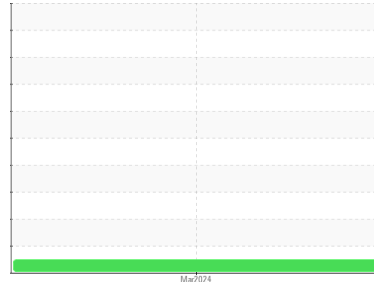




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
TRUCK - URBAN
 Machine Id
FREIGHTLINER 103
 Component
Rear Differential
 Fluid
GEAR OIL SAE 75W90 (2 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PE0000483	---	---
Sample Date	Client Info			12 Mar 2024	---	---
Machine Age	mls	Client Info		473500	---	---
Oil Age	mls	Client Info		473500	---	---
Oil Changed	Client Info			Changed	---	---
Sample Status				NORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>.2	NEG	---	---

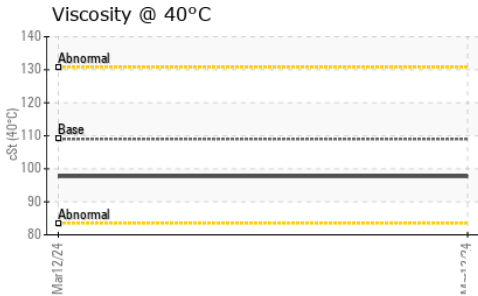
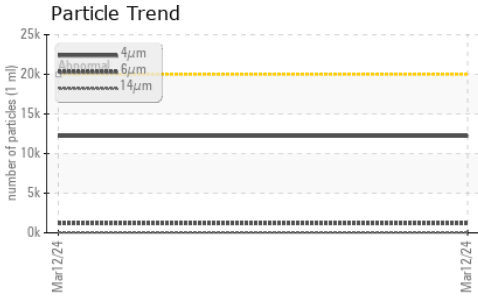
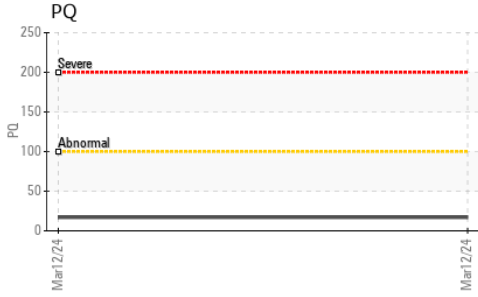
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		17	---	---
Iron	ppm	ASTM D5185m	>500	250	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>25	5	---	---
Lead	ppm	ASTM D5185m	>25	<1	---	---
Copper	ppm	ASTM D5185m	>100	3	---	---
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	400	265	---	---
Barium	ppm	ASTM D5185m	200	0	---	---
Molybdenum	ppm	ASTM D5185m	12	1	---	---
Manganese	ppm	ASTM D5185m		9	---	---
Magnesium	ppm	ASTM D5185m	12	4	---	---
Calcium	ppm	ASTM D5185m	150	26	---	---
Phosphorus	ppm	ASTM D5185m	1650	1360	---	---
Zinc	ppm	ASTM D5185m	125	27	---	---
Sulfur	ppm	ASTM D5185m	22500	24265	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	39	---	---
Sodium	ppm	ASTM D5185m		13	---	---
Potassium	ppm	ASTM D5185m	>20	8	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	12207	---	---
Particles >6µm		ASTM D7647	>5000	1187	---	---
Particles >14µm		ASTM D7647	>640	47	---	---
Particles >21µm		ASTM D7647	>160	7	---	---
Particles >38µm		ASTM D7647	>40	0	---	---
Particles >71µm		ASTM D7647	>10	0	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/17/13	---	---

OIL ANALYSIS REPORT



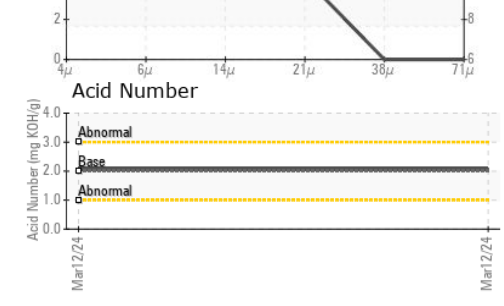
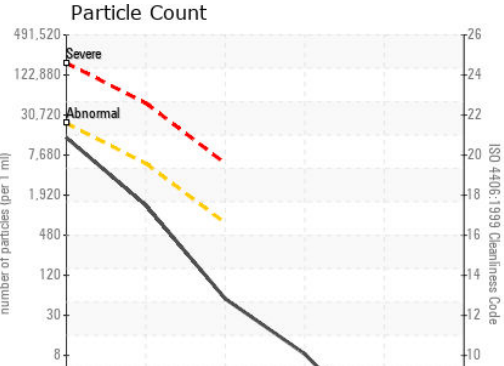
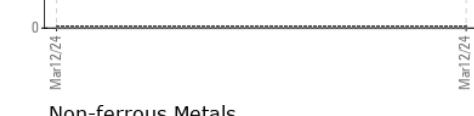
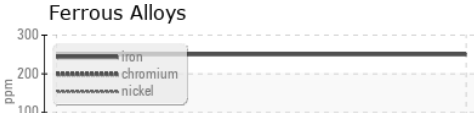
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	2.06	---	---

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	>.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	109	97.7	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color				<i>no image</i>	<i>no image</i>	<i>no image</i>
Bottom				<i>no image</i>	<i>no image</i>	<i>no image</i>

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0000483 **Received** : 27 Mar 2024
Lab Number : **06131510** **Tested** : 02 Apr 2024
Unique Number : 10950975 **Diagnosed** : 02 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

PetroCard - Aberdeen
 110 Commerce St
 Aberdeen, WA
 US 98520
 Contact: ED ROZMARYN
 erozmaryn@petrocard.com

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)