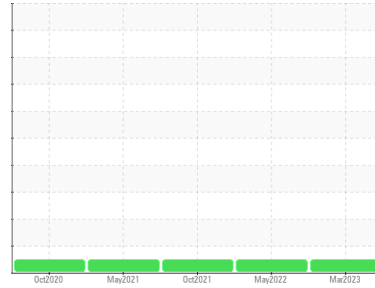




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**PIERCE 0671**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 XLE 10W30 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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>WC0771940</b>	WC0701520	WC0610942
Sample Date	Client Info			<b>07 Mar 2023</b>	17 May 2022	26 Oct 2021
Machine Age	hrs	Client Info		<b>2742</b>	2136	1659
Oil Age	hrs	Client Info		<b>1083</b>	864	387
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Not Changd
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
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>41</b>	22	15
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>17</b>	12	6
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>61</b>	50	47
Tin	ppm	ASTM D5185m	>15	<b>3</b>	3	2
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>13</b>	25	46
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>18</b>	15	25
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>817</b>	766	771
Calcium	ppm	ASTM D5185m	2900	<b>1571</b>	1511	1506
Phosphorus	ppm	ASTM D5185m	1100	<b>754</b>	776	780
Zinc	ppm	ASTM D5185m	1200	<b>994</b>	971	881
Sulfur	ppm	ASTM D5185m	4000	<b>3371</b>	2515	2716

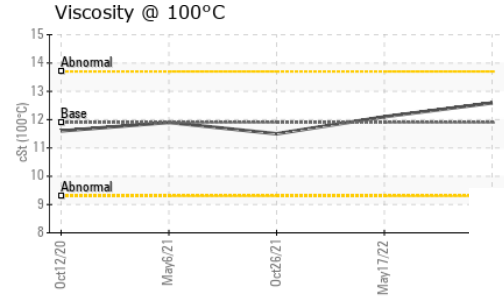
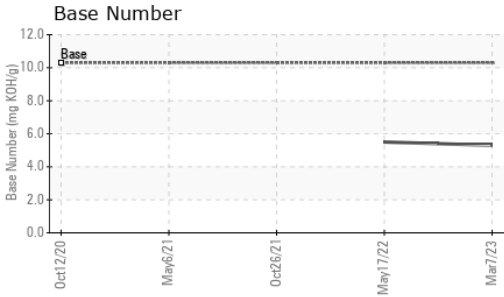
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	4
Sodium	ppm	ASTM D5185m		<b>18</b>	11	7
Potassium	ppm	ASTM D5185m	>20	<b>30</b>	21	12

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.7</b>	10.5	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.4</b>	24.2	21.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.8</b>	19.5	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>5.3</b>	5.5	---



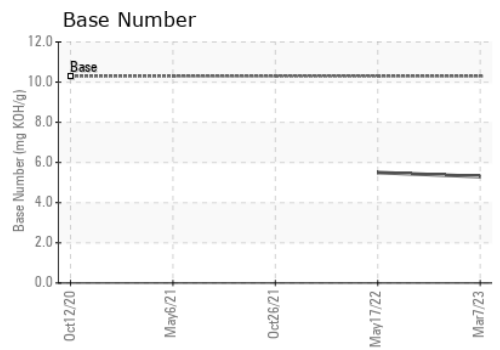
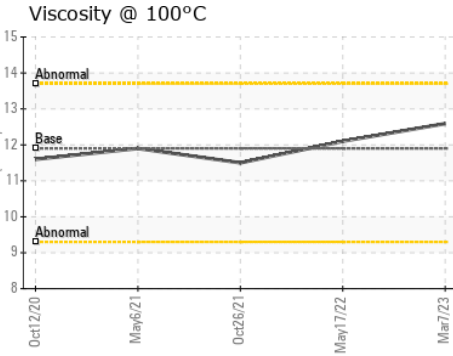
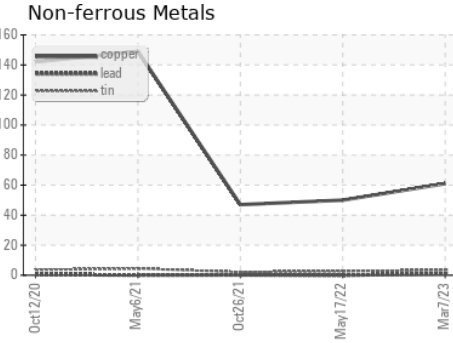
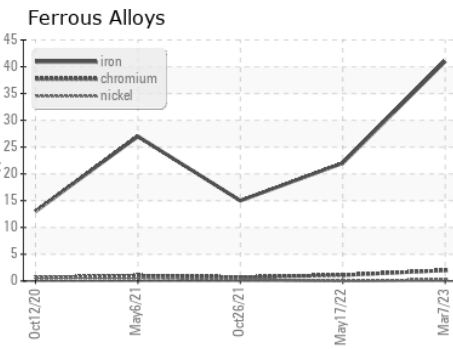
# OIL ANALYSIS REPORT



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	11.9	<b>12.59</b>	12.1	11.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0771940 **Received** : 13 Mar 2023  
**Lab Number** : **05790304** **Diagnosed** : 17 Mar 2023  
**Unique Number** : 10374975 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TOWN OF CARY**  
 420 JAMES JACKSON AVENUE  
 CARY, NC  
 US 27513  
 Contact: BRANDON PASINSKI  
 brandon.pasinski@townofcary.org  
 T: (919)469-4098  
 F: (919)380-6420

Certificate L2367  
 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)