

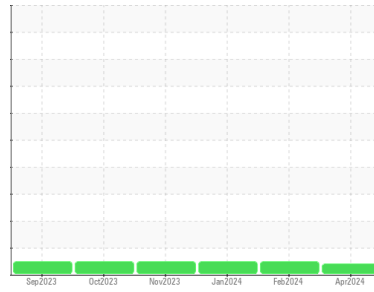


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR D6 LGP 10041 (S/N KEW01161)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

Sample Rating Trend



VISCOSITY



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

Fuel content negligible. There is no indication of any contamination in the oil.

● Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0913257	WC0888055	WC0887956
Sample Date	Client Info		08 Apr 2024	06 Feb 2024	03 Jan 2024
Machine Age	hrs	Client Info	3152	2664	2112
Oil Age	hrs	Client Info	488	540	453
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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	8	17	19
Chromium	ppm	ASTM D5185m >20	<1	<1	0
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	2	<1
Lead	ppm	ASTM D5185m >40	0	<1	<1
Copper	ppm	ASTM D5185m >330	3	2	4
Tin	ppm	ASTM D5185m >15	0	<1	0
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 1	13	0	3
Barium	ppm	ASTM D5185m 1	0	<1	0
Molybdenum	ppm	ASTM D5185m 60	20	60	58
Manganese	ppm	ASTM D5185m 1	0	<1	0
Magnesium	ppm	ASTM D5185m 1010	281	934	1000
Calcium	ppm	ASTM D5185m 1070	2655	1154	1194
Phosphorus	ppm	ASTM D5185m 1150	1055	1083	1046
Zinc	ppm	ASTM D5185m 1270	1179	1296	1318
Sulfur	ppm	ASTM D5185m 2060	3517	2991	3202

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	2	4
Sodium	ppm	ASTM D5185m	0	<1	<1
Potassium	ppm	ASTM D5185m >20	2	<1	0
Fuel	%	ASTM D3524 >5	0.1	<1.0	<1.0

INFRA-RED

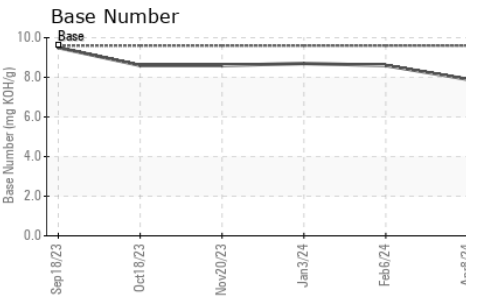
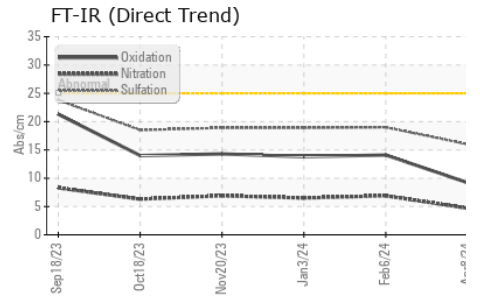
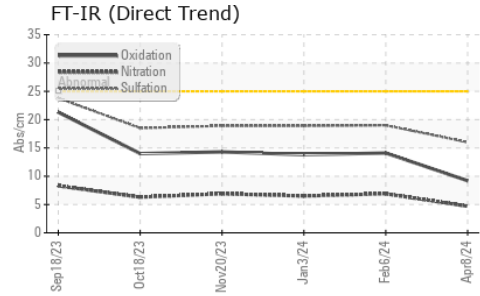
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	4.7	6.9	6.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.0	19.0	18.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	9.2	14.1	13.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	7.9	8.6	8.7



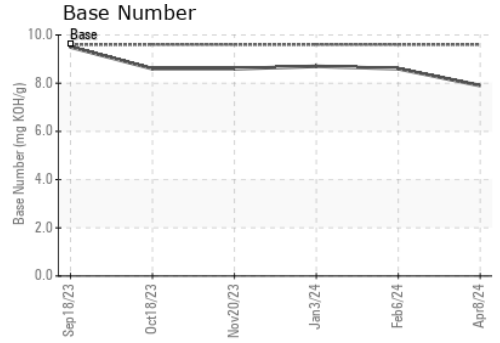
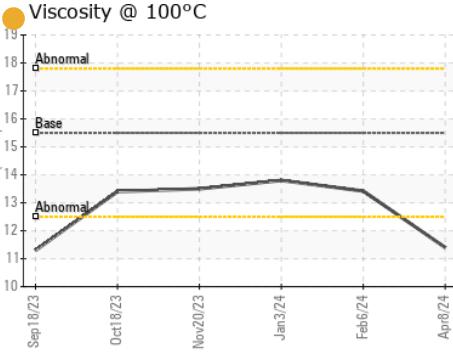
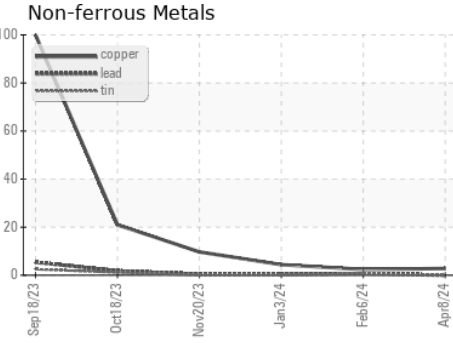
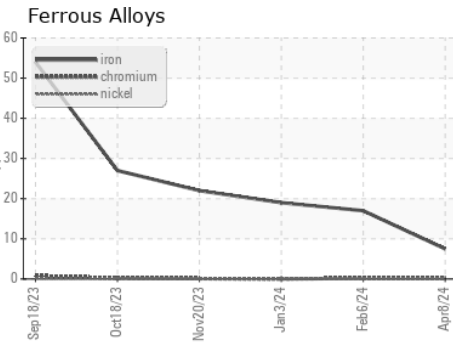
OIL ANALYSIS REPORT



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	● 11.4	13.42	13.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0913257 **Received** : 17 Apr 2024
Lab Number : 06151794 **Tested** : 22 Apr 2024
Unique Number : 10981872 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests : FuelDilution, PercentFuel, TBN)

TRADER CONSTRUCTION CO.
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 NEW BERN, NC
 US 28563
 Contact: MIKE WYATT
 mwyatt@traderconstruction.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)