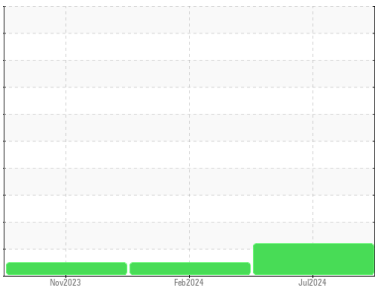
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
(P1184783) Preferred Service-Tractor
Machine Id
[Preferred Service-Tractor] 192A32028B
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W30 (36 QTS)

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
There is no indication of any contamination in the oil.

Fluid Condition
The BN level is low. The oil is no longer serviceable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0126896**	PCA0116680	PCA0109420
Sample Date		Client Info		**06 Jul 2024**	29 Feb 2024	15 Nov 2023
Machine Age	mls	Client Info		**67668**	49511	32922
Oil Age	mls	Client Info		**49511**	49511	32922
Oil Changed		Client Info		**Changed**	Changed	Not Changd
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	**<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	>100	**25**	48	23
Chromium	ppm	ASTM D5185m	>20	**<1**	1	<1
Nickel	ppm	ASTM D5185m	>2	**0**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>2	**<1**	<1	<1
Aluminum	ppm	ASTM D5185m	>25	**8**	17	10
Lead	ppm	ASTM D5185m	>40	**<1**	<1	<1
Copper	ppm	ASTM D5185m	>330	**42**	114	113
Tin	ppm	ASTM D5185m	>15	**2**	4	2
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**15**	24	20
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	64	**60**	69	60
Manganese	ppm	ASTM D5185m	0	**<1**	2	<1
Magnesium	ppm	ASTM D5185m	1160	**1116**	1112	1068
Calcium	ppm	ASTM D5185m	820	**899**	963	922
Phosphorus	ppm	ASTM D5185m	1160	**996**	1040	984
Zinc	ppm	ASTM D5185m	1260	**1330**	1297	1204
Sulfur	ppm	ASTM D5185m	3000	**2782**	3203	2703

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**6**	17	12
Sodium	ppm	ASTM D5185m		**4**	5	5
Potassium	ppm	ASTM D5185m	>20	**24**	65	40

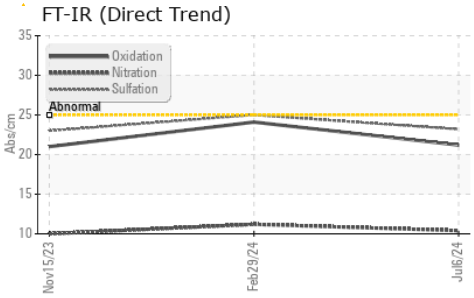
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.5**	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**10.4**	11.2	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.2**	25.0	23.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**21.2**	24.1	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	**0.0**	5.7	7.3

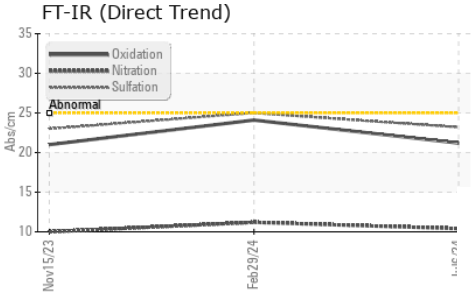
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

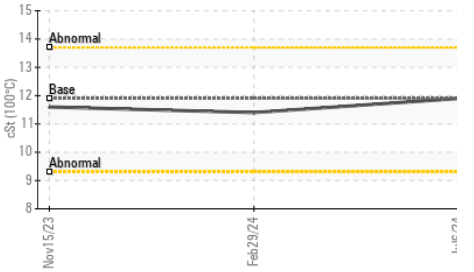
FT-IR (Direct Trend)



FT-IR (Direct Trend)



Viscosity @ 100°C

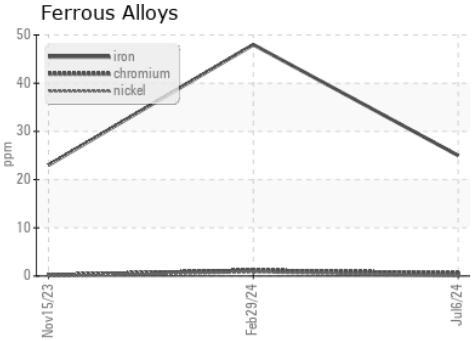


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

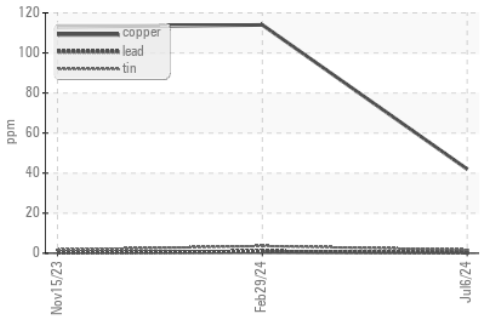
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	**11.9**	11.4	11.6

GRAPHS

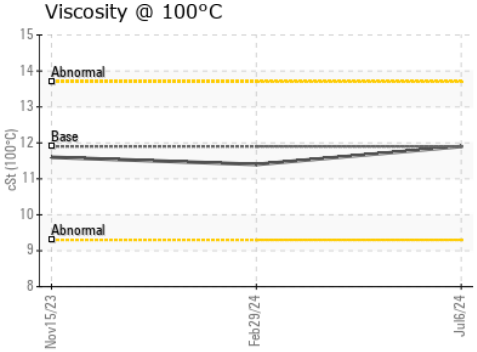
Ferrous Alloys



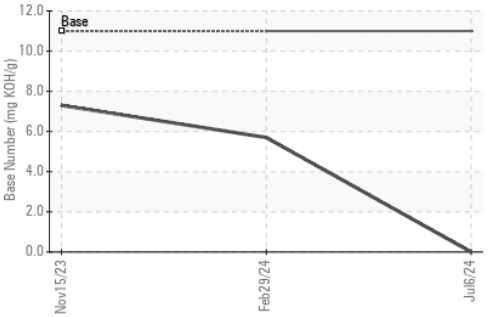
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0126896
Lab Number : 06234515
Unique Number : 11123349
Test Package : FLEET

Received : 12 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 15 Jul 2024 - Don Baldridge

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)

Transervice - Shop 1920 - Preferred Service
1955 W. North Avenue, Bldg K
Melrose Park, IL
US 60160
Contact: Tom Lindeman
tlindemann@transervice.com
T: (630)376-8946
F: