



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**ELGIN ELGIN PELICAN**

Component  
**Rear Diesel Engine**

Fluid  
**TRC PRO-SPEC IV XP SYN BLEND 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06045113	TR05848813	---
Sample Date		Client Info		21 Dec 2023	12 May 2023	---
Machine Age	hrs	Client Info		1781	1259	---
Oil Age	hrs	Client Info		481	0	---
Filter Age	hrs	Client Info		481	0	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				NORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	28	19	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	<1	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	0	<1	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

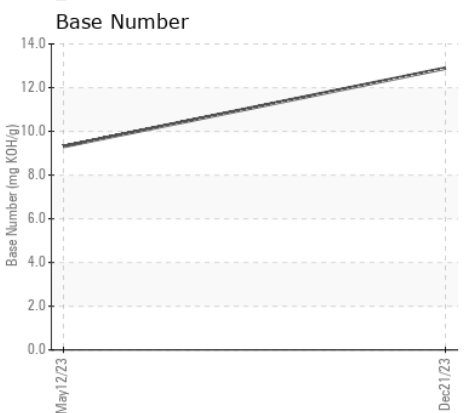
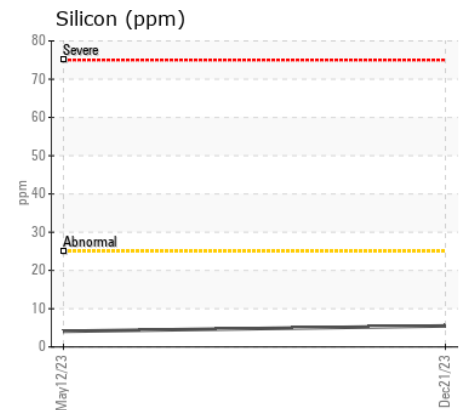
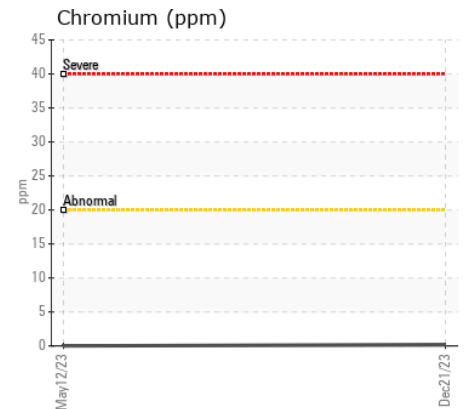
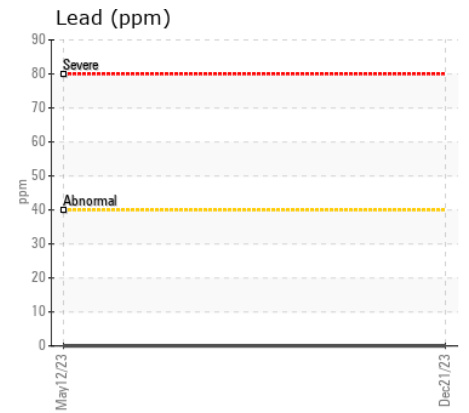
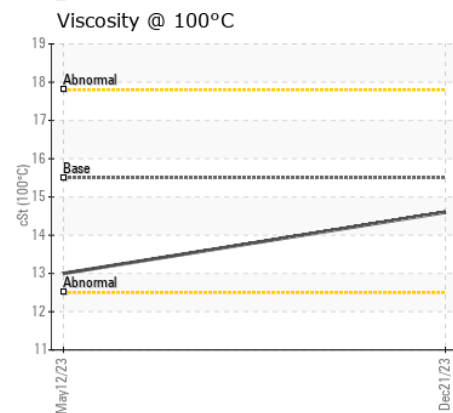
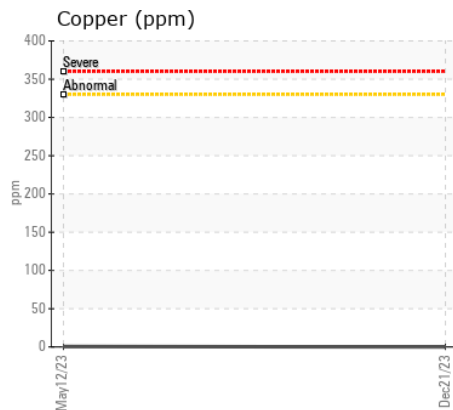
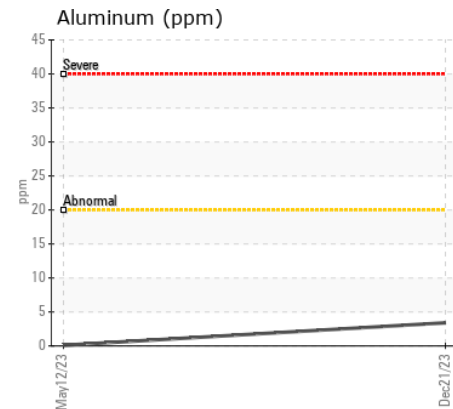
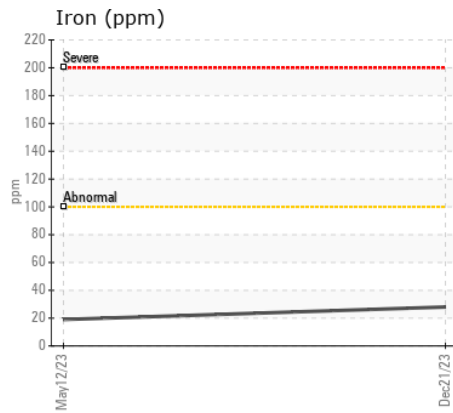
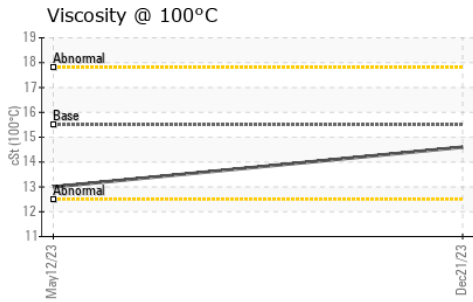
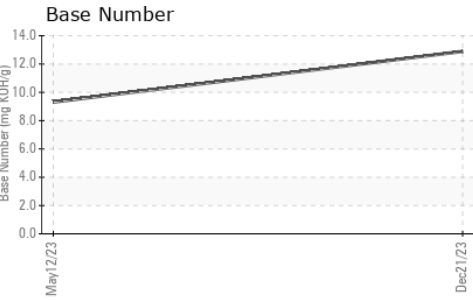
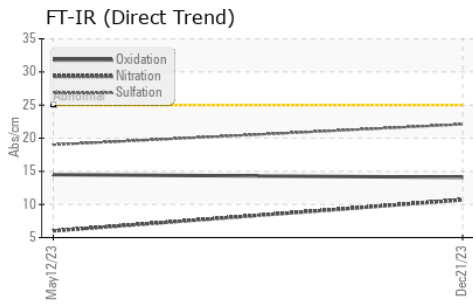
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	6.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	19.0	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	<1	---
Boron	ppm	ASTM D5185m		3	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		132	59	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		50	374	---
Calcium	ppm	ASTM D5185m		4115	1751	---
Phosphorus	ppm	ASTM D5185m		948	965	---
Zinc	ppm	ASTM D5185m		1095	1204	---
Sulfur	ppm	ASTM D5185m		4196	3464	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1	14.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		12.89	9.31	---
Visc @ 100°C	cSt	ASTM D445	15.5	14.6	13.0	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06045113  
**Lab Number** : 06045113  
**Unique Number** : 10805721  
**Test Package** : MOB 2  
**Received** : 26 Dec 2023  
**Tested** : 27 Dec 2023  
**Diagnosed** : 27 Dec 2023 - Wes Davis

**GBD ENTERPRISE LLC**  
 7 ROOKERY RD  
 MILTON, NH  
 US 03851  
 Contact: DON PERCY

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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)

T:  
F: