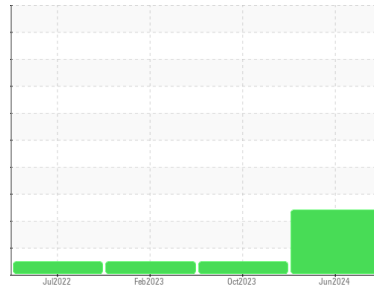




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area
(89684X) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A69105
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

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	PCA0128197	PCA0106162	PCA0090855
Sample Date	Client Info	19 Jun 2024	20 Oct 2023	16 Feb 2023
Machine Age	mls	Client Info	728531	674026
Oil Age	mls	Client Info	54505	48967
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	NORMAL	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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	56	42	46
Chromium	ppm ASTM D5185m >5	2	2	2
Nickel	ppm ASTM D5185m >2	1	<1	<1
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m >3	<1	0	0
Aluminum	ppm ASTM D5185m >30	24	23	29
Lead	ppm ASTM D5185m >30	0	<1	<1
Copper	ppm ASTM D5185m >150	20	5	5
Tin	ppm ASTM D5185m >5	2	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	8	4	3
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 50	67	63	70
Manganese	ppm ASTM D5185m 0	2	<1	<1
Magnesium	ppm ASTM D5185m 950	964	945	969
Calcium	ppm ASTM D5185m 1050	1302	1072	1231
Phosphorus	ppm ASTM D5185m 995	1029	997	1060
Zinc	ppm ASTM D5185m 1180	1337	1251	1315
Sulfur	ppm ASTM D5185m 2600	3330	2575	2852

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	8	8	7
Sodium	ppm ASTM D5185m	▲ 48	2	<1
Potassium	ppm ASTM D5185m >20	▲ 48	10	14
Glycol	% *ASTM D2982	NEG	NEG	NEG

INFRA-RED

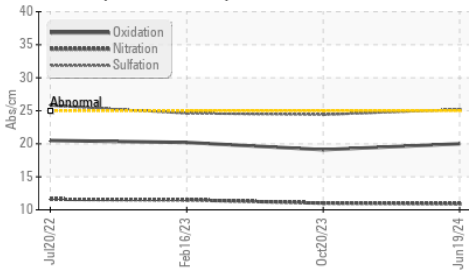
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.2	1.5	1.4
Nitration	Abs/cm *ASTM D7624 >20	10.9	11.0	11.5
Sulfation	Abs/.1mm *ASTM D7415 >30	25.2	24.4	24.6

FLUID DEGRADATION

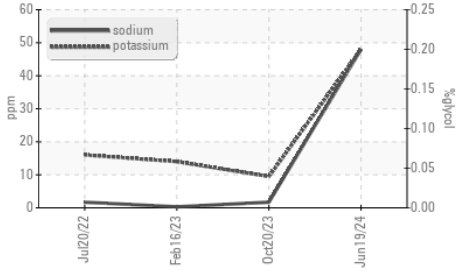
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	20.0	19.1	20.2
Base Number (BN)	mg KOH/g ASTM D2896	5.2	5.4	6.0

OIL ANALYSIS REPORT

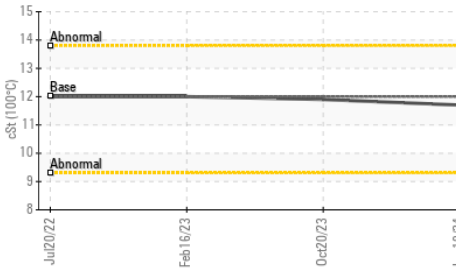
FT-IR (Direct Trend)



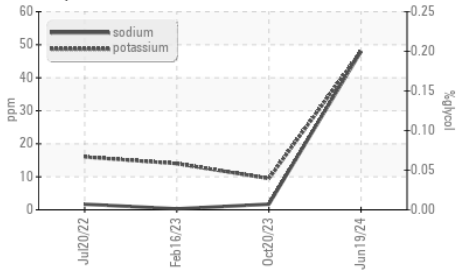
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

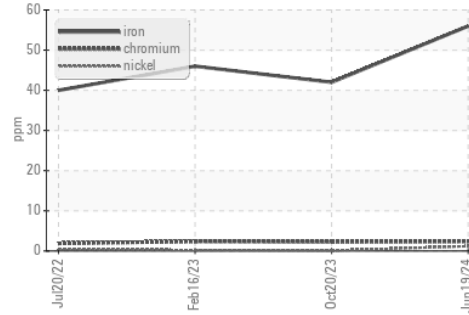


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

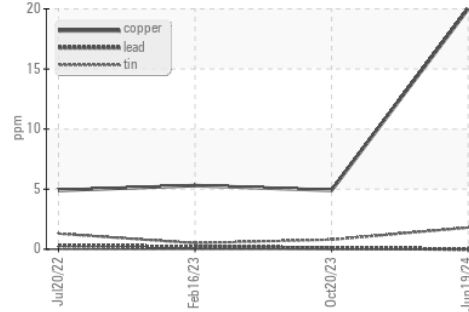
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.9

GRAPHS

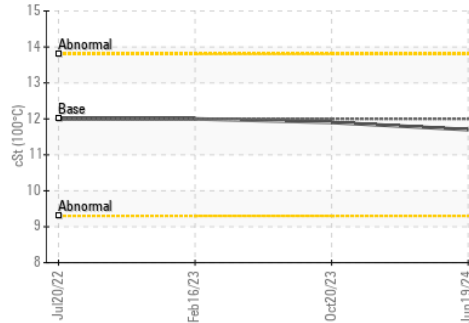
Ferrous Alloys



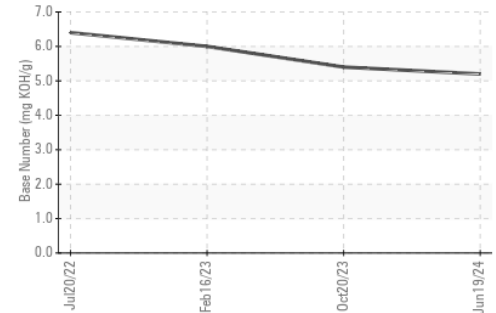
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0128197 **Received** : 27 Jun 2024
Lab Number : 06222990 **Tested** : 01 Jul 2024
Unique Number : 11101187 **Diagnosed** : 01 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass
 101 Alliance Parkway
 Willamston, SC
 US 29697

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)

Contact: Sonny Boucher
 sboucher@transervice.com
 T: (864)226-2304
 F: (864)226-2329