRR) | | |
| | Major Axis | 260 | µm |
| | Minor Axis | 220 | µm |
| | Wear Scar Diameter | 240 | µm |

**Sample ID:** 2014-MEMP-000685-004
**Sample Designated As:** ULSD
**Vessel/Location:** Orem, UT
**Representing:** Pump Diesel Fuel w/ XL 1:1280
**Date Taken:** 02-July-2014
**Date Submitted:** 02-July-2014
**Date Tested:** 02-July-2014
**Drawn By:** Client

| Method | Test | Result | Units |
|---|---|---|---|
| ASTM D6079 | Lubricity by the High-Frequency Reciprocating Rig (HFRR) | | |
| | Major Axis | 390 | µm |
| | Minor Axis | 350 | µm |
| | Wear Scar Diameter | 370 | µm |


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