



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
3046
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0663199	WC0816656	WC0816674
Sample Date		Client Info		11 Mar 2024	15 Jul 2023	15 Jul 2023
Machine Age	mls	Client Info		604340	555994	555994
Oil Age	mls	Client Info		25207	541818	541818
Filter Age	mls	Client Info		25207	14176	14176
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	17	17	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	6	4	4
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	9	2	5
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

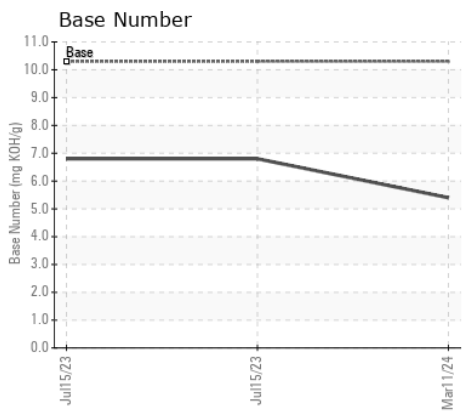
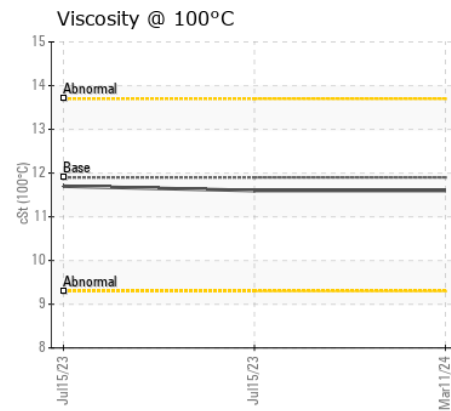
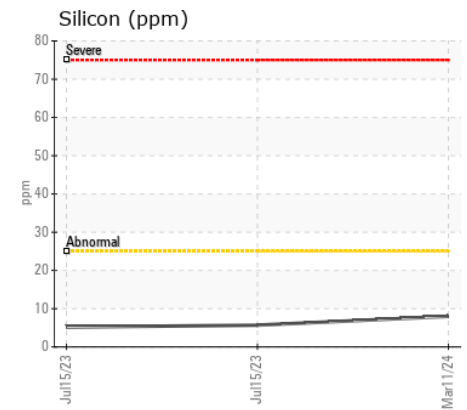
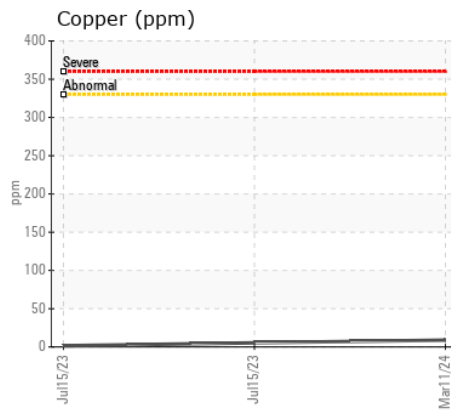
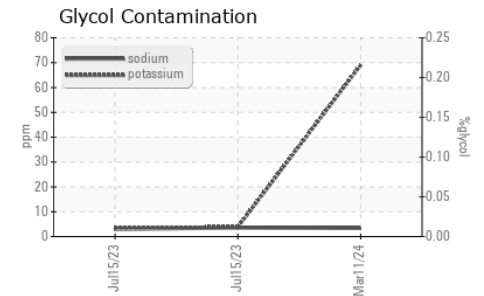
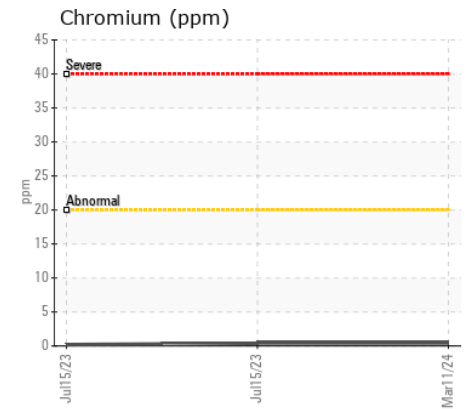
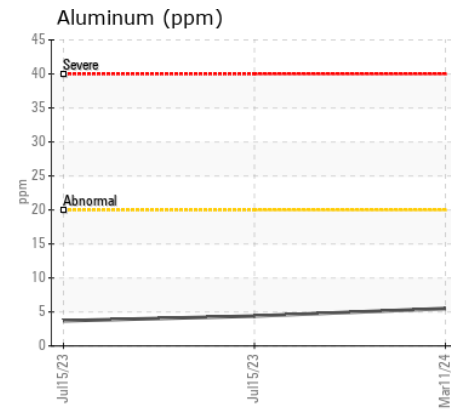
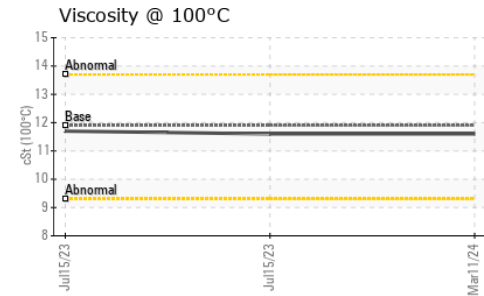
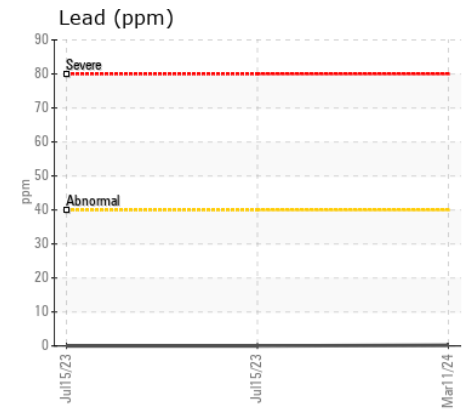
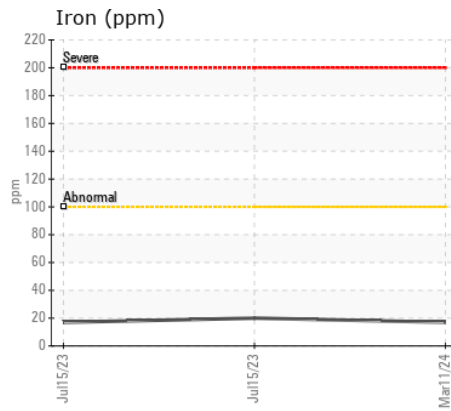
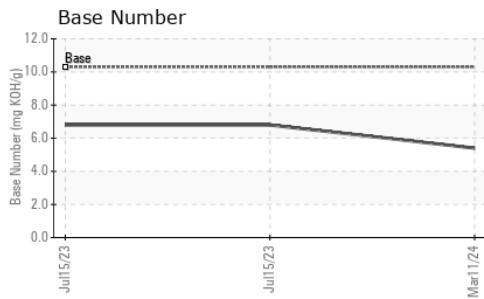
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	8	5	6
Potassium	ppm	ASTM D5185m	>20	69	3	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.6	9.5	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	20.3	20.4
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		3	3	4
Boron	ppm	ASTM D5185m		77	24	28
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		169	<1	1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		686	800	814
Calcium	ppm	ASTM D5185m	2900	1364	1457	1499
Phosphorus	ppm	ASTM D5185m	1100	644	729	756
Zinc	ppm	ASTM D5185m	1200	791	847	868
Sulfur	ppm	ASTM D5185m	4000	3160	3498	3575
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	15.3	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.4	6.8	6.8
Visc @ 100°C	cSt	ASTM D445	11.9	11.6	11.6	11.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0663199 **Received** : 21 Mar 2024
Lab Number : 06125372 **Tested** : 25 Mar 2024
Unique Number : 10939523 **Diagnosed** : 25 Mar 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

LTI/MILKY WAY - SUNNYSIDE
 333 MIDVALE RD
 SUNNYSIDE, WA
 US 98944

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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)