



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

FSP144312

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (--- QTS)

DIAGNOSIS

● Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

● Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0932965	---	---
Sample Date	Client Info		29 May 2024	---	---
Machine Age	mls	Client Info	18152	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ATTENTION	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	114	---
Chromium	ppm	ASTM D5185m	>20	3	---
Nickel	ppm	ASTM D5185m	>4	1	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>20	16	---
Lead	ppm	ASTM D5185m	>40	<1	---
Copper	ppm	ASTM D5185m	>330	120	---
Tin	ppm	ASTM D5185m	>15	0	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		2	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	15	---
Barium	ppm	ASTM D5185m	10	7	---
Molybdenum	ppm	ASTM D5185m	100	50	---
Manganese	ppm	ASTM D5185m		8	---
Magnesium	ppm	ASTM D5185m	450	832	---
Calcium	ppm	ASTM D5185m	3000	1309	---
Phosphorus	ppm	ASTM D5185m	1150	698	---
Zinc	ppm	ASTM D5185m	1350	884	---
Sulfur	ppm	ASTM D5185m	4250	2397	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	33	---
Sodium	ppm	ASTM D5185m	>158	10	---
Potassium	ppm	ASTM D5185m	>20	35	---
Fuel	%	ASTM D3524	>5	1.4	---

INFRA-RED

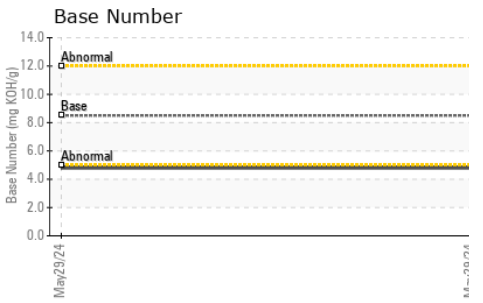
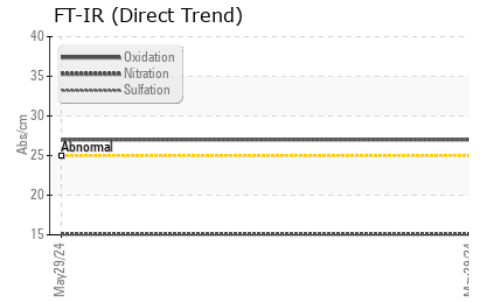
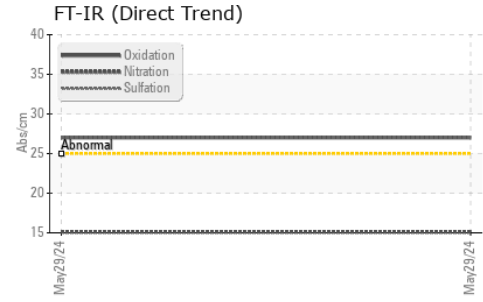
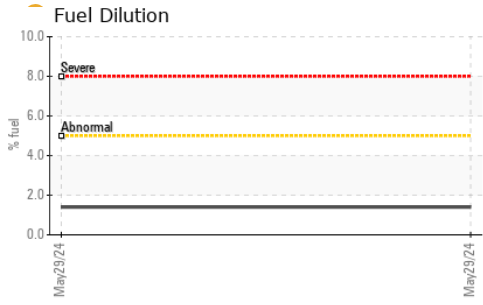
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	15.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.0	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.8	---



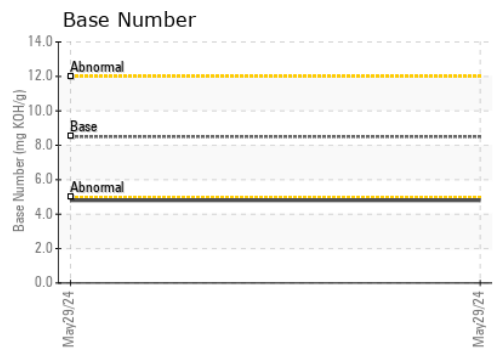
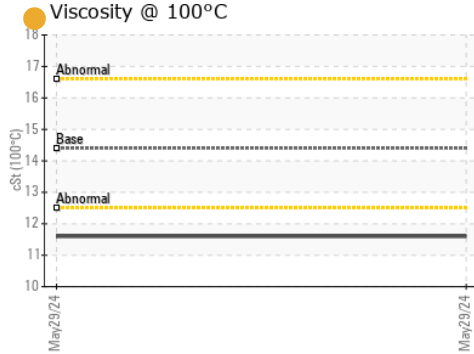
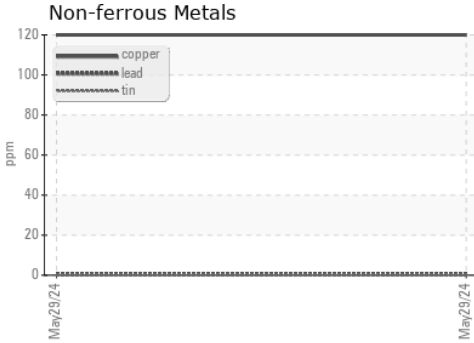
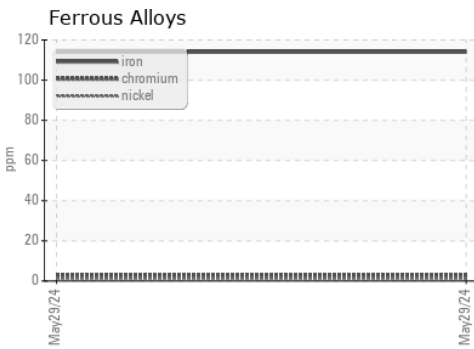
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VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.6	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0932965 **Received** : 13 Jun 2024
Lab Number : 06209577 **Tested** : 19 Jun 2024
Unique Number : 11077038 **Diagnosed** : 19 Jun 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

FRESHPOINT
 8801 EXCHANGE DRIVE
 ORLANDO, FL
 US 32809
 Contact: CRAIG EVANS
 evans_craig@sbcglobal.net

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)