

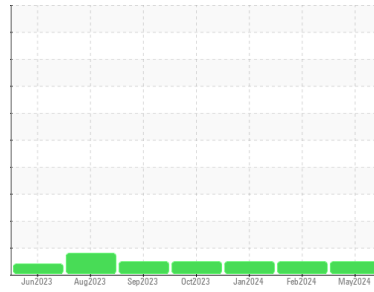


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR D6 LGP 10039 (S/N KEW01125)**  
 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			<b>WC0913078</b>	WC0879298	WC0888016
Sample Date	Client Info			<b>07 May 2024</b>	21 Feb 2024	16 Jan 2024
Machine Age	hrs	Client Info		<b>3845</b>	3376	2812
Oil Age	hrs	Client Info		<b>469</b>	564	733
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>23</b>	21	23
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	5
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	<b>2</b>	5	4
Barium	ppm	ASTM D5185m	1	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	56	62
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>922</b>	912	949
Calcium	ppm	ASTM D5185m	1070	<b>1267</b>	1162	1151
Phosphorus	ppm	ASTM D5185m	1150	<b>1180</b>	1072	1068
Zinc	ppm	ASTM D5185m	1270	<b>1305</b>	1304	1302
Sulfur	ppm	ASTM D5185m	2060	<b>3490</b>	3038	2955

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	4
Sodium	ppm	ASTM D5185m		<b>5</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	0	2

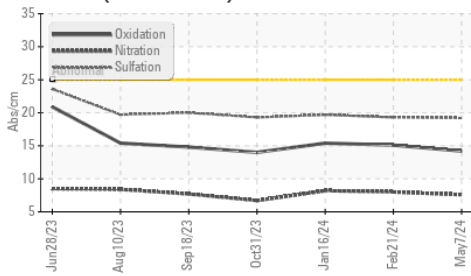
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	8.0	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	19.3	19.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	15.1	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>8.8</b>	8.3	8.1

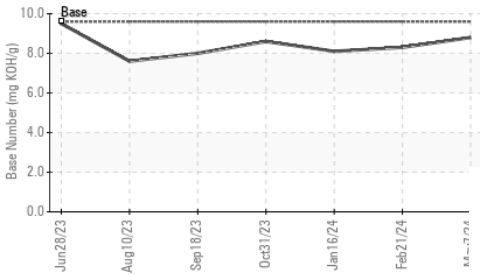


# OIL ANALYSIS REPORT

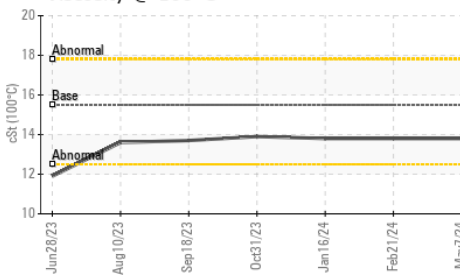
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

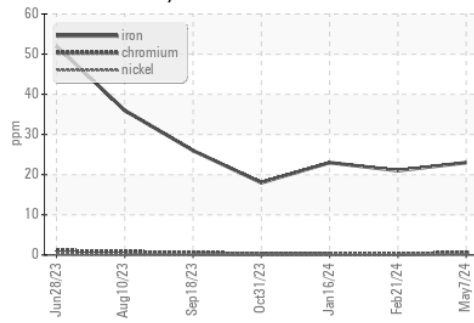


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

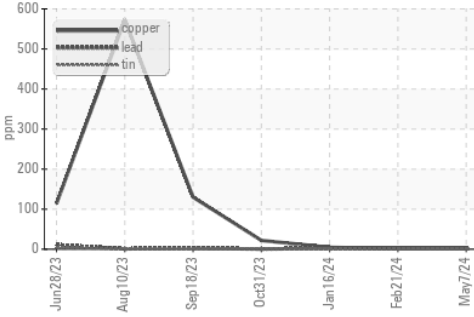
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	13.8

## GRAPHS

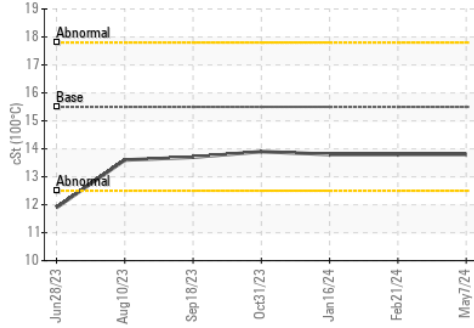
Ferrous Alloys



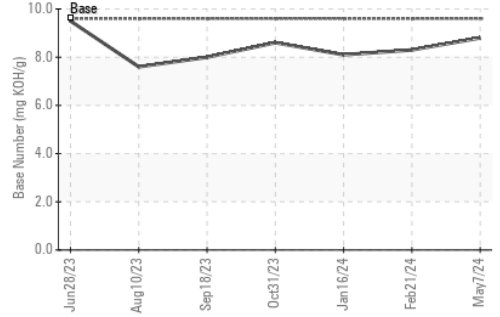
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0913078 **Received** : 15 May 2024  
**Lab Number** : 06179707 **Tested** : 15 May 2024  
**Unique Number** : 11031033 **Diagnosed** : 15 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRADER CONSTRUCTION CO.**  
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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)