



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**CAPACITY 913**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0844151</b>	WC0844177	WC0778986
Sample Date		Client Info		<b>01 Mar 2024</b>	25 Jan 2024	25 Oct 2023
Machine Age	hrs	Client Info		<b>18771</b>	18202	17479
Oil Age	hrs	Client Info		<b>450</b>	450	450
Filter Age	hrs	Client Info		<b>450</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>25</b>	17	21
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	4	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>▲ MODER</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

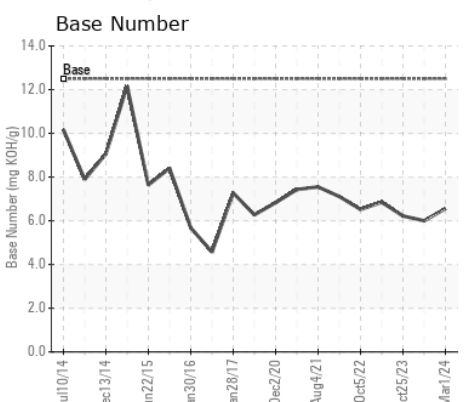
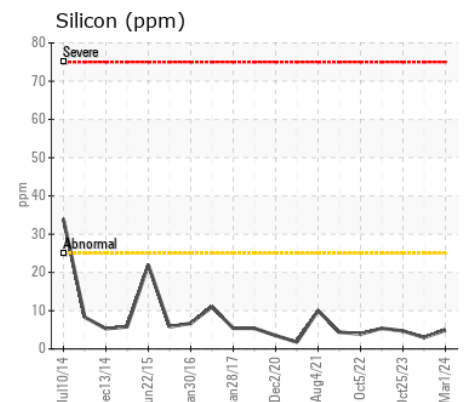
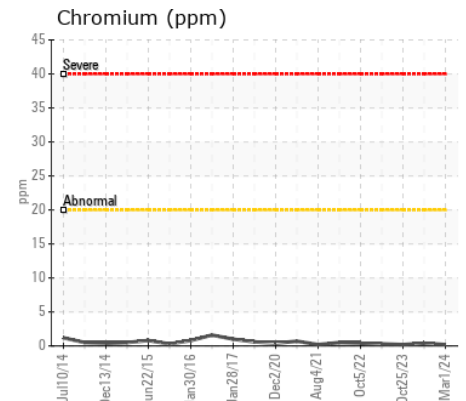
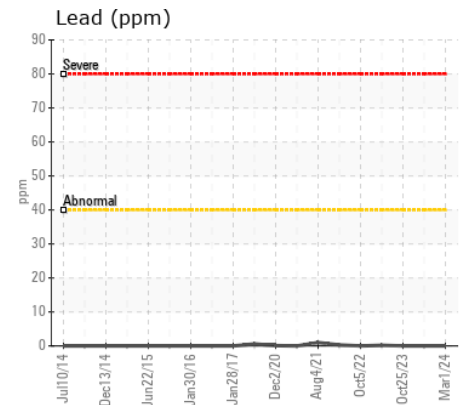
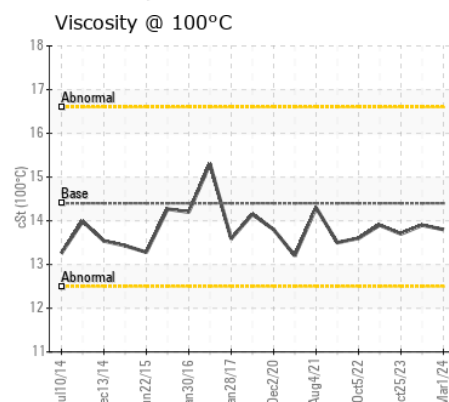
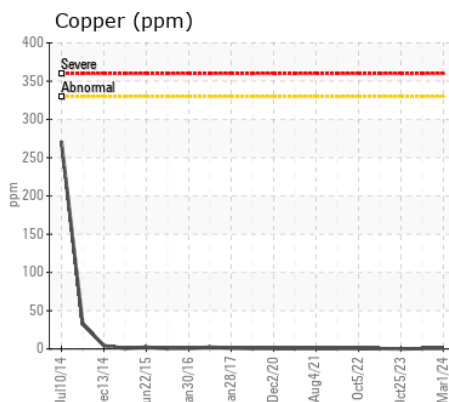
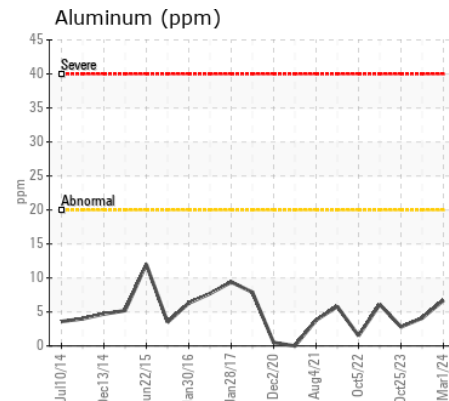
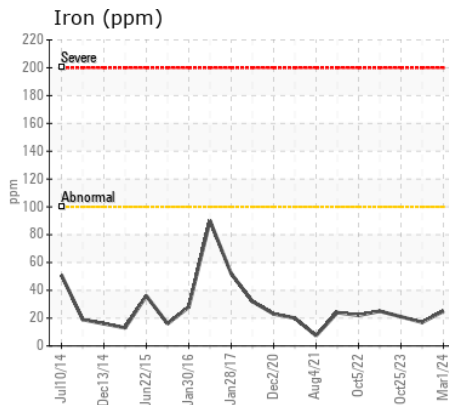
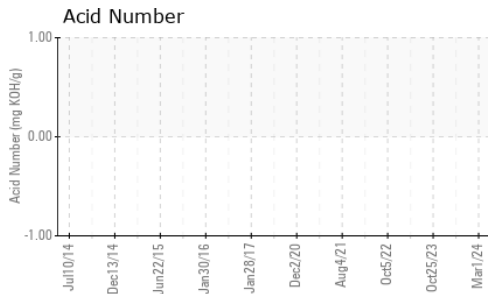
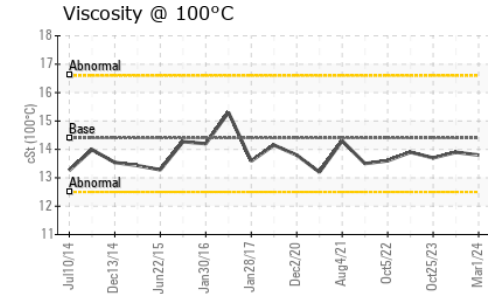
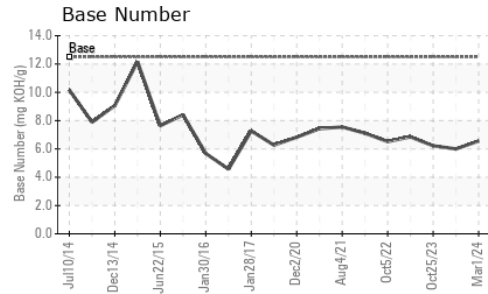
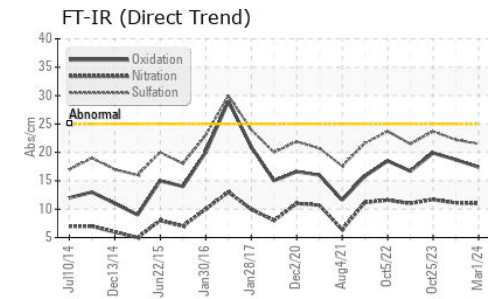
No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	6	2
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
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.0</b>	11.1	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	22.2	23.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m		<b>4</b>	0	<1
Boron	ppm	ASTM D5185m	151	<b>50</b>	50	44
Barium	ppm	ASTM D5185m	0.4	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	250	<b>2</b>	3	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>764</b>	714	743
Calcium	ppm	ASTM D5185m	2046	<b>1350</b>	1321	1295
Phosphorus	ppm	ASTM D5185m	1043	<b>761</b>	723	705
Zinc	ppm	ASTM D5185m	943	<b>842</b>	842	807
Sulfur	ppm	ASTM D5185m	5012	<b>3549</b>	3030	2924
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	18.7	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>6.56</b>	6.00	6.22
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.9	13.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844151 **Received** : 17 Jun 2024  
**Lab Number** : 06211959 **Tested** : 19 Jun 2024  
**Unique Number** : 11084823 **Diagnosed** : 19 Jun 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: TAN Man )

**LYNDEN TRANSPORT - FIFE**  
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 T: (253)926-7245  
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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)