

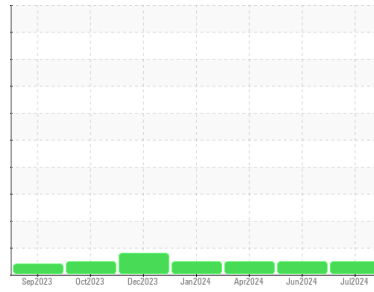


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR D6 LGP 10040 (S/N KEW01159)**  
 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>WC0899075</b>	WC0899262	WC0888006
Sample Date	Client Info		<b>04 Jul 2024</b>	04 Jun 2024	10 Apr 2024
Machine Age	hrs	Client Info	<b>4248</b>	3706	3050
Oil Age	hrs	Client Info	<b>542</b>	650	430
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>25</b>	26	15
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</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>&lt;1</b>	4	<1
Copper	ppm	ASTM D5185m >330	<b>6</b>	13	69
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	<b>0</b>	0	2
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>56</b>	59	57
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>936</b>	1000	892
Calcium	ppm	ASTM D5185m 1070	<b>1332</b>	1268	1307
Phosphorus	ppm	ASTM D5185m 1150	<b>1021</b>	1033	1127
Zinc	ppm	ASTM D5185m 1270	<b>1275</b>	1356	1324
Sulfur	ppm	ASTM D5185m 2060	<b>3243</b>	3326	2906

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	4	3
Sodium	ppm	ASTM D5185m	<b>3</b>	1	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	2

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.3</b>	8.4	7.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.2</b>	20.1	19.5

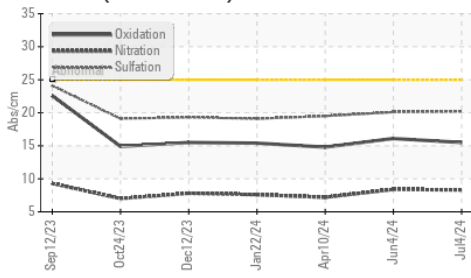
### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.5</b>	16.1	14.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>8.0</b>	7.0	8.3

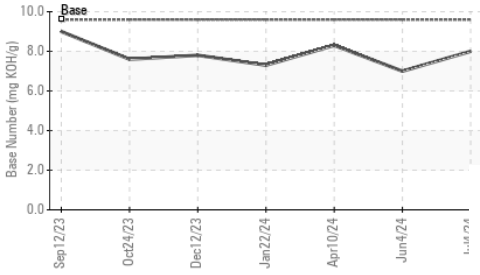


# OIL ANALYSIS REPORT

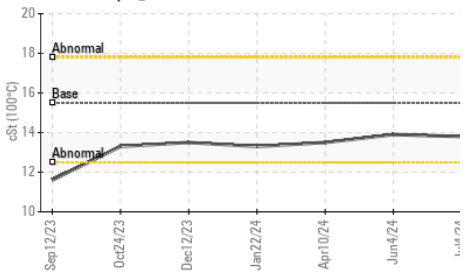
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

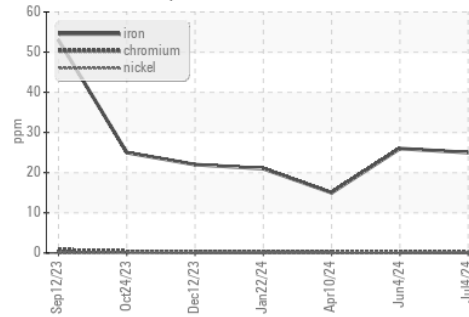


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

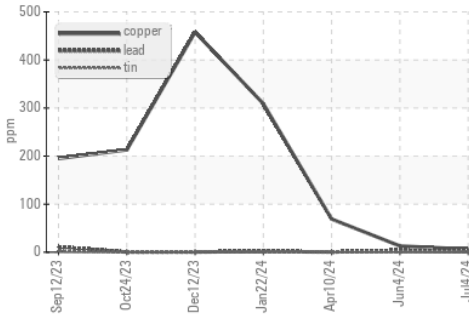
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	13.9

GRAPHS

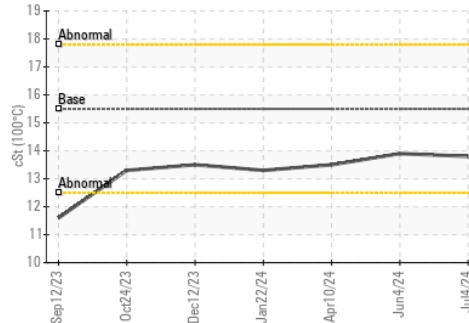
Ferrous Alloys



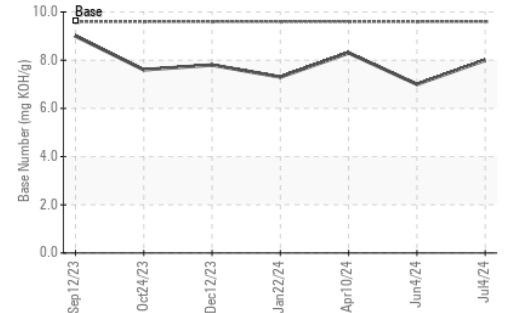
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0899075 **Received** : 15 Jul 2024  
**Lab Number** : 06235465 **Tested** : 15 Jul 2024  
**Unique Number** : 11124299 **Diagnosed** : 15 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRADER CONSTRUCTION CO.**  
 PO DRAWER 1578  
 NEW BERN, NC  
 US 28563  
 Contact: MIKE WYATT  
 mw Wyatt@traderconstruction.com  
 T: (252)633-1399  
 F: (252)638-4871

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)