



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3170
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0663161	WC0816651	WC0816632
Sample Date		Client Info		03 Oct 2023	08 Aug 2023	31 Jul 2023
Machine Age	mls	Client Info		164175	140690	137381
Oil Age	mls	Client Info		26722	3237	48175
Filter Age	mls	Client Info		26722	3237	48175
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	29	29	▲ 131
Chromium	ppm	ASTM D5185m	>20	<1	0	1
Nickel	ppm	ASTM D5185m	>4	<1	0	2
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	2	9
Lead	ppm	ASTM D5185m	>40	1	1	0
Copper	ppm	ASTM D5185m	>330	23	29	126
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

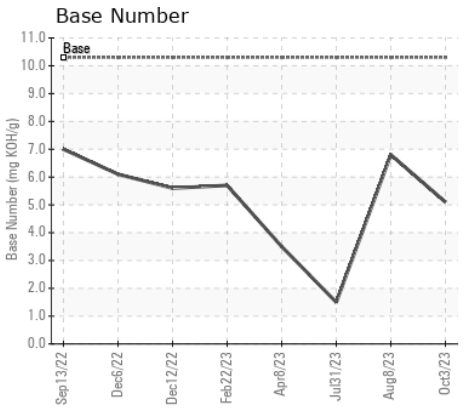
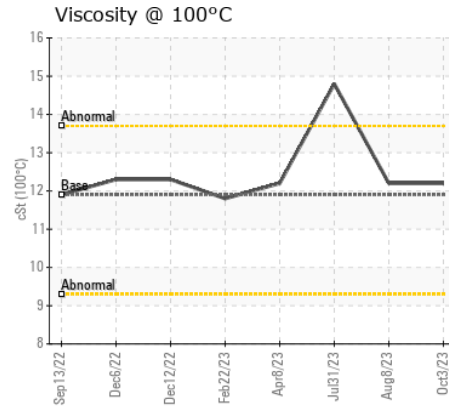
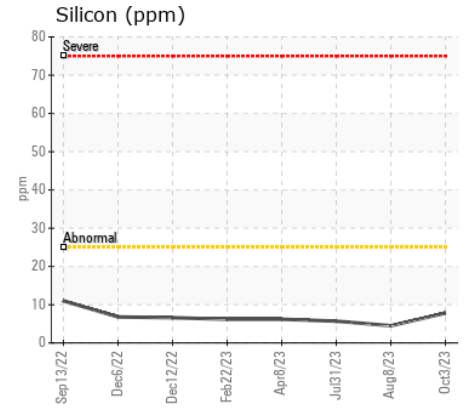
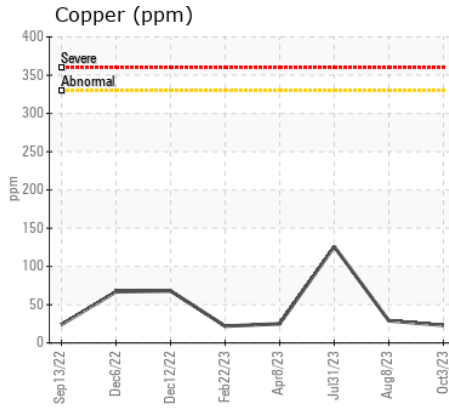
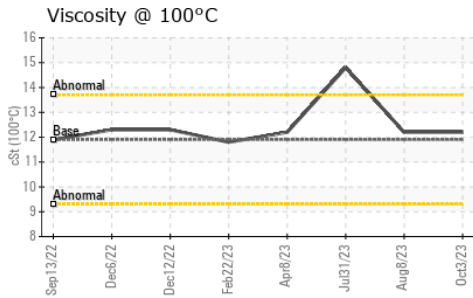
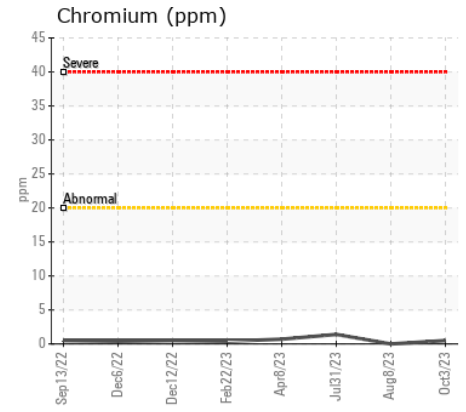
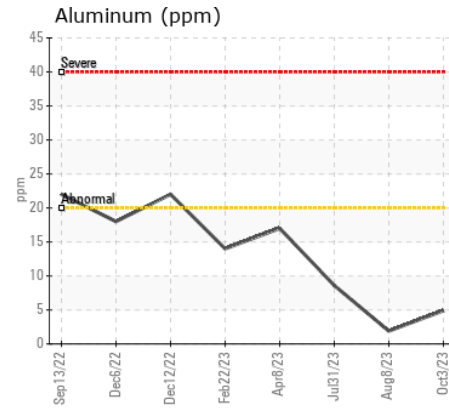
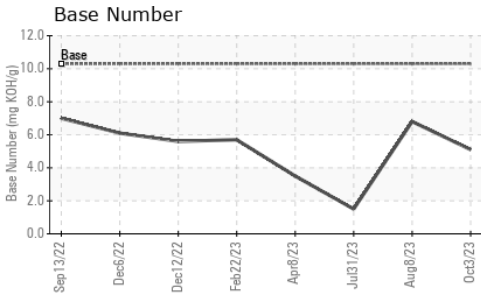
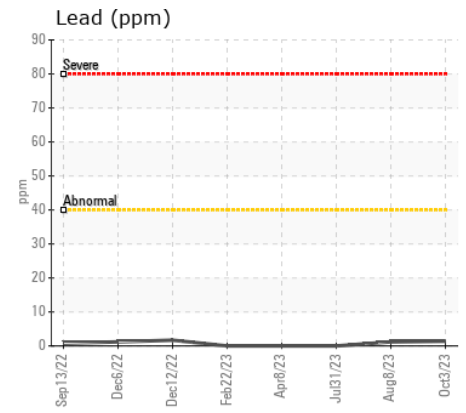
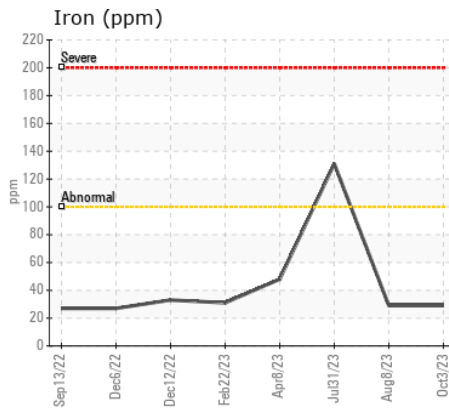
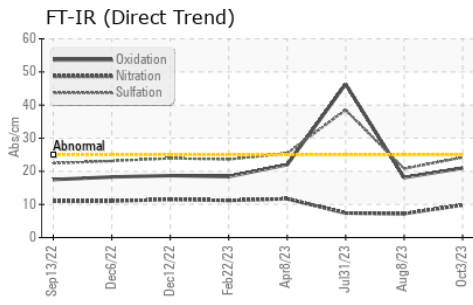
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	4	6
Potassium	ppm	ASTM D5185m	>20	6	4	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.2	0.8
Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.2	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	20.8	38.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		2	2	2
Boron	ppm	ASTM D5185m		17	83	26
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	1	4
Manganese	ppm	ASTM D5185m		1	1	4
Magnesium	ppm	ASTM D5185m		730	720	273
Calcium	ppm	ASTM D5185m	2900	1258	1307	509
Phosphorus	ppm	ASTM D5185m	1100	747	791	990
Zinc	ppm	ASTM D5185m	1200	802	815	475
Sulfur	ppm	ASTM D5185m	4000	2674	3478	1224
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	18.1	46.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.1	6.8	▲ 1.5
Visc @ 100°C	cSt	ASTM D445	11.9	12.2	12.2	▲ 14.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0663161 **Received** : 10 Oct 2023
Lab Number : 05974703 **Tested** : 11 Oct 2023
Unique Number : 10686653 **Diagnosed** : 11 Oct 2023 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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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)