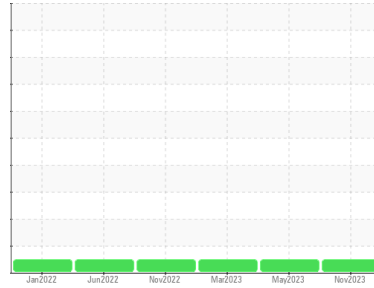




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[847674]**  
 Machine Id  
**LCL-6**  
 Component  
**1 Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

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>WC0816957</b>	WC0793397	WC0744079
Sample Date	Client Info			<b>15 Nov 2023</b>	05 May 2023	27 Mar 2023
Machine Age	hrs	Client Info		<b>6777</b>	6620	6590
Oil Age	hrs	Client Info		<b>91</b>	0	256
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not 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
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>83</b>	109	106
Barium	ppm	ASTM D5185m	10	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>80</b>	<1	3
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>77</b>	712	748
Calcium	ppm	ASTM D5185m	3000	<b>2094</b>	1382	1368
Phosphorus	ppm	ASTM D5185m	1150	<b>958</b>	1100	1088
Zinc	ppm	ASTM D5185m	1350	<b>1135</b>	1234	1226
Sulfur	ppm	ASTM D5185m	4250	<b>4307</b>	3893	4826

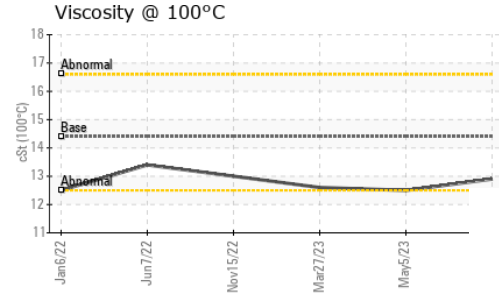
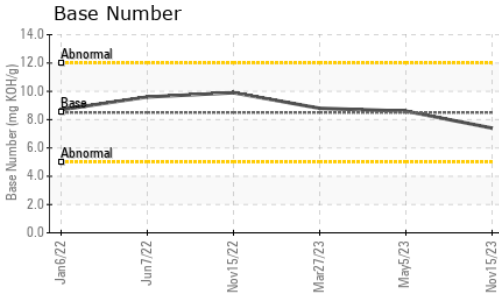
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m	>158	<b>0</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	7.1	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.7</b>	19.0	18.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.3</b>	12.5	12.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.4</b>	8.6	8.8



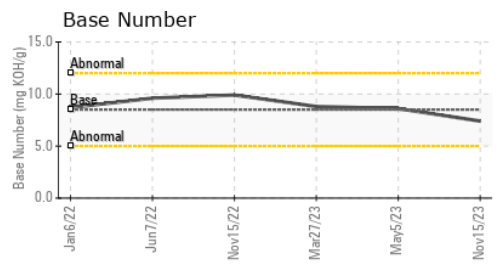
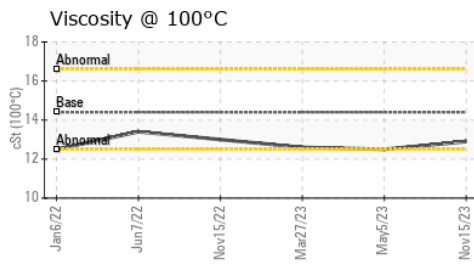
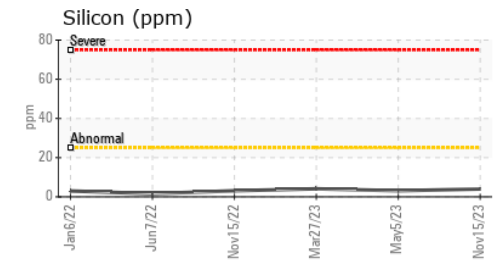
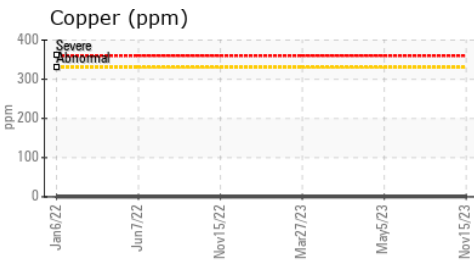
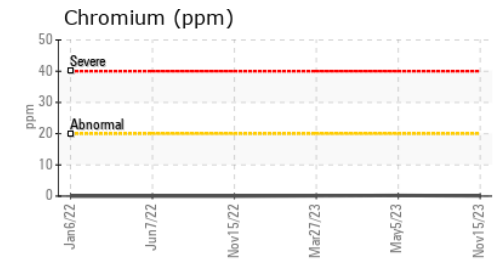
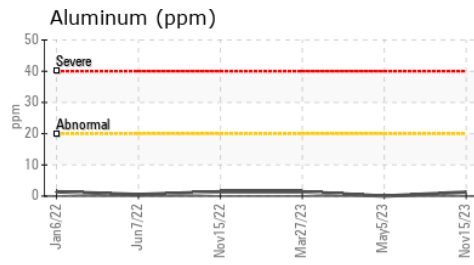
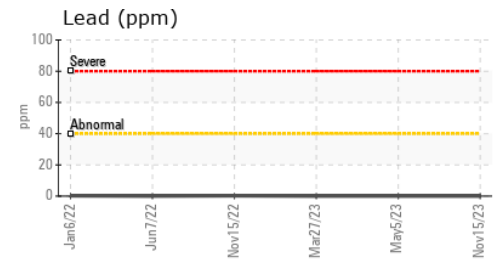
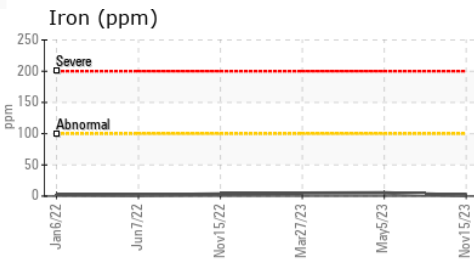
# OIL ANALYSIS REPORT



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	12.9	12.5	12.6

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0816957 **Received** : 06 Dec 2023  
**Lab Number** : 06026256 **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10776047 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**AES USA - EVERETT**  
 3003 W CASINO RD BLDG 40-26 DR S2  
 EVERETT, WA  
 US 98204-1910  
 Contact: TIM FELLER  
 tim.feller@aes-gse.com  
 T: (425)266-4649  
 F:

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)