



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
3108
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0833155	---	---
Sample Date		Client Info		28 Nov 2023	---	---
Machine Age	mls	Client Info		416950	---	---
Oil Age	mls	Client Info		45125	---	---
Filter Age	mls	Client Info		45125	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>4	1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	7	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	4	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

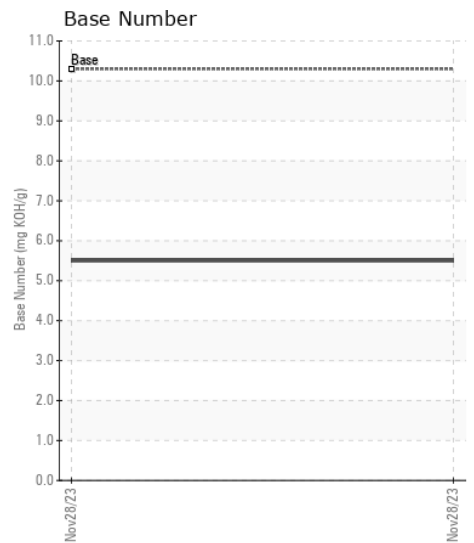
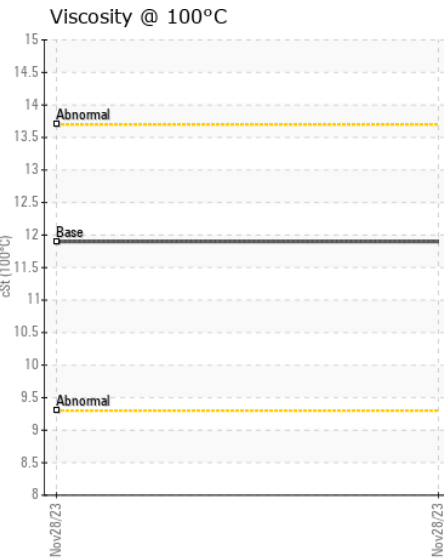
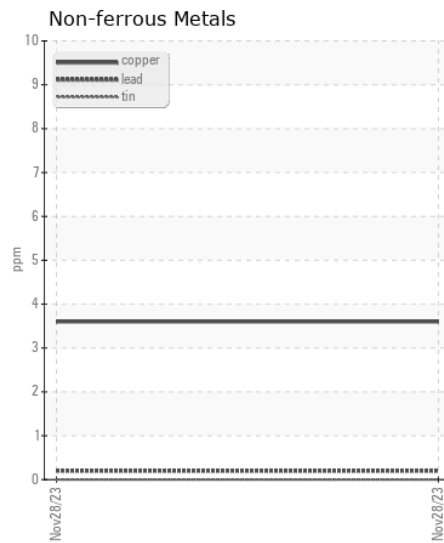
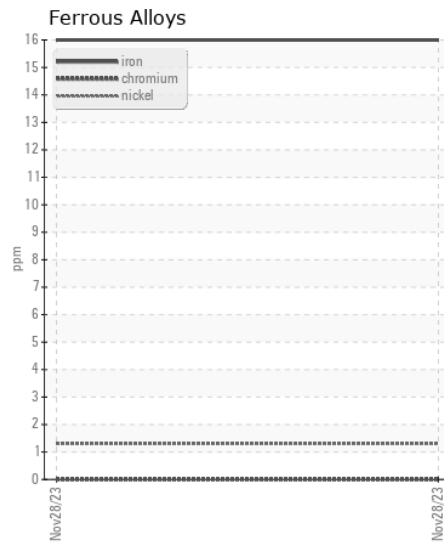
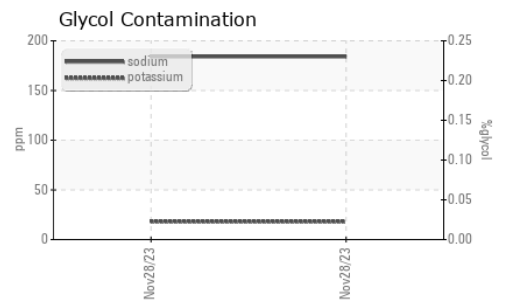
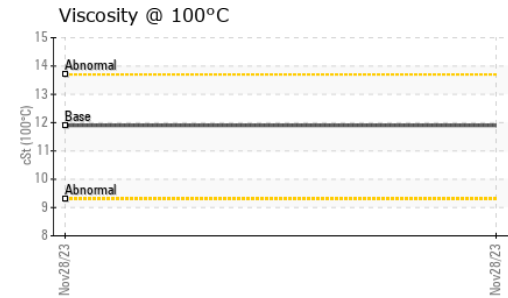
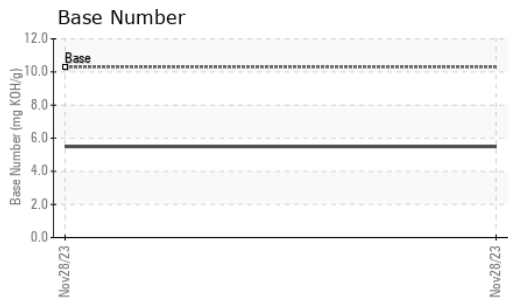
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	9	---	---
Potassium	ppm	ASTM D5185m	>20	18	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.6	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	---	---
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	---	---

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		▲ 184	---	---
Boron	ppm	ASTM D5185m		22	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		25	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		783	---	---
Calcium	ppm	ASTM D5185m	2900	1388	---	---
Phosphorus	ppm	ASTM D5185m	1100	708	---	---
Zinc	ppm	ASTM D5185m	1200	898	---	---
Sulfur	ppm	ASTM D5185m	4000	2877	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.5	---	---
Visc @ 100°C	cSt	ASTM D445	11.9	11.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0833155 **Received** : 11 Jan 2024
Lab Number : 06057677 **Diagnosed** : 15 Jan 2024
Unique Number : 10823626 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

LTI/MILKY WAY - MOSES
 120 WISER LANE
 MOSES LAKE, WA
 US 98837

Contact: MIGUEL PEREZ
 mperez@lynden.com; dougb@wearcheckusa.com
 T: (509)765-5840
 F: (509)765-5636

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)