



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

1196

Component

Diesel Engine

Fluid

CHEVRON DELO 400 XLE 10W30 (35 LTR)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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		WC0851801	---	---
Sample Date	Client Info		27 Jun 2024	---	---
Machine Age	mls	Client Info	33259	---	---
Oil Age	mls	Client Info	33259	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	73	---
Chromium	ppm	ASTM D5185m	>20	3	---
Nickel	ppm	ASTM D5185m	>4	<1	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	<1	---
Aluminum	ppm	ASTM D5185m	>20	46	---
Lead	ppm	ASTM D5185m	>40	1	---
Copper	ppm	ASTM D5185m	>330	279	---
Tin	ppm	ASTM D5185m	>15	9	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		31	---
Barium	ppm	ASTM D5185m		<1	---
Molybdenum	ppm	ASTM D5185m		38	---
Manganese	ppm	ASTM D5185m		7	---
Magnesium	ppm	ASTM D5185m		607	---
Calcium	ppm	ASTM D5185m	2900	1889	---
Phosphorus	ppm	ASTM D5185m	1100	771	---
Zinc	ppm	ASTM D5185m	1200	920	---
Sulfur	ppm	ASTM D5185m	4000	2241	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	---
Sodium	ppm	ASTM D5185m		12	---
Potassium	ppm	ASTM D5185m	>20	122	---
Glycol	%	*ASTM D2982		NEG	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	11.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	---

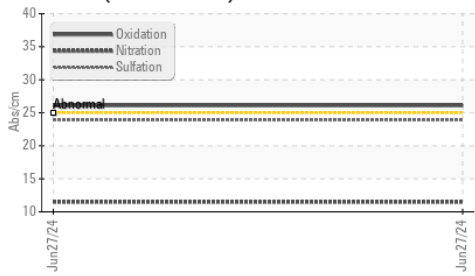
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	8.25	---

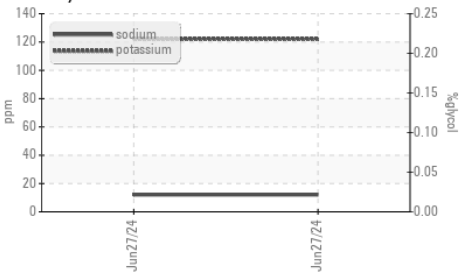


OIL ANALYSIS REPORT

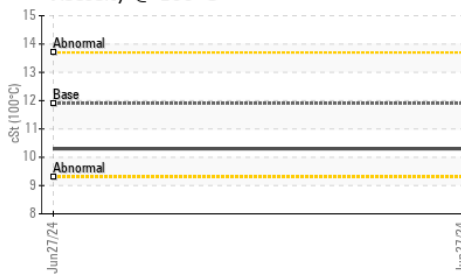
FT-IR (Direct Trend)



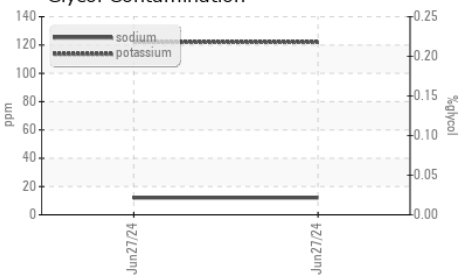
Glycol Contamination



Viscosity @ 100°C



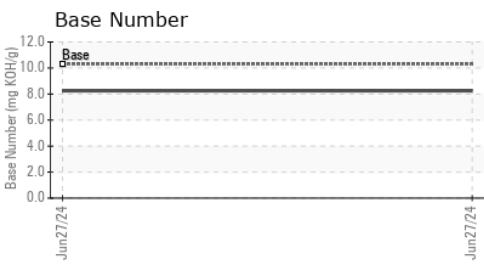
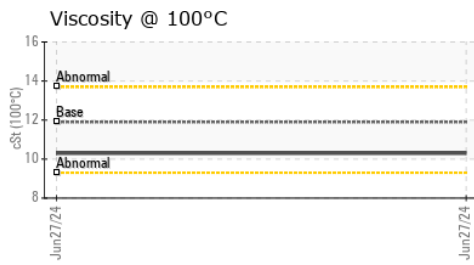
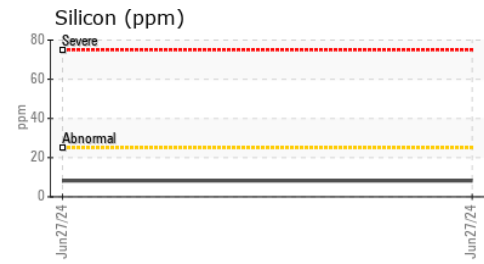
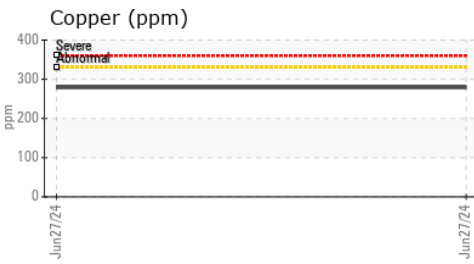
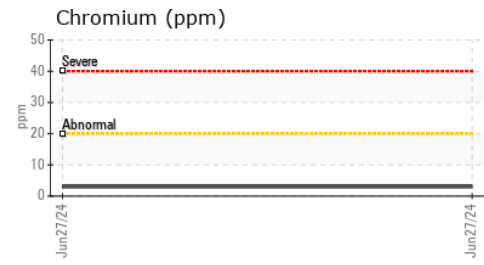
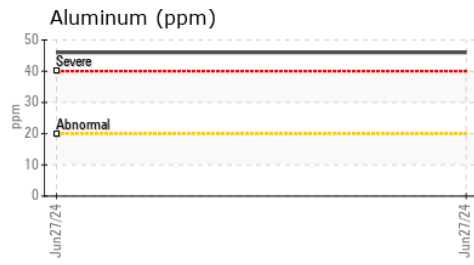
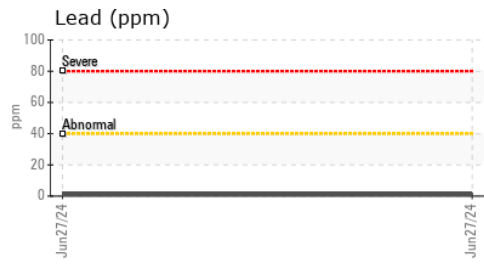
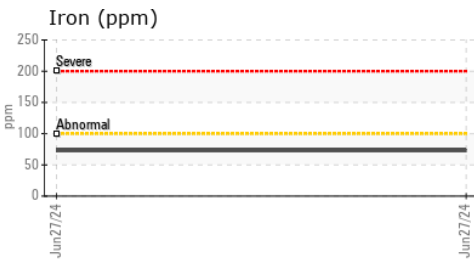
Glycol Contamination



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	10.3	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0851801 **Received** : 15 Jul 2024
Lab Number : 06236268 **Tested** : 16 Jul 2024
Unique Number : 11125102 **Diagnosed** : 16 Jul 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: Glycol)

LYNDEN TRANSPORT - SPRUCE GROVE
 27340 ACHESON RD, ACHESON INDUSTRIAL PARK
 ACHESON, AB
 CA T7X 6B1
 Contact: Mathieu Carby
 mcarby@lynden.com

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)