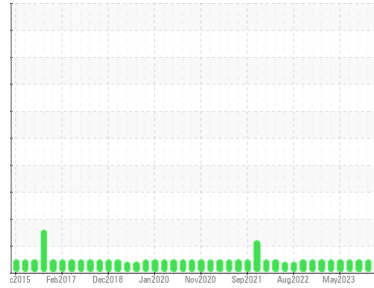




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[886746]
 Machine Id
LCL-9 ENGINE 2

Component
Rear Diesel Engine
 Fluid
PHILLIPS 66 Fleet Supreme EC 15W40 (9 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0865374	WC0865372	WC0843459
Sample Date	Client Info			03 Jan 2024	08 Nov 2023	12 Sep 2023
Machine Age	hrs	Client Info		4785	4770	4770
Oil Age	hrs	Client Info		0	69	110
Oil Changed	Client Info			N/A	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
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	0	2	1
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	2	1
Lead	ppm	ASTM D5185m	>40	1	<1	0
Copper	ppm	ASTM D5185m	>330	0	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		85	93	98
Barium	ppm	ASTM D5185m		0	12	0
Molybdenum	ppm	ASTM D5185m		93	98	89
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		34	28	35
Calcium	ppm	ASTM D5185m		2344	2272	2285
Phosphorus	ppm	ASTM D5185m	1116	1200	1109	1099
Zinc	ppm	ASTM D5185m	1250	1389	1246	1258
Sulfur	ppm	ASTM D5185m		4341	3736	4796

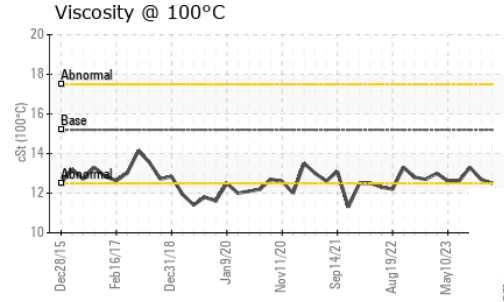
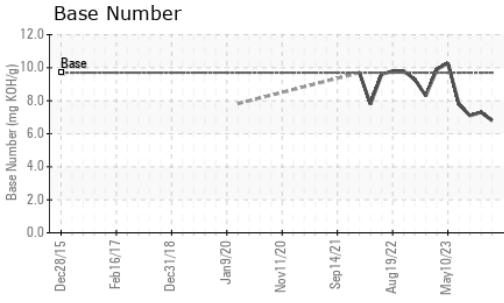
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	3	4
Sodium	ppm	ASTM D5185m		2	0	3
Potassium	ppm	ASTM D5185m	>20	<1	2	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.4	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.0	16.6	16.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9	12.5	12.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.7	6.8	7.3	7.1



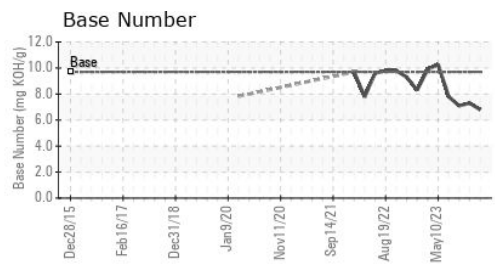
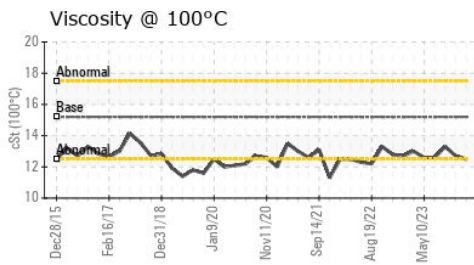
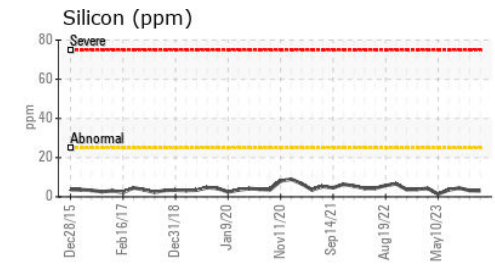
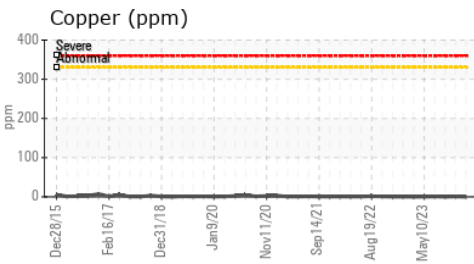
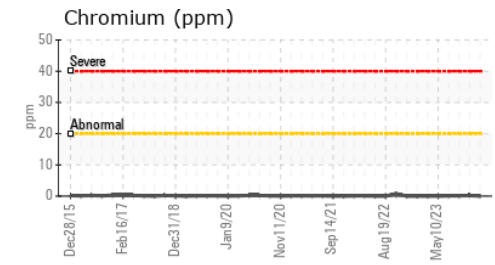
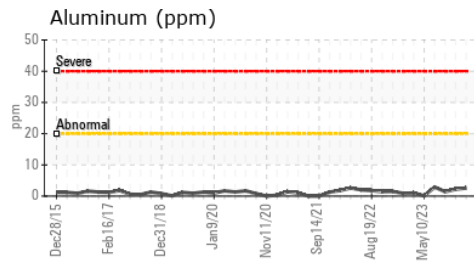
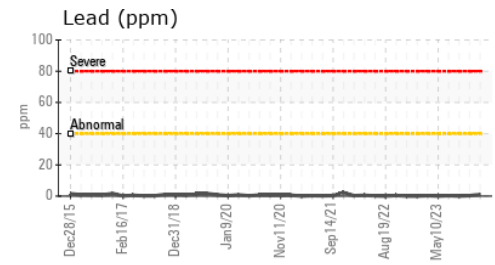
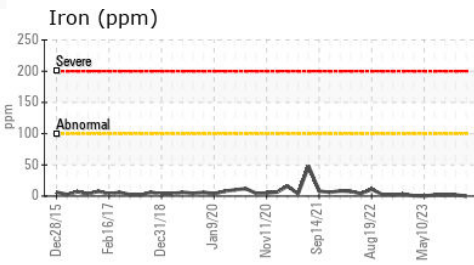
OIL ANALYSIS REPORT



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	15.2	12.5	12.7	13.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0865374 **Recieved** : 08 Jan 2024
Lab Number : 06054675 **Diagnosed** : 10 Jan 2024
Unique Number : 10820624 **Diagnostician** : Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

AES USA - NORTH CHARLESTON
 5400 INTERNATIONAL BLVD, BLDG 88-20
 NORTH CHARLESTON, SC
 US 29418
 Contact: Maxime Banctel
 maxime.banctel@aes-gse.com

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)

T: _____
F: _____