



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PE4045N013695

Component
Diesel Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0007014	KLMFA23367	KL0005119
Sample Date		Client Info		11 Jan 2024	11 Jun 2022	24 Feb 2022
Machine Age	hrs	Client Info		17946	10616	9156
Oil Age	hrs	Client Info		107	415	444
Filter Age	hrs	Client Info		107	415	444
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	3	14	6
Chromium	ppm	ASTM D5185m	>11	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>31	1	3	2
Lead	ppm	ASTM D5185m	>26	0	34	11
Copper	ppm	ASTM D5185m	>26	0	5	<1
Tin	ppm	ASTM D5185m	>4	0	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

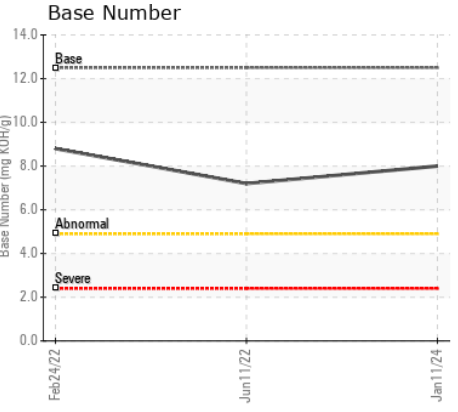
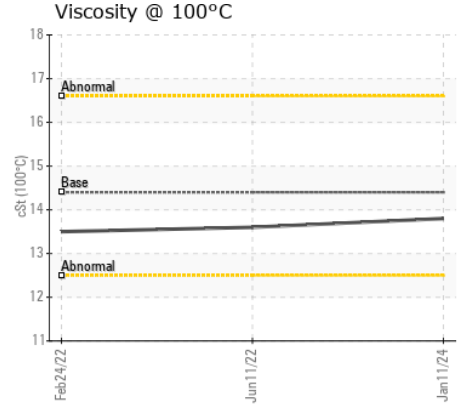
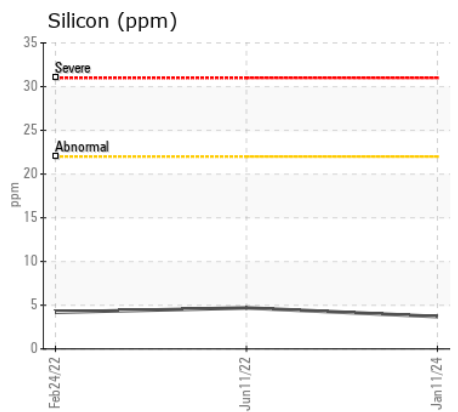
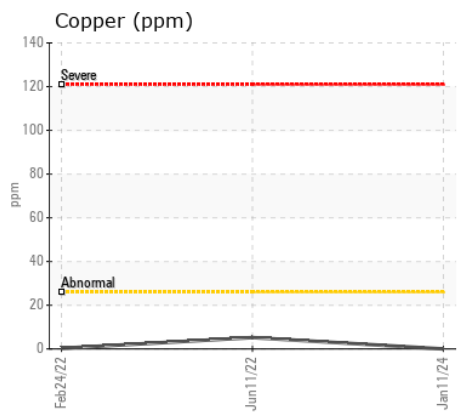
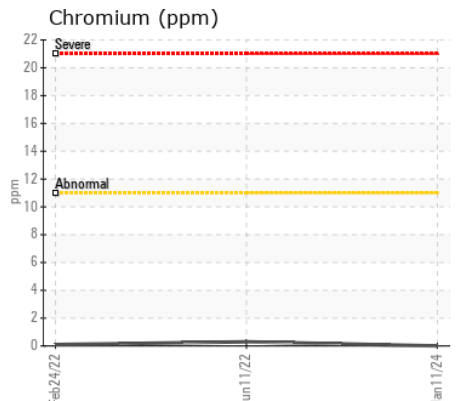
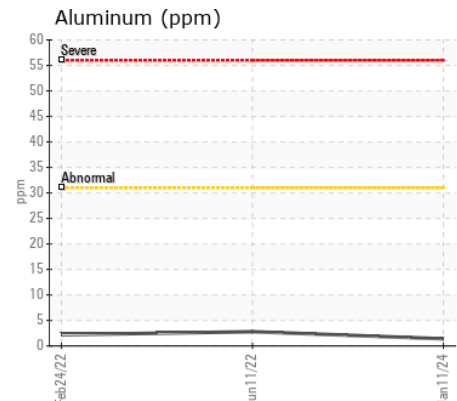
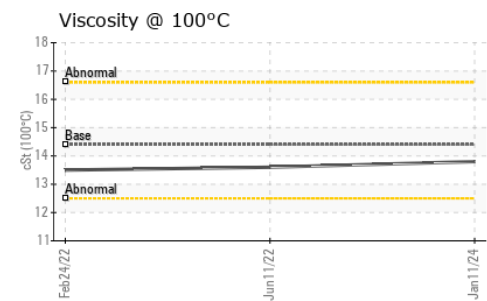
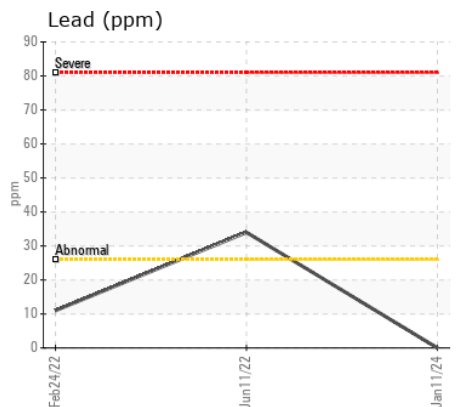
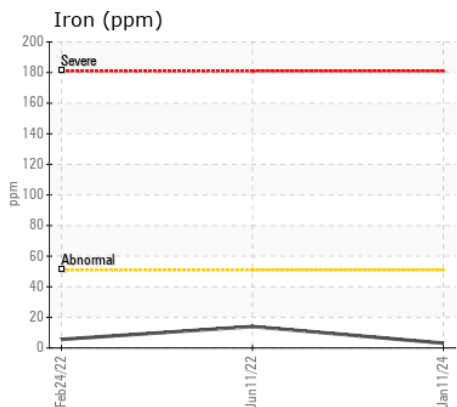
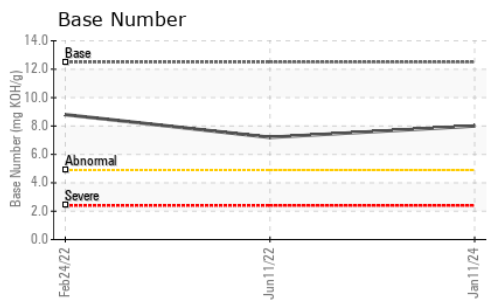
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	4	5	4
Potassium	ppm	ASTM D5185m	>20	4	<1	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.8	8.6	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	21.2	21.9
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	>0.21	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	>31	2	3	<1
Boron	ppm	ASTM D5185m	151	82	193	248
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	0	71	69
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	750	576	605
Calcium	ppm	ASTM D5185m	2046	1265	1696	1690
Phosphorus	ppm	ASTM D5185m	1043	722	726	759
Zinc	ppm	ASTM D5185m	943	827	835	851
Sulfur	ppm	ASTM D5185m	5012	3040	4101	3001
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2	18.4	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8	7.2	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	13.6	13.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0007014
Lab Number : 06087957
Unique Number : 10875402
Test Package : MOB1+
Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

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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)