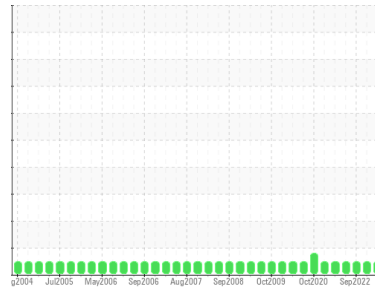




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CATERPILLAR 322 8344 (S/N 01YS01354)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**

## 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>WC0888093</b>	WC0790925	WC0734403
Sample Date	Client Info			<b>31 May 2024</b>	08 May 2023	22 Sep 2022
Machine Age	hrs	Client Info		<b>11652</b>	11186	10720
Oil Age	hrs	Client Info		<b>466</b>	466	540
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	>105	<b>22</b>	19	11
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>14</b>	11	4
Lead	ppm	ASTM D5185m	>15	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>140	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	<b>5</b>	7	4
Barium	ppm	ASTM D5185m	1	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	57	60
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>984</b>	929	963
Calcium	ppm	ASTM D5185m	1070	<b>1227</b>	1145	1072
Phosphorus	ppm	ASTM D5185m	1150	<b>1075</b>	1020	1050
Zinc	ppm	ASTM D5185m	1270	<b>1318</b>	1238	1197
Sulfur	ppm	ASTM D5185m	2060	<b>3673</b>	3349	3593

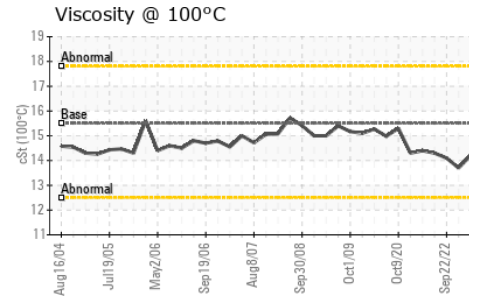
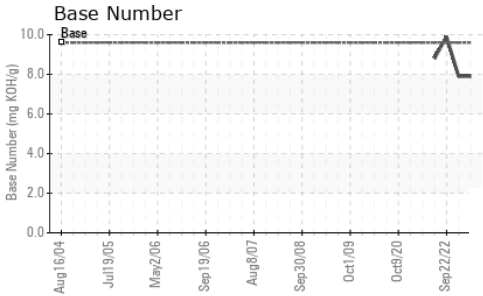
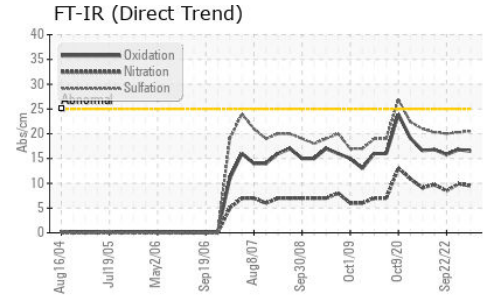
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.9	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	9.9	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	20.3	20.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	16.8	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>7.9</b>	7.9	9.9



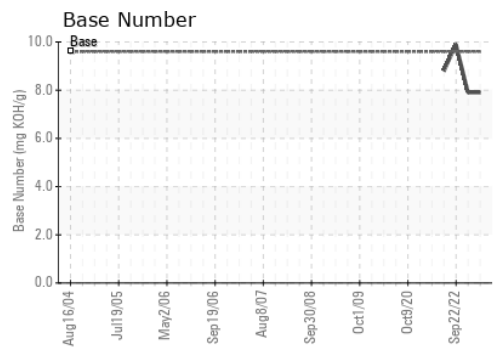
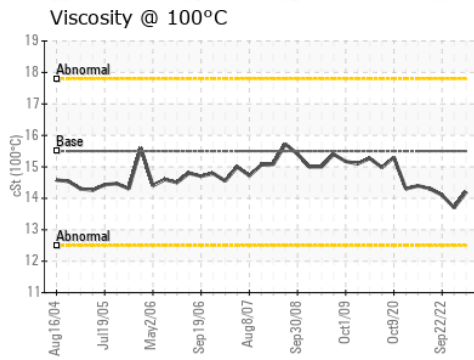
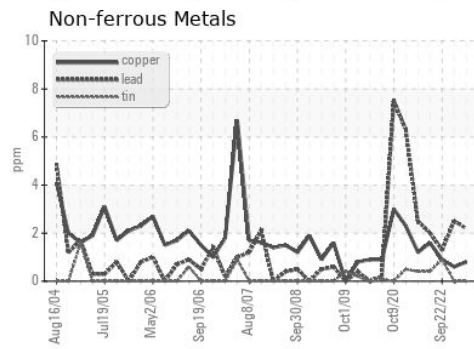
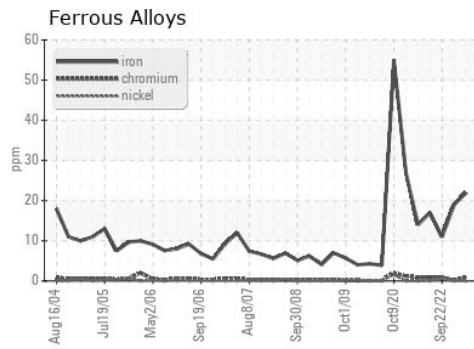
# OIL ANALYSIS REPORT



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	<b>14.2</b>	13.7	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0888093      **Received** : 07 Jun 2024  
**Lab Number** : **06202417**      **Tested** : 11 Jun 2024  
**Unique Number** : 11069878      **Diagnosed** : 11 Jun 2024 - Sean Felton  
**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)