

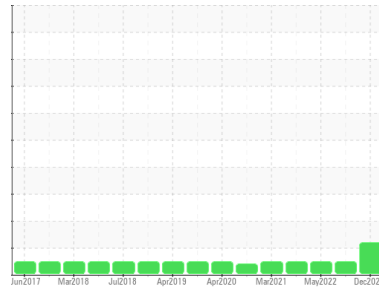


OIL ANALYSIS REPORT



Area
KANSAS/44/EG - OTHER SERVICE
 Machine Id
53.131L [KANSAS^44^EG - OTHER SERVICE]
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)

Sample Rating Trend



FUEL



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0741767	WC0697766	WC0697611
Sample Date	Client Info		07 Dec 2022	08 Sep 2022	13 May 2022
Machine Age	hrs	Client Info	3655	3371	3017
Oil Age	hrs	Client Info	284	354	237
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	25	16	24
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	3
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	2	3
Tin	ppm	ASTM D5185m	>15	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	30	6	45
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	40	36	5
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	569	555	766
Calcium	ppm	ASTM D5185m		1679	1594	1563
Phosphorus	ppm	ASTM D5185m		743	738	768
Zinc	ppm	ASTM D5185m		1018	888	869
Sulfur	ppm	ASTM D5185m		2627	2389	2573

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	6	7
Sodium	ppm	ASTM D5185m		3	2	3
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Fuel	%	ASTM D3524	>5	▲ 4.3	<1.0	<1.0

INFRA-RED

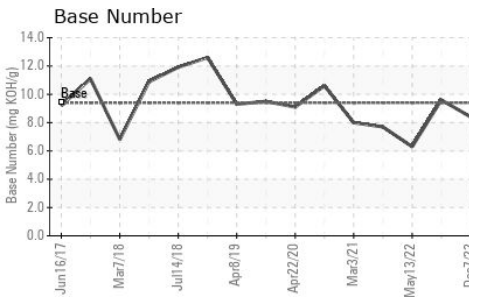
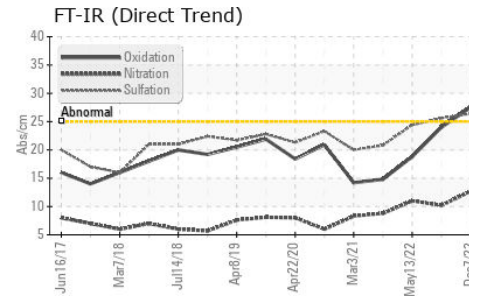
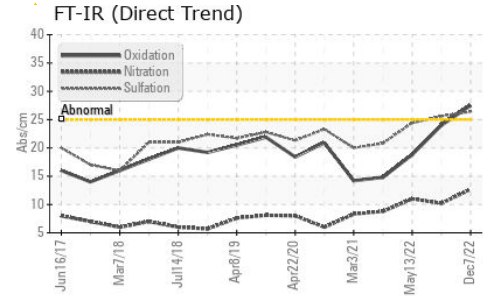
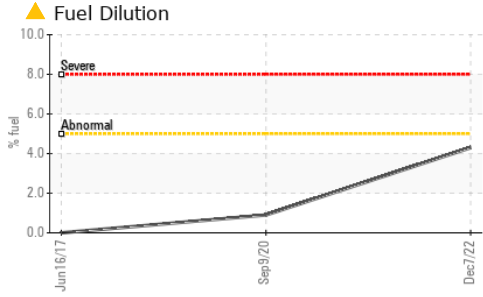
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.6	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	12.7	10.2	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	25.6	24.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.5	24.0	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.4	9.6	6.3



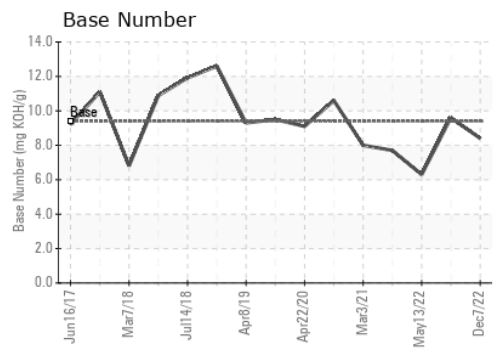
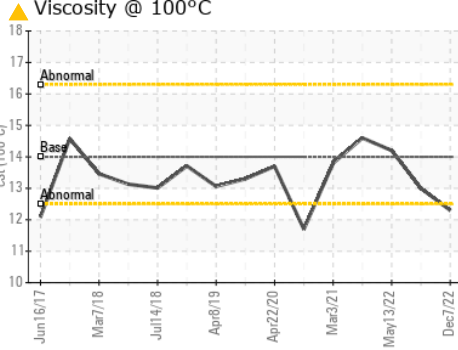
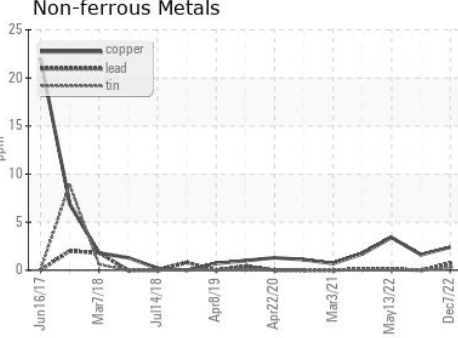
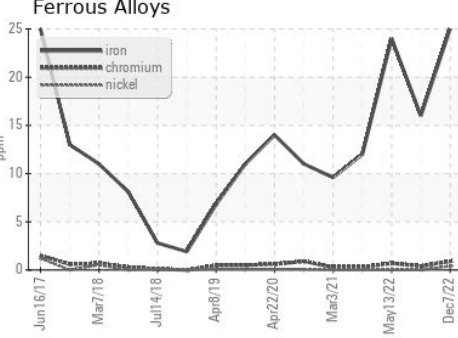
OIL ANALYSIS REPORT



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 ▲ 12.3	13.0	14.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0741767 **Received** : 12 Dec 2022
Lab Number : 05714620 **Tested** : 14 Dec 2022
Unique Number : 10254196 **Diagnosed** : 14 Dec 2022 - Don Baldrige
Test Package : CONST (Additional Tests : FuelDilution, PercentFuel, TBN)

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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)