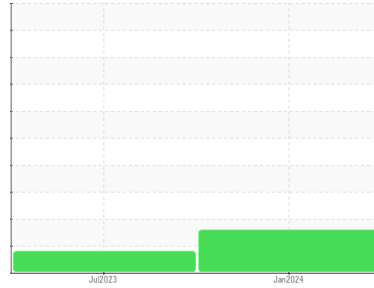


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**253**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1 5W40 (--- GAL)**

**DIAGNOSIS**

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0099442</b>	PCA0099452	---
Sample Date	Client Info			<b>20 Jan 2024</b>	03 Jul 2023	---
Machine Age	mls	Client Info		<b>98092</b>	89287	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>▲ 124</b>	▲ 192	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	8	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 41</b>	56	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>5</b>	7	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

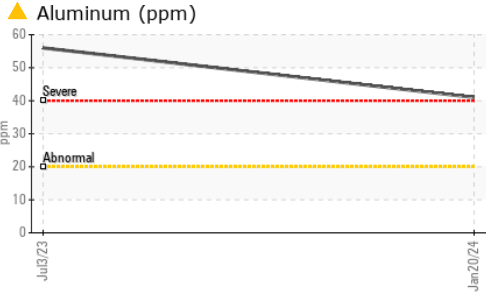
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	291	<b>33</b>	54	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	8.0	<b>47</b>	44	---
Manganese	ppm	ASTM D5185m		<b>1</b>	2	---
Magnesium	ppm	ASTM D5185m	624	<b>943</b>	864	---
Calcium	ppm	ASTM D5185m	2158	<b>872</b>	965	---
Phosphorus	ppm	ASTM D5185m	1132	<b>923</b>	980	---
Zinc	ppm	ASTM D5185m	1300	<b>1118</b>	1207	---
Sulfur	ppm	ASTM D5185m	3616	<b>2893</b>	3114	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	11	---
Sodium	ppm	ASTM D5185m		<b>3</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---

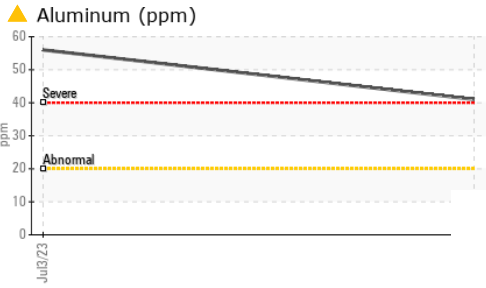
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.4</b>	1.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>16.6</b>	21.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.4</b>	45.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>35.7</b>	61.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>5.8</b>	3.8	---

# OIL ANALYSIS REPORT

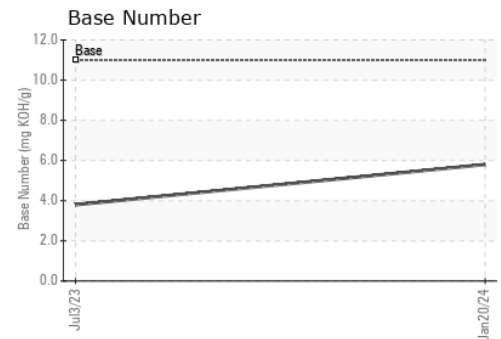
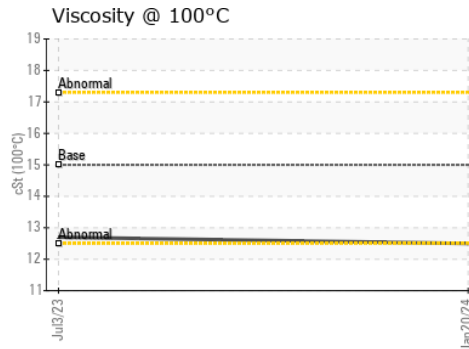
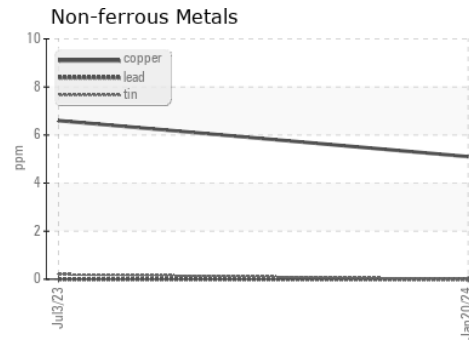
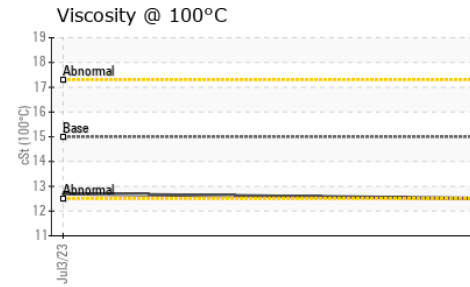
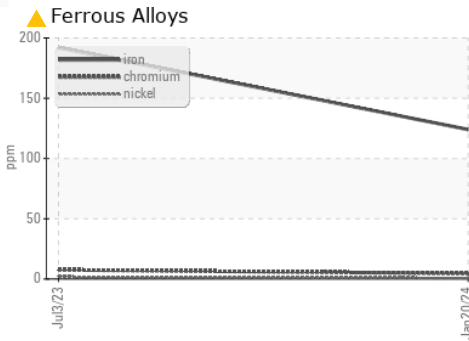
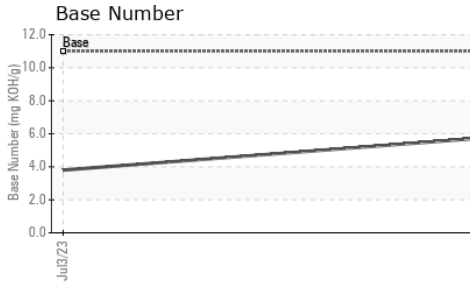


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	15.0	12.5	12.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099442 **Received** : 30 Jan 2024  
**Lab Number** : 06073559 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10850236 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**PETROSTAR INC - FAIRBANKS**  
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 FAIRBANKS, AK  
 US 99701  
 Contact: PHIL SWAFFORD  
 pswafford@petrostar.com  
 T: (907)452-0671  
 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)