

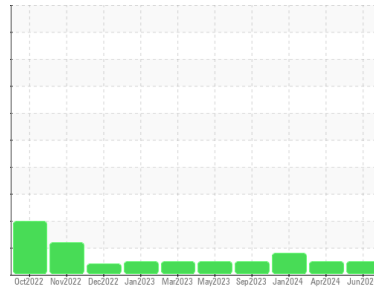


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR 745D 13378 (S/N 3T603294)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

Sample Rating Trend



NORMAL



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		WC0899195	WC0913249	WC0888028
Sample Date	Client Info		12 Jun 2024	19 Apr 2024	25 Jan 2024
Machine Age	hrs	Client Info	5622	5103	4494
Oil Age	hrs	Client Info	519	609	499
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	MARGINAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	▲ 2.0
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	29	22	20
Chromium	ppm	ASTM D5185m >20	0	<1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m >2	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	<1	1	2
Lead	ppm	ASTM D5185m >40	2	3	2
Copper	ppm	ASTM D5185m >330	3	3	4
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	0	<1	6
Barium	ppm	ASTM D5185m 1	0	0	0
Molybdenum	ppm	ASTM D5185m 60	59	58	60
Manganese	ppm	ASTM D5185m 1	0	<1	<1
Magnesium	ppm	ASTM D5185m 1010	1022	981	920
Calcium	ppm	ASTM D5185m 1070	1238	1294	1064
Phosphorus	ppm	ASTM D5185m 1150	1075	1102	1036
Zinc	ppm	ASTM D5185m 1270	1316	1365	1223
Sulfur	ppm	ASTM D5185m 2060	3577	3741	2927

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	3	3
Sodium	ppm	ASTM D5185m	4	3	3
Potassium	ppm	ASTM D5185m >20	1	1	2

INFRA-RED

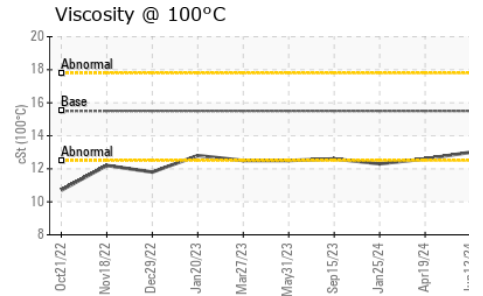
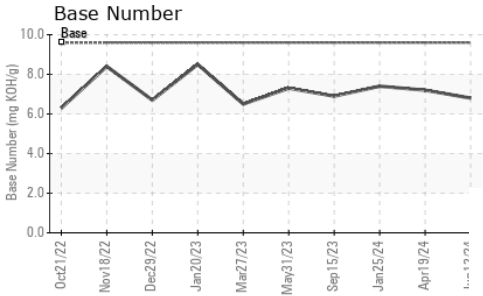
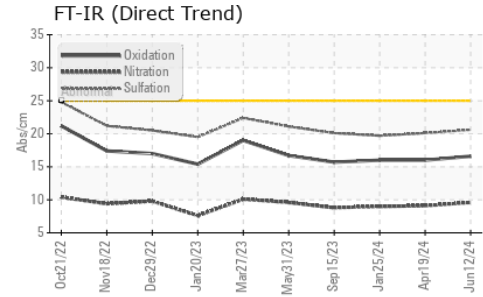
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	9.6	9.1	9.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.6	20.1	19.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.6	16.0	16.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	6.8	7.2	7.4



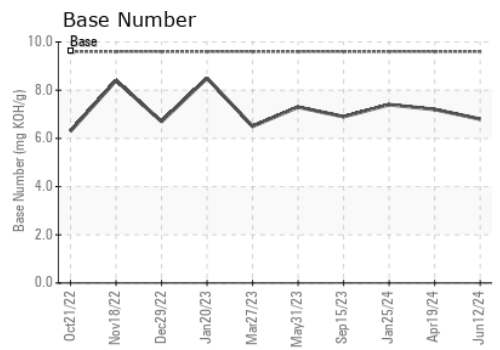
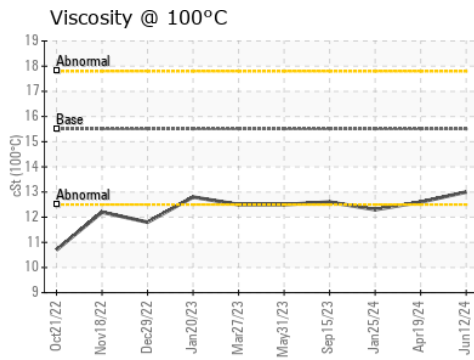
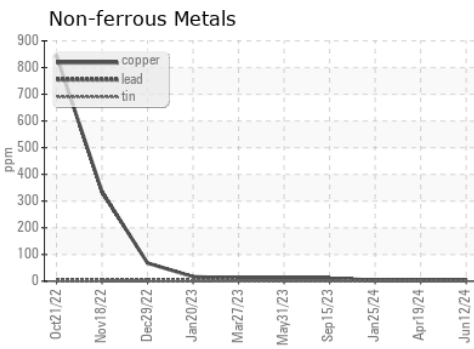
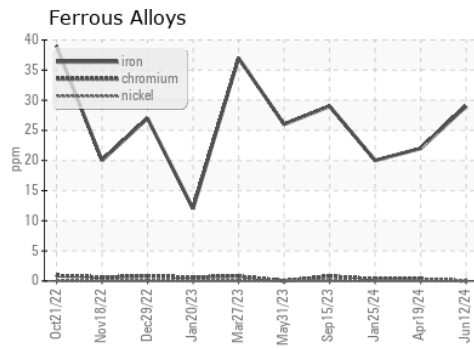
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
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	13.0	12.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899195 **Received** : 18 Jun 2024
Lab Number : 06213191 **Tested** : 19 Jun 2024
Unique Number : 11086055 **Diagnosed** : 19 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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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)