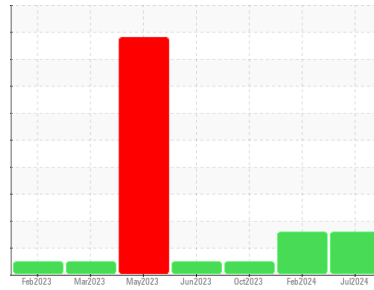


OIL ANALYSIS REPORT

Sample Rating Trend



Area
(51484Z) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A63399
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (40 QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0128167	PCA0094350	PCA0094335
Sample Date	Client Info	05 Jul 2024	14 Feb 2024	15 Oct 2023
Machine Age	mls	259974	216580	162130
Oil Age	mls	60000	0	0
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

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
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	50	42	53
Chromium	ppm ASTM D5185m >5	4	4	5
Nickel	ppm ASTM D5185m >2	<1	1	<1
Titanium	ppm ASTM D5185m	0	<1	0
Silver	ppm ASTM D5185m >3	<1	<1	0
Aluminum	ppm ASTM D5185m >30	35	37	76
Lead	ppm ASTM D5185m >30	0	<1	0
Copper	ppm ASTM D5185m >150	42	63	45
Tin	ppm ASTM D5185m >5	<1	1	1
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	3	4	5
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 50	63	91	58
Manganese	ppm ASTM D5185m 0	1	2	2
Magnesium	ppm ASTM D5185m 950	891	1315	881
Calcium	ppm ASTM D5185m 1050	1318	1639	1263
Phosphorus	ppm ASTM D5185m 995	1091	1386	794
Zinc	ppm ASTM D5185m 1180	1297	1732	1187
Sulfur	ppm ASTM D5185m 2600	2601	3657	1966

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	▲ 24	▲ 29	11
Sodium	ppm ASTM D5185m	4	0	4
Potassium	ppm ASTM D5185m >20	68	75	148

INFRA-RED

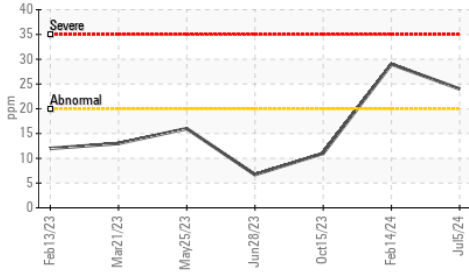
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.3	0.6	0.9
Nitration	Abs/cm *ASTM D7624 >20	13.5	9.5	10.9
Sulfation	Abs/.1mm *ASTM D7415 >30	26.2	21.7	23.0

FLUID DEGRADATION

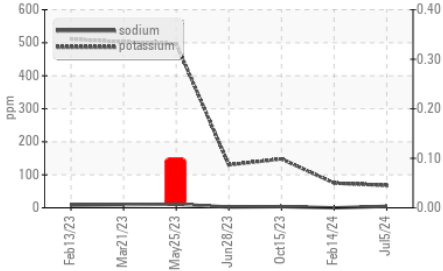
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	24.3	19.6	22.8
Base Number (BN)	mg KOH/g ASTM D2896	5.0	5.9	3.9

OIL ANALYSIS REPORT

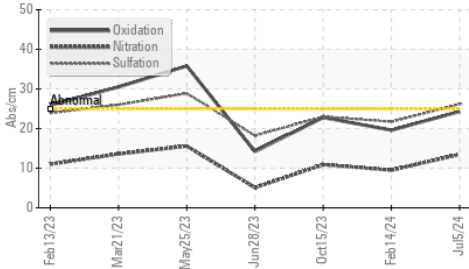
▲ Silicon (ppm)



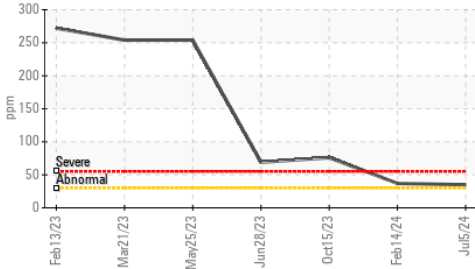
Glycol Contamination



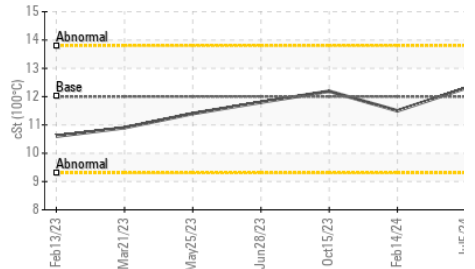
FT-IR (Direct Trend)



Aluminum (ppm)



Viscosity @ 100°C

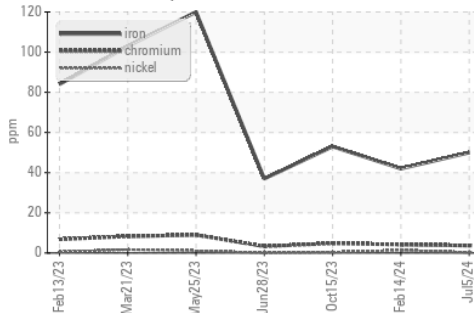


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

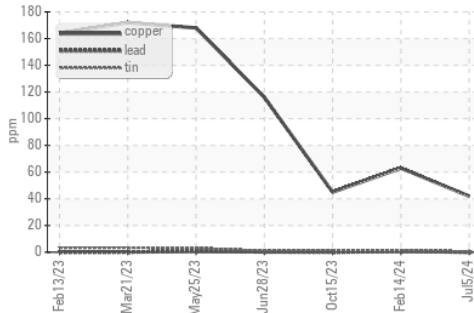
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	12.3	11.5

GRAPHS

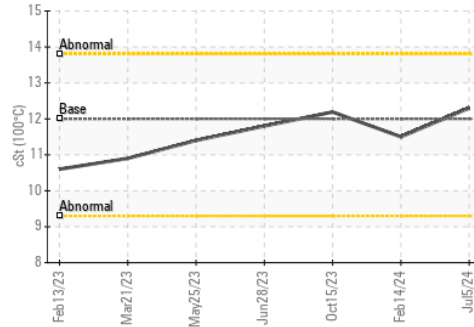
Ferrous Alloys



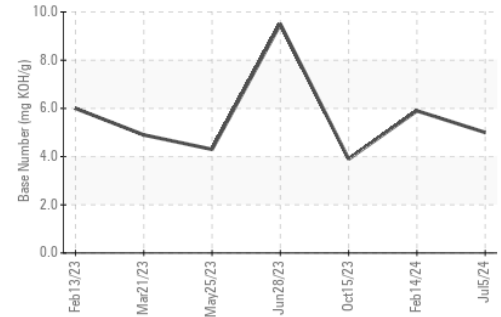
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0128167

Lab Number : 06235357

Unique Number : 11124191

Test Package : FLEET

Received : 15 Jul 2024

Tested : 15 Jul 2024

Diagnosed : 15 Jul 2024 - Don Baldrige

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass

101 Alliance Parkway

Williamston, SC

US 29697

Contact: Sonny Boucher

soucher@transervice.com

T: (864)226-2304

F: (864)226-2329

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)