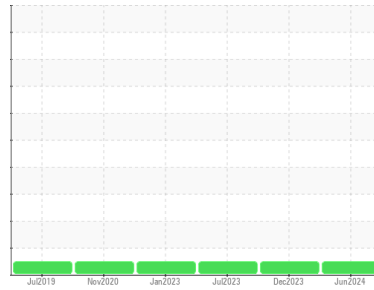




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
300-301-01-GN-01 - WASHINGTON ST (S/N 6CA00865)
 Component
Diesel Engine
 Fluid
 DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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			RP0034239	RP0030057	RP0031512
Sample Date	Client Info			20 Jun 2024	19 Dec 2023	20 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	7	3	5
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	2
Lead	ppm	ASTM D5185m	>40	5	1	5
Copper	ppm	ASTM D5185m	>330	75	28	91
Tin	ppm	ASTM D5185m	>15	0	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	30	41	79
Barium	ppm	ASTM D5185m	10	0	6	2
Molybdenum	ppm	ASTM D5185m	100	49	45	89
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	55	46	109
Calcium	ppm	ASTM D5185m	3000	2349	1970	2271
Phosphorus	ppm	ASTM D5185m	1150	1031	984	1060
Zinc	ppm	ASTM D5185m	1350	1247	1040	1213

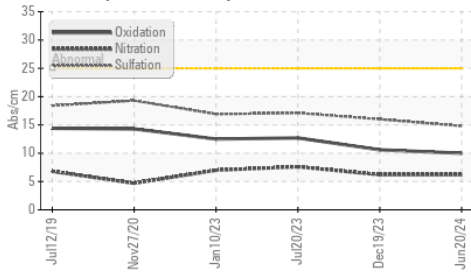
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	5	5
Sodium	ppm	ASTM D5185m		29	10	27
Potassium	ppm	ASTM D5185m	>20	4	2	5
Water	%	ASTM D6304	>0.2	NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.2	6.2	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.8	16.0	17.1

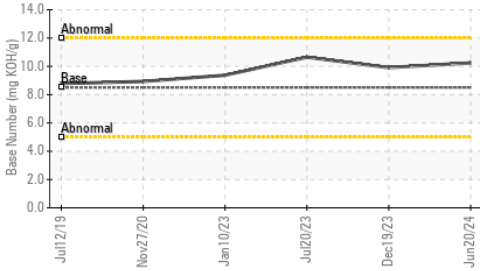
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0	10.6	12.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.24	9.91	10.65

OIL ANALYSIS REPORT

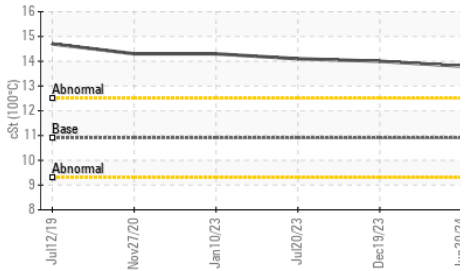
FT-IR (Direct Trend)



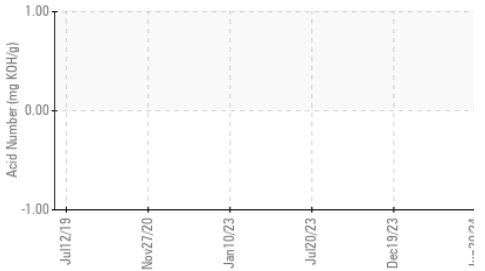
Base Number



Viscosity @ 100°C



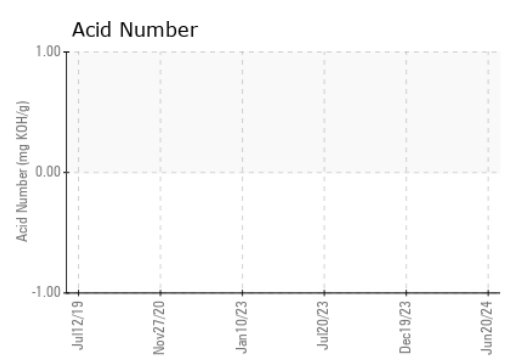
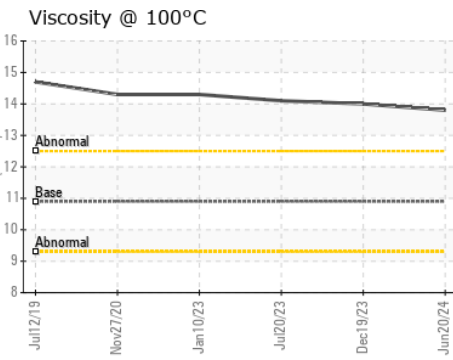
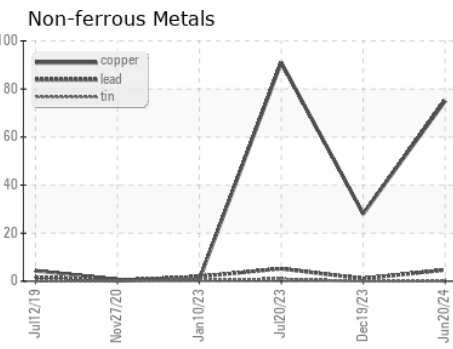
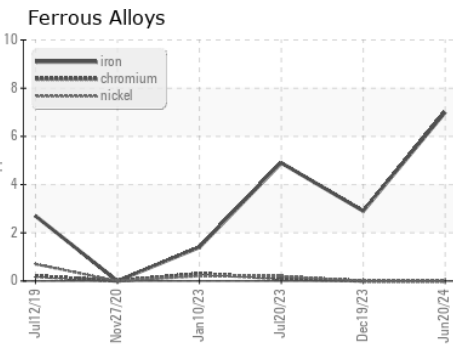
Acid Number



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	10.9	13.8	14.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034239 **Received** : 20 Jun 2024
Lab Number : 06215940 **Tested** : 23 Jun 2024
Unique Number : 11088804 **Diagnosed** : 23 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: FT-IR, KV100, TBN)

VEOLIA NEWPORT
 250 CONNELL HWY
 NEWPORT, RI
 US 02840

Contact: ANTHONY CALENDA
 anthony.calenda@suez-na.com
 T: (401)439-8512

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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