

Page: Case Study – Engine Oil 15W40

Oil Analysis - Engine Oil 15W40 CI4-AP

Application: Prime Mover - Engine
Filtration Solution: FS200

Intertek

FACSIMILE TRANSMITTAL SHEET

TO: GLW OIL PURIFIER PTE LTD FROM: Jessie Ho
DATE: 14-JAN-2013
ATTENTION: Evan Yuen YOUR FAX NO.: **
RE: ANALYSIS RESULTS TOTAL PAGES: 2

If this preliminary report is faxed / printed, it is considered an uncontrolled document. As an uncontrolled document, the test result(s) indicated below is / are not final until the original test report is received.

If you do not receive all pages clearly, please let us know as soon as possible to the undersigned either by telephone or fax as stated. Telephone: 6469 9109 Fax: 6469 1982

CB REF/NO.: 2013-MIS-001764-001

SAMPLE DESCRIPTION:

Sample Date: 08/01/2013
Sample No: 13M001764001
SAMPLE NO.: 99811
CLIENT:
EQUIPMENT DESC.: 14FT LORRY
VEH. NO.:
OIL LIFE: 162 675 KM

Before Filtration

TEST	METHOD	UNIT	SPECIFICATION	RESULT
Kinematic Viscosity @ 40°C	ASTM D445-12	cSt	Report	75.54
Kinematic Viscosity @ 100°C	ASTM D445-12	cSt	Report	10.99
Viscosity Index	ASTM D2270-10e1		Report	135

TEST	METHOD	UNIT	SPECIFICATION	RESULT
Silicon	ASTM D5185-09(MOD)	mg / kg	Report	5
Boron	ASTM D5185-09(MOD)	mg / kg	Report	1
Sodium	ASTM D5185-09(MOD)	mg / kg	Report	<1
Magnesium	ASTM D5185-09(MOD)	mg / kg	Report	7
Phosphorus	ASTM D5185-09(MOD)	mg / kg	Report	488
Zinc	ASTM D5185-09(MOD)	mg / kg	Report	604
Barium	ASTM D5185-09(MOD)	mg / kg	Report	1
Calcium	ASTM D5185-09(MOD)	mg / kg	Report	2156

REMARKS : No oil grade provided. Unable to provide full diagnosis. Possible oil in used may be of SAE 10W30 grade. Please confirm oil grade in used. If oil is confirm to be of SAE 10W30 grade, condition of oil is normal and is for further used.

APPROVED SIGNATORY

All work is performed in accordance with Intertek Standard Terms and Conditions of Service which is available on request and at <http://www.intertek.com/terms>.

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FACSIMILE TRANSMITTAL SHEET

TO: GLW OIL PURIFIER PTE LTD FROM: Jessie Ho
DATE: 09-JUL-2013
ATTENTION: Evan Yuen YOUR FAX NO.:
RE: ANALYSIS RESULTS TOTAL PAGES: 2

If you do not receive all pages clearly, please let us know as soon as possible to the undersigned either by telephone or fax as stated. Telephone: 6469 9109 Fax: 6469 1982

CB REF/NO.: 2013-MIS-034318-001

SAMPLE DESCRIPTION:

Sample Date: 27/5/2013
Bottle No: 09831
Sample No: 13M034318001
COMPANY NAME:
EQUIPMENT: ENGINE
EQUIPMENT ID: 1
EQUIPMENT: MITSUBISHI 14FT LORRY
OIL GRADE: ENGINE OIL/15W40CI4-AP
OIL LIFE: 201629KM

After Filtration

Oil Life after

Installation : 38,954

TEST	METHOD	UNIT	SPECIFICATION	RESULT
Kinematic Viscosity @ 40°C	ASTM D445-12	cSt	Report	93.00
Kinematic Viscosity @ 100°C	ASTM D445-12	cSt	Report	13.00
Viscosity Index	ASTM D2270-10e1		Report	137
Water	Visual Observation	%	Report	0.5

TEST	METHOD	UNIT	SPECIFICATION	RESULT
Boron	ASTM D5185-09(MOD)	mg / kg	Report	2
Sodium	ASTM D5185-09(MOD)	mg / kg	Report	1
Magnesium	ASTM D5185-09(MOD)	mg / kg	Report	1411
Phosphorus	ASTM D5185-09(MOD)	mg / kg	Report	1137
Zinc	ASTM D5185-09(MOD)	mg / kg	Report	1302
Barium	ASTM D5185-09(MOD)	mg / kg	Report	<1
Calcium	ASTM D5185-09(MOD)	mg / kg	Report	1028

REMARKS : Normal, no action required. Oil is fit for further used. Resample for testing at normal intervals.

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GLW Oil Purifier Pte. Ltd.