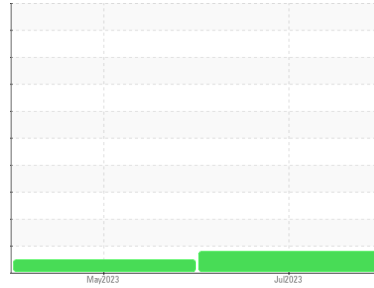




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

O-5

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0819755	WC0756107	---
Sample Date	Client Info		21 Jul 2023	03 May 2023	---
Machine Age	hrs	Client Info	779	450	---
Oil Age	hrs	Client Info	300	450	---
Oil Changed		Client Info	N/A	N/A	---
Sample Status			MARGINAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	9	14	---
Chromium	ppm	ASTM D5185m >20	<1	1	---
Nickel	ppm	ASTM D5185m >4	0	0	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	3	3	---
Lead	ppm	ASTM D5185m >40	3	11	---
Copper	ppm	ASTM D5185m >330	1	1	---
Tin	ppm	ASTM D5185m >15	<1	1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 151	298	263	---
Barium	ppm	ASTM D5185m 0.4	0	0	---
Molybdenum	ppm	ASTM D5185m 250	122	119	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 0	650	684	---
Calcium	ppm	ASTM D5185m 2046	1616	1557	---
Phosphorus	ppm	ASTM D5185m 1043	695	720	---
Zinc	ppm	ASTM D5185m 943	830	869	---
Sulfur	ppm	ASTM D5185m 5012	2821	2788	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	7	8	---
Sodium	ppm	ASTM D5185m	3	2	---
Potassium	ppm	ASTM D5185m >20	5	2	---
Fuel	%	ASTM D3524 >5	▲ 3.4	<1.0	---

INFRA-RED

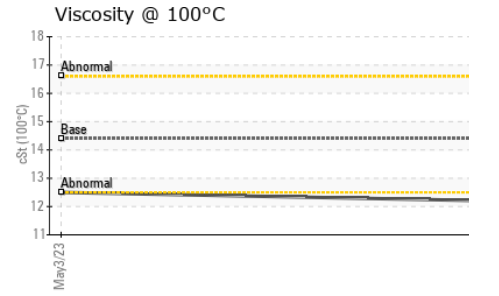
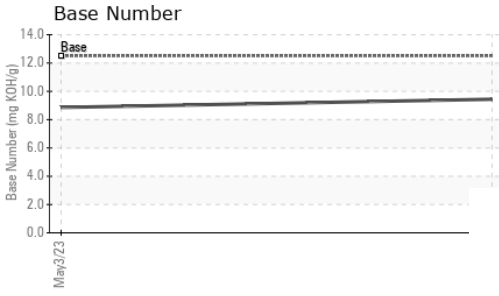
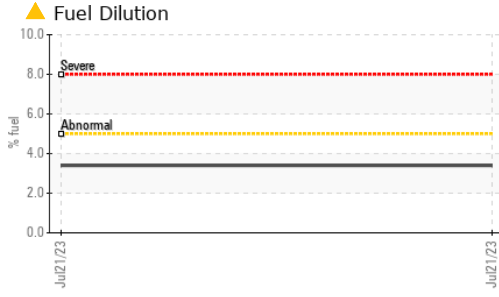
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.6	---
Nitration	Abs/cm	*ASTM D7624 >20	8.3	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.8	25.3	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.2	20.3	---
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	9.44	8.86	---



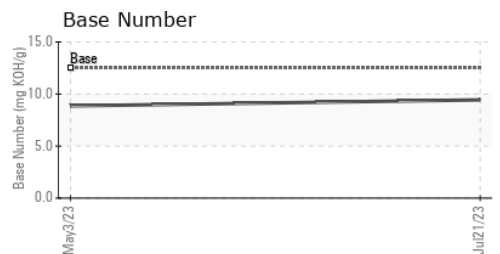
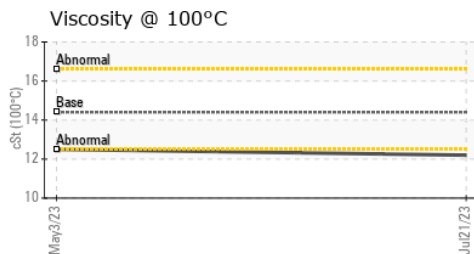
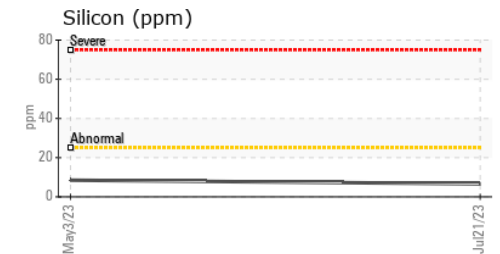
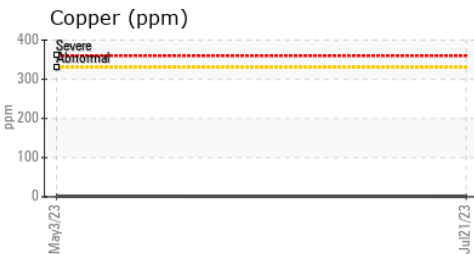
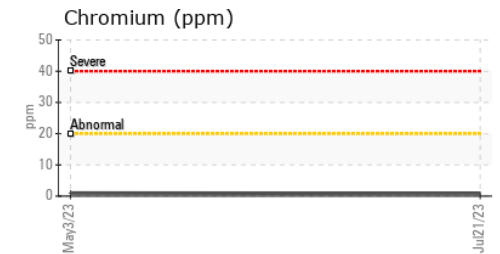
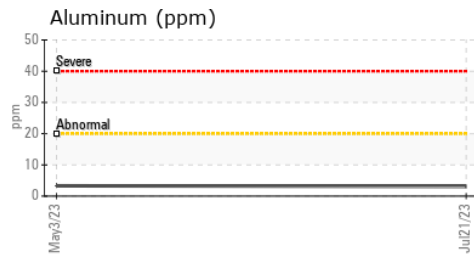
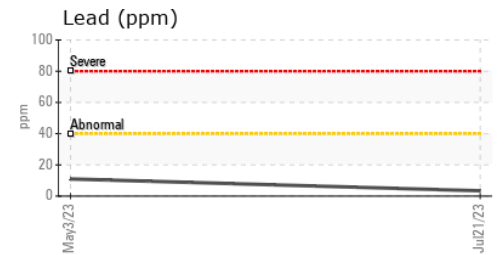
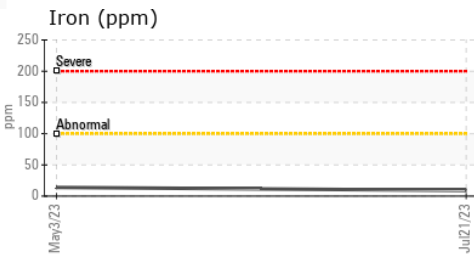
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
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	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	12.2	12.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0819755 **Received** : 16 Aug 2023
Lab Number : 05926832 **Diagnosed** : 18 Aug 2023
Unique Number : 10606779 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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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)