



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

FORD Red service pickup 98066

Component

Diesel Engine

Fluid

AMERIGUARD 15W40 (--- GAL)

DIAGNOSIS

● Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Ameriguard 15w40)

Wear

All component wear rates are normal.

▲ Contamination

Light fuel dilution occurring.

● 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			SBP0004288	---	---
Sample Date	Client Info			14 May 2024	---	---
Machine Age	Client Info			249572	---	---
Oil Age	Client Info			0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				ATTENTION	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.1		NEG	---	---
Glycol	WC Method			NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	20	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>5	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>5	<1	---	---
Aluminum	ppm	ASTM D5185m	>7	5	---	---
Lead	ppm	ASTM D5185m	>50	4	---	---
Copper	ppm	ASTM D5185m	>100	4	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		<1	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		5	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		58	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		900	---	---
Calcium	ppm	ASTM D5185m		1197	---	---
Phosphorus	ppm	ASTM D5185m		1057	---	---
Zinc	ppm	ASTM D5185m		1191	---	---
Sulfur	ppm	ASTM D5185m		3302	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>5	12	---	---
Sodium	ppm	ASTM D5185m		5	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel	%	ASTM D3524	>4.0	▲ 3.1	---	---

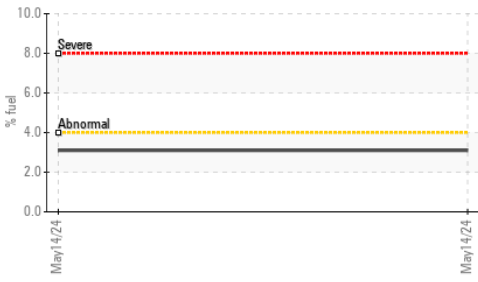
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	---	---

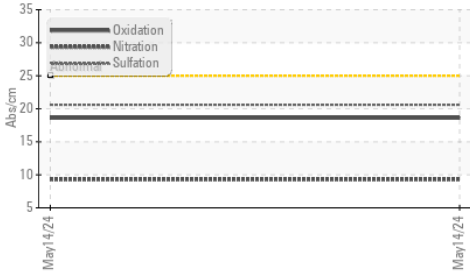


OIL ANALYSIS REPORT

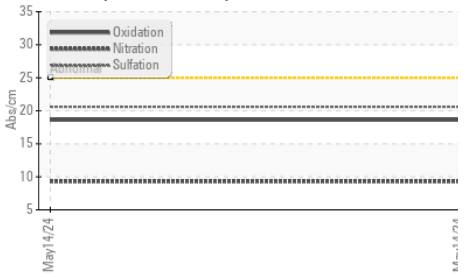
Fuel Dilution



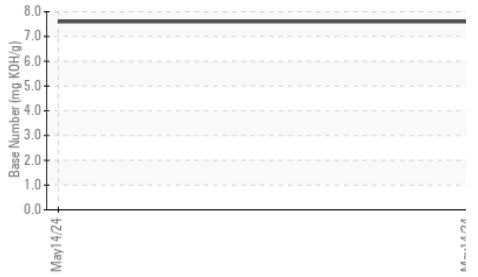
FT-IR (Direct Trend)



FT-IR (Direct Trend)



Base Number

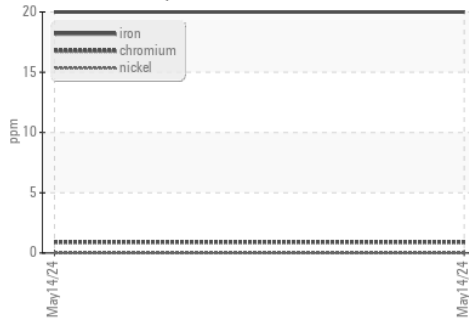


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

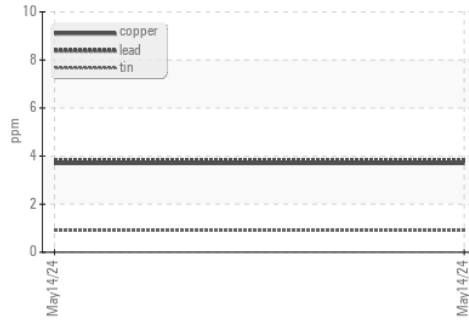
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.5	---	---

GRAPHS

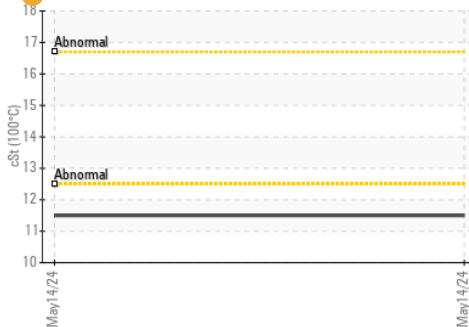
Ferrous Alloys



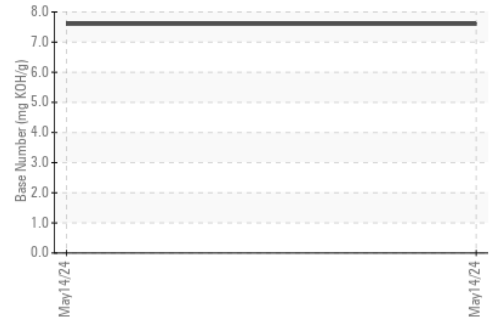
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004288 **Received** : 29 May 2024
Lab Number : 06194880 **Tested** : 03 Jun 2024
Unique Number : 11057003 **Diagnosed** : 03 Jun 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Sapp Bros. Petroleum - Sioux City
 129 STEUBEN ST
 SIOUX CITY, IA
 US 51106
 Contact: JASON MAHRT
 jmahrt@sappbros.net
 T: (712)203-5443
 F:

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)