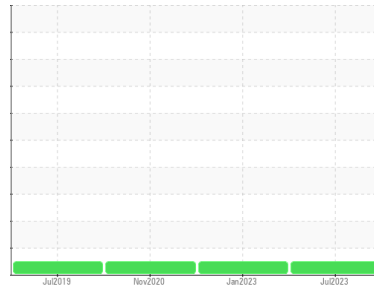




# OIL ANALYSIS REPORT

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			<b>RP0031512</b>	RP0001179	RP0014810
Sample Date	Client Info			<b>20 Jul 2023</b>	10 Jan 2023	27 Nov 2020
Machine Age	hrs	Client Info		<b>0</b>	0	466
Oil Age	hrs	Client Info		<b>0</b>	0	6
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

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

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

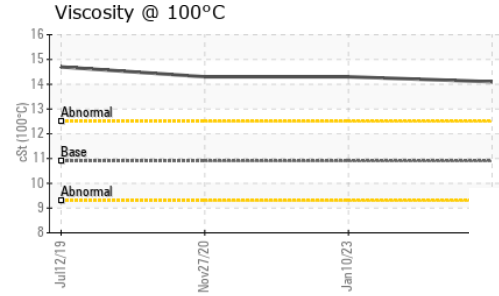
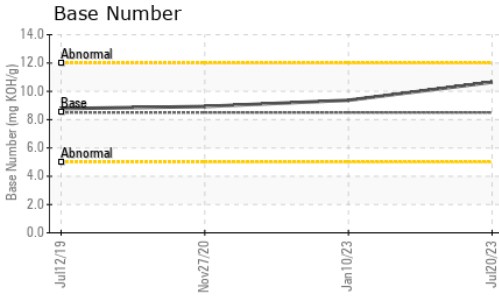
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>79</b>	85	143
Barium	ppm	ASTM D5185m	10	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>89</b>	88	48
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	450	<b>109</b>	116	305
Calcium	ppm	ASTM D5185m	3000	<b>2271</b>	2271	1690
Phosphorus	ppm	ASTM D5185m	1150	<b>1060</b>	1059	934
Zinc	ppm	ASTM D5185m	1350	<b>1213</b>	1351	1014

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	4
Sodium	ppm	ASTM D5185m		<b>27</b>	1	1
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	7.0	4.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.1</b>	16.9	19.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.7</b>	12.5	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>10.65</b>	9.37	8.93

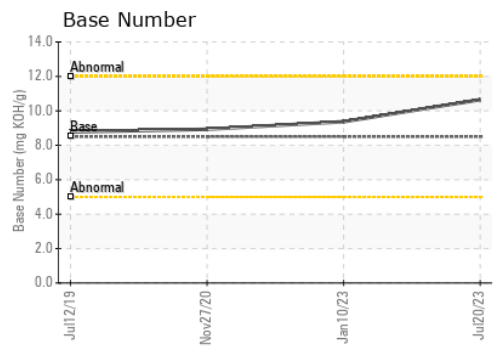
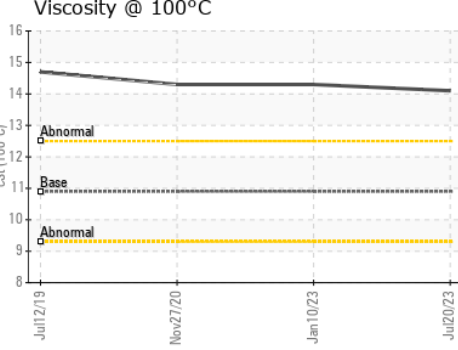
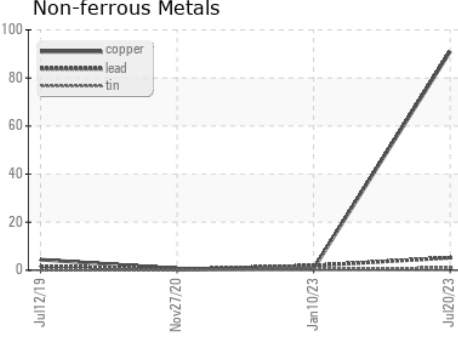
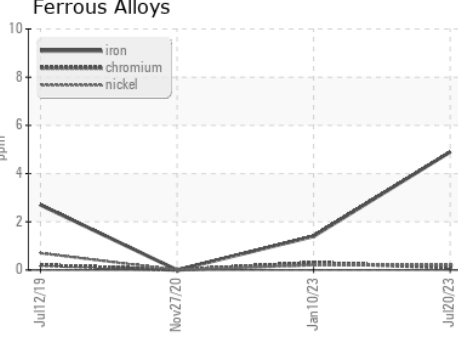
# OIL ANALYSIS REPORT



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	10.9	14.1	14.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0031512 **Received** : 21 Jul 2023  
**Lab Number** : 05904544 **Diagnosed** : 26 Jul 2023  
**Unique Number** : 10565900 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: FT-IR, KV100, TBN )

**VEOLIA NEWPORT**  
 250 CONNELL HWY  
 NEWPORT, RI  
 US 02840  
 Contact: ANTHONY CALEND  
 anthony.calenda@suez-na.com  
 T: (401)439-8512  
 F:

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)