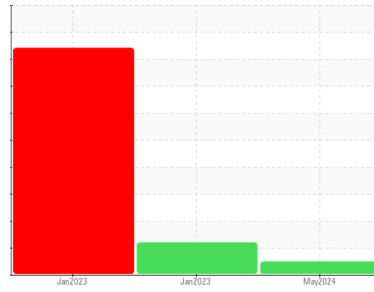




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PETERBILT 34
 Component
Diesel Engine
 Fluid
SHELL ROTELLA T3 15W40 (--- 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.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PE0003180	PE0000406	PE0000448
Sample Date	Client Info			29 May 2024	23 Jan 2023	11 Jan 2023
Machine Age	mls	Client Info		228964	200629	199927
Oil Age	mls	Client Info		10000	702	5000
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				NORMAL	ATTENTION	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32	8	41
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	<1	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

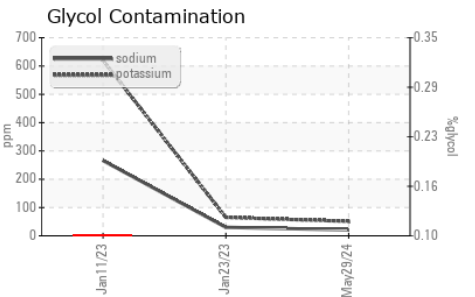
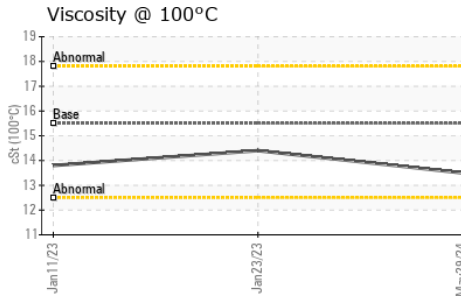
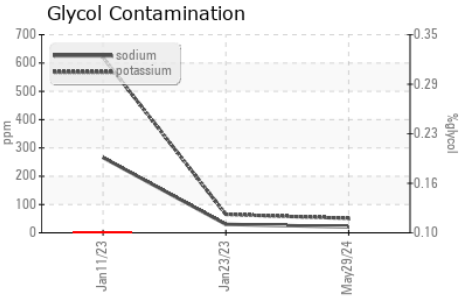
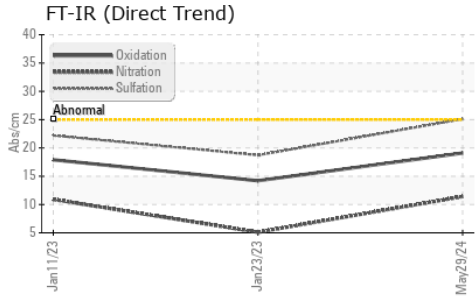
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	15	124	29
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	10	21	60	82
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	10	126	361	366
Calcium	ppm	ASTM D5185m	2600	2271	1694	1762
Phosphorus	ppm	ASTM D5185m	1050	919	995	947
Zinc	ppm	ASTM D5185m	1250	1147	1180	1184
Sulfur	ppm	ASTM D5185m	3900	3977	3245	3660

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	7
Sodium	ppm	ASTM D5185m		21	30	▲ 266
Potassium	ppm	ASTM D5185m	>20	51	● 65	▲ 620
Glycol	%	*ASTM D2982		NEG	NEG	▲ 0.10

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	0.1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	11.4	5.1	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.1	18.7	22.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	14.2	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	5.1	9.0	8.0

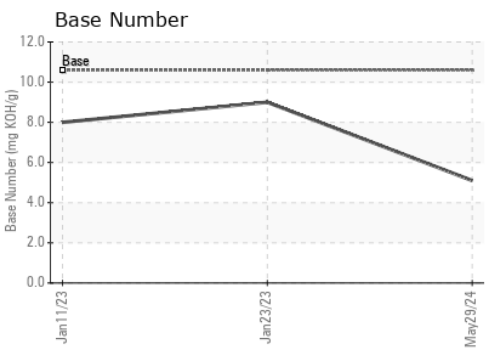
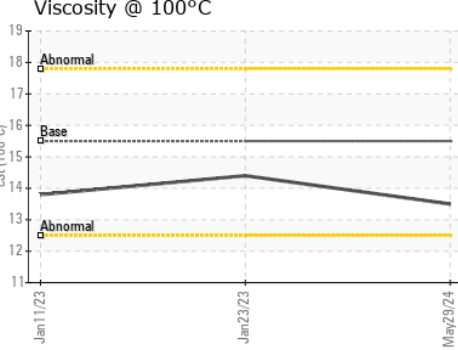
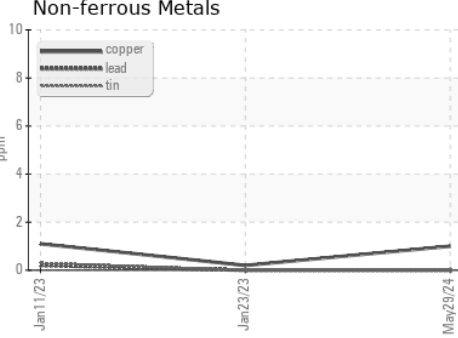
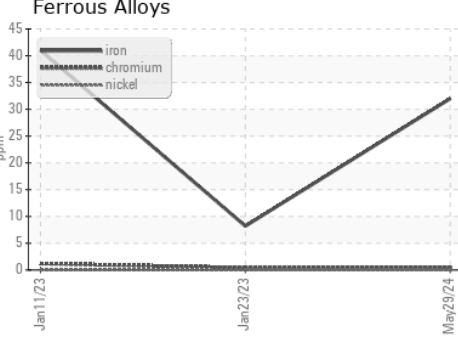
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	13.5	14.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003180 **Received** : 25 Jun 2024
Lab Number : 06220555 **Tested** : 27 Jun 2024
Unique Number : 11098752 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FT-IR, Glycol, ICP, KV100, SCREEN, TBN)

SCHERMER CONSTRUCTION
 299 US-101
 HOQUIAM, WA
 US 98550
 Contact: Service Manager
 office@schermerconstruction.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)