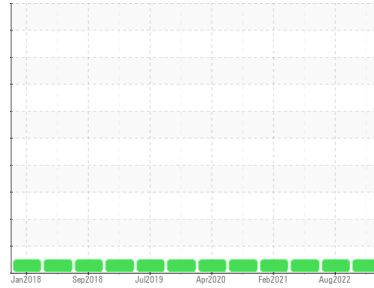




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KENWORTH 3955**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 XLE 10W30 (40 QTS)**

## 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>WC0877303</b>	WC0625670	WC0625717	
Sample Date	Client Info	<b>20 Dec 2023</b>	29 Aug 2022	11 Jan 2022	
Machine Age	mls	Client Info	<b>0</b>	294761	246279
Oil Age	mls	Client Info	<b>0</b>	50000	40000
Oil Changed	Client Info	<b>N/A</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>17</b>	14	20
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	4
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m >20	<b>6</b>	5	6
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	1
Copper	ppm ASTM D5185m >330	<b>2</b>	2	19
Tin	ppm ASTM D5185m >15	<b>2</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>18</b>	24	30
Barium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>21</b>	14	15
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>678</b>	640	733
Calcium	ppm ASTM D5185m 2900	<b>1301</b>	1380	1464
Phosphorus	ppm ASTM D5185m 1100	<b>708</b>	714	771
Zinc	ppm ASTM D5185m 1200	<b>782</b>	822	932
Sulfur	ppm ASTM D5185m 4000	<b>2720</b>	3393	2995

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>7</b>	5	6
Sodium	ppm ASTM D5185m	<b>65</b>	<1	4
Potassium	ppm ASTM D5185m >20	<b>10</b>	7	12

## INFRA-RED

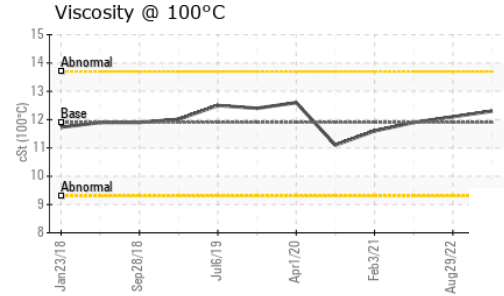
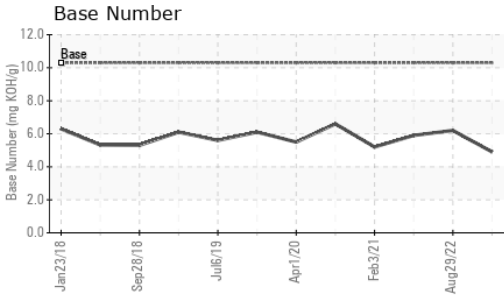
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.8</b>	0.8	0.6
Nitration	Abs/cm *ASTM D7624 >20	<b>11.0</b>	11.3	11.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>25.5</b>	26.5	26.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.5</b>	20.5	20.8
Base Number (BN)	mg KOH/g ASTM D2896 10.3	<b>4.9</b>	6.2	5.9



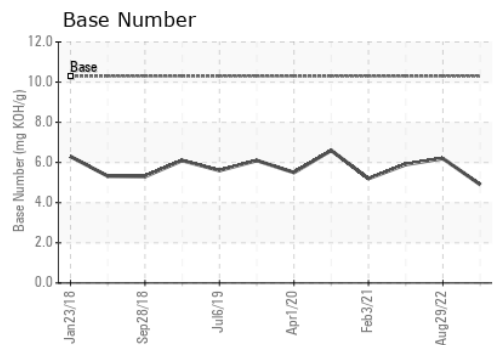
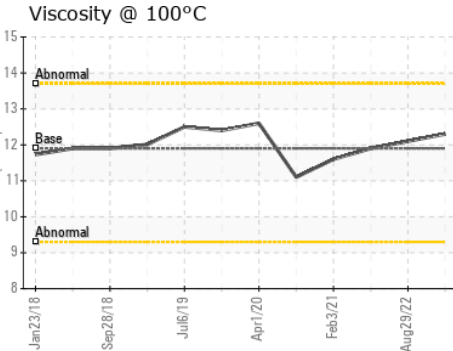
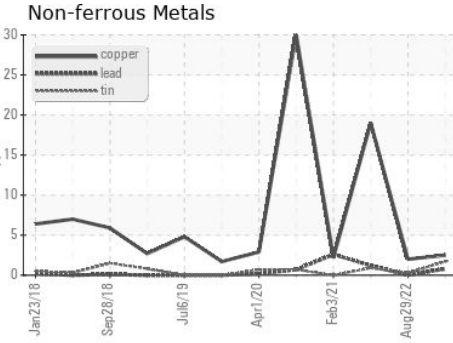
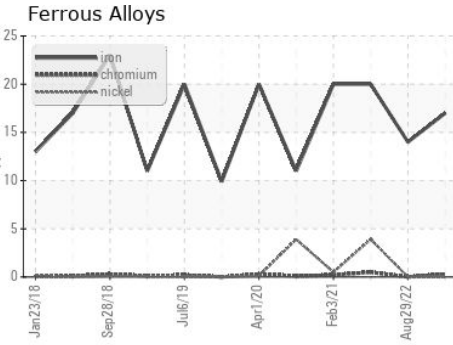
# OIL ANALYSIS REPORT



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	11.9	<b>12.3</b>	12.1	11.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0877303 **Received** : 01 Feb 2024  
**Lab Number** : 06077459 **Diagnosed** : 04 Feb 2024  
**Unique Number** : 10859550 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**LTI/MILKY WAY - MOUNT VERNON**  
 3814 OLD HWY 99 S RD  
 MOUNT VERNON, WA  
 US 98273  
 Contact: JOHN VAN WINGERDEN  
 jvw@lynden.com  
 T: (360)354-2101  
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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)