



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
ONAN ONAN
 Component
Diesel Engine
 Fluid
CHEVRON URSA SUPER PLUS EC 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0962108	WC0550438	WC0452549
Sample Date		Client Info		16 Jul 2024	06 Jun 2021	05 May 2020
Machine Age	hrs	Client Info		661	540	513
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

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

CONTAMINATION

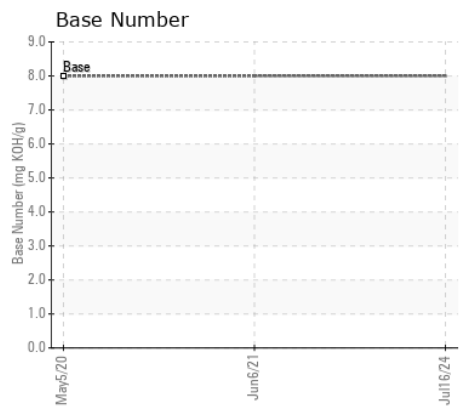
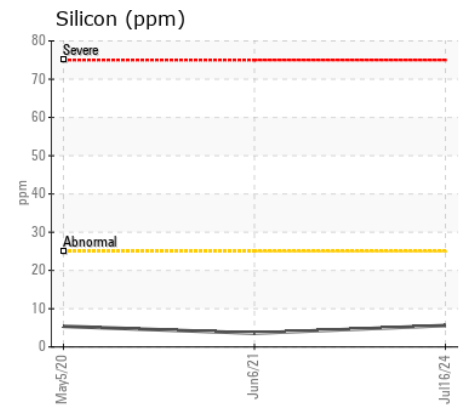
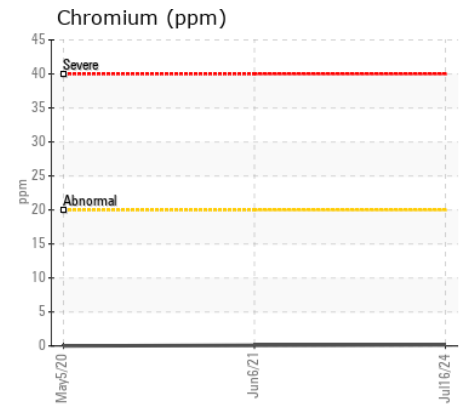
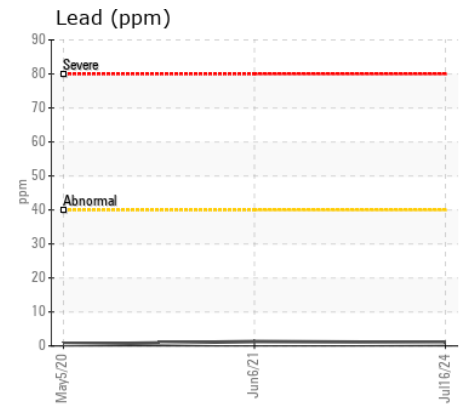
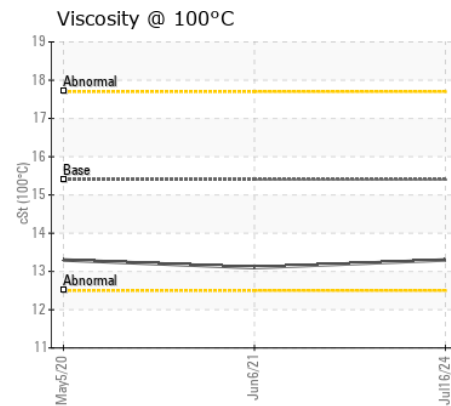
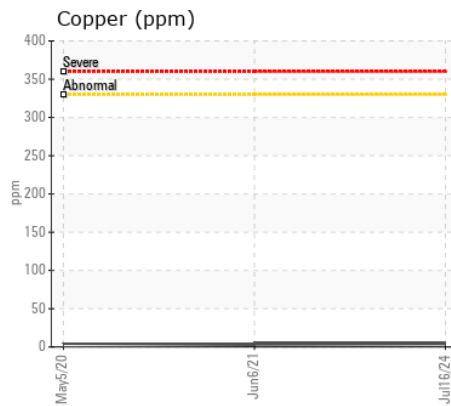
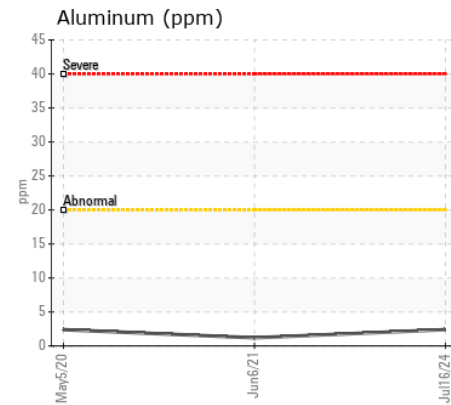
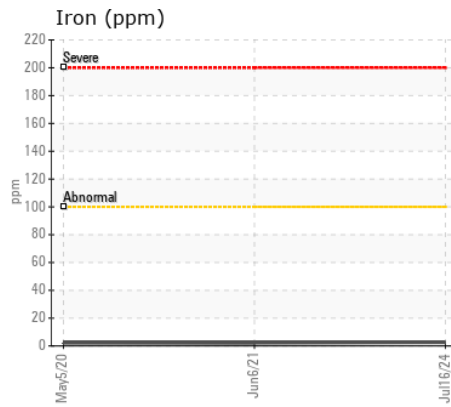
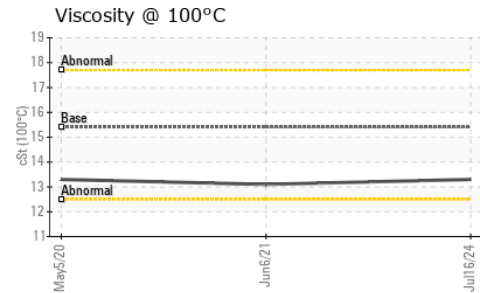
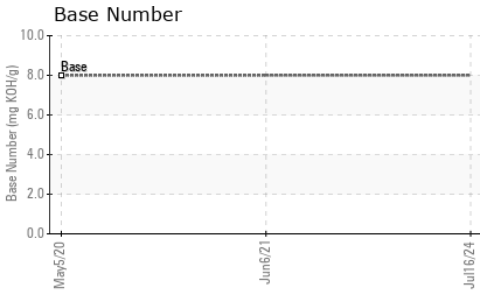
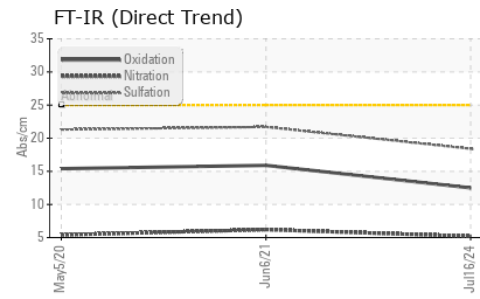
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	5
Potassium	ppm	ASTM D5185m	>20	3	<1	0
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	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	5.2	6.2	5.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	21.7	21.3
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		<1	2	2
Boron	ppm	ASTM D5185m		341	810	362
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		64	98	111
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		309	427	501
Calcium	ppm	ASTM D5185m		1630	1356	1288
Phosphorus	ppm	ASTM D5185m	1200	1046	659	652
Zinc	ppm	ASTM D5185m	1300	1132	791	734
Sulfur	ppm	ASTM D5185m		3190	1952	2368
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	15.9	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	7.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.1	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0962108 **Received** : 16 Jul 2024
Lab Number : 06238664 **Tested** : 17 Jul 2024
Unique Number : 11127498 **Diagnosed** : 17 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

UNIVAR USA INC.
 200 DEAN SIEVERS PLACE
 MORRISVILLE, PA
 US 19067
 Contact: TODD EVANS

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)

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F: