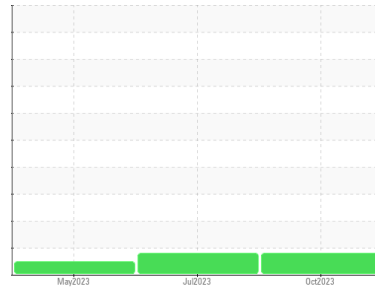




OIL ANALYSIS REPORT

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

All component wear rates are normal.

▲ 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	WC0819750	WC0819755	WC0756107
Sample Date	Client Info	24 Oct 2023	21 Jul 2023	03 May 2023
Machine Age	hrs	1090	779	450
Oil Age	hrs	300	300	450
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		MARGINAL	MARGINAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	6	9	14
Chromium	ppm	ASTM D5185m >20	<1	<1	1
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	3	3
Lead	ppm	ASTM D5185m >40	2	3	11
Copper	ppm	ASTM D5185m >330	<1	1	1
Tin	ppm	ASTM D5185m >15	<1	<1	1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 151	281	298	263
Barium	ppm	ASTM D5185m 0.4	0	0	0
Molybdenum	ppm	ASTM D5185m 250	120	122	119
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 0	612	650	684
Calcium	ppm	ASTM D5185m 2046	1512	1616	1557
Phosphorus	ppm	ASTM D5185m 1043	746	695	720
Zinc	ppm	ASTM D5185m 943	804	830	869
Sulfur	ppm	ASTM D5185m 5012	2350	2821	2788

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	7	7	8
Sodium	ppm	ASTM D5185m	5	3	2
Potassium	ppm	ASTM D5185m >20	2	5	2
Fuel	%	ASTM D3524 >5	▲ 2.5	▲ 3.4	<1.0

INFRA-RED

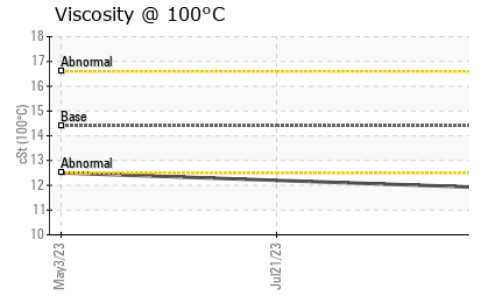
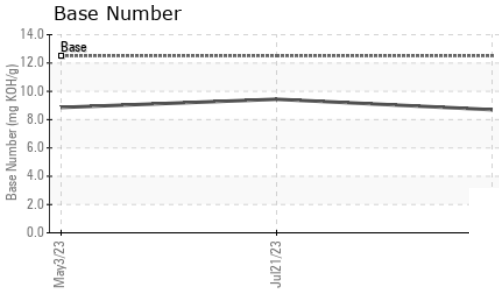
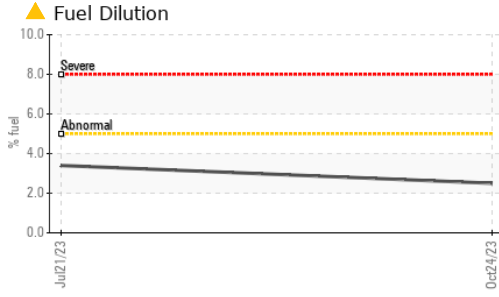
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.4	0.4	0.6
Nitration	Abs/cm	*ASTM D7624 >20	8.0	8.3	9.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.8	23.8	25.3

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	18.2	20.3
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	8.70	9.44	8.86



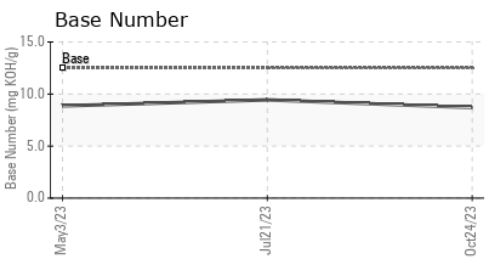
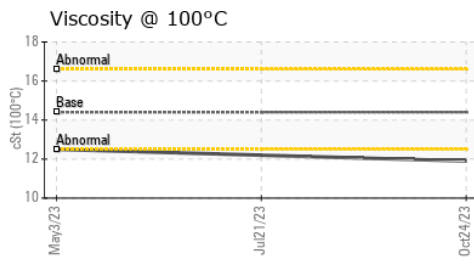
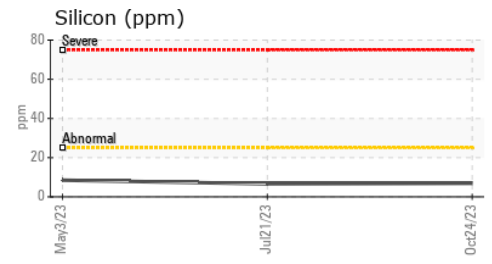
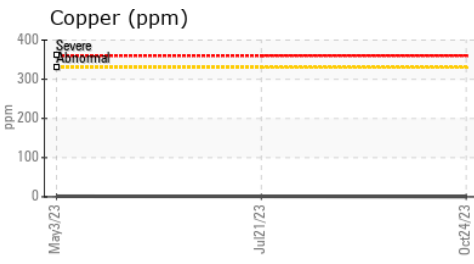
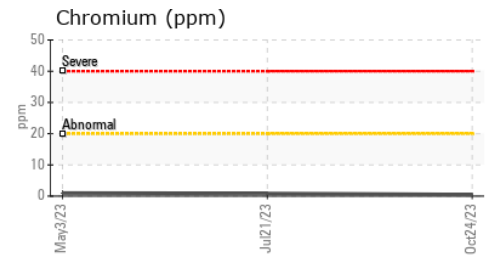
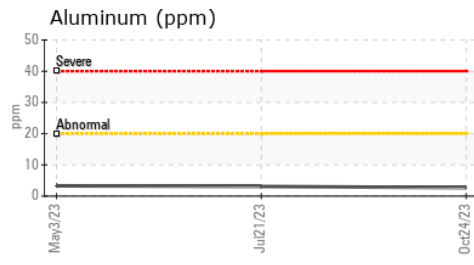
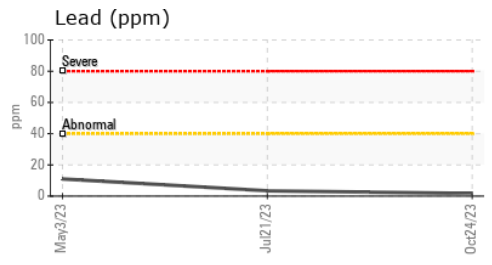
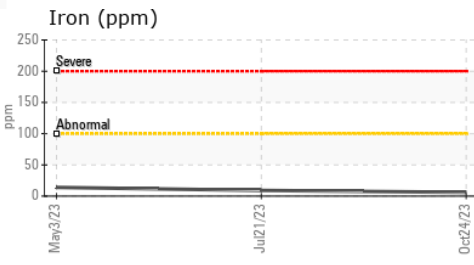
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	11.9	12.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0819750 **Received** : 30 Oct 2023
Lab Number : 05993765 **Diagnosed** : 03 Nov 2023
Unique Number : 10722125 **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)