



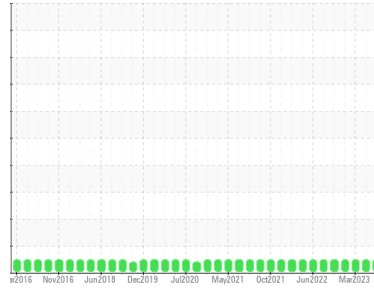
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[722504]
 Machine Id
LCT-2
 Component
Diesel Engine
 Fluid
PHILLIPS 66 Fleet Supreme EC 15W40 (--- 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			WC0803178	WC0808468	WC0687737
Sample Date	Client Info			06 Jul 2023	04 May 2023	20 Mar 2023
Machine Age	hrs	Client Info		2907	2877	2856
Oil Age	hrs	Client Info		23	0	0
Oil Changed	Client Info			Not Chngd	N/A	Not Chngd
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	2	0	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	5	3
Lead	ppm	ASTM D5185m	>40	<1	1	2
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		81	82	90
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		90	85	80
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		39	123	86
Calcium	ppm	ASTM D5185m		2312	2239	2176
Phosphorus	ppm	ASTM D5185m	1116	1097	1183	1092
Zinc	ppm	ASTM D5185m	1250	1291	1400	1235
Sulfur	ppm	ASTM D5185m		4718	4835	3992

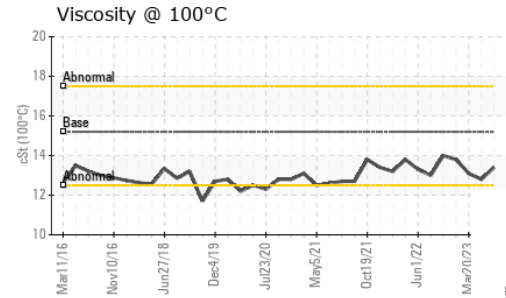
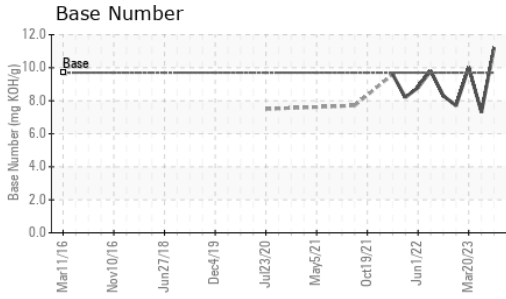
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	3	4
Sodium	ppm	ASTM D5185m		1	2	<1
Potassium	ppm	ASTM D5185m	>20	<1	1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.4	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.7	17.4	17.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.7	12.9	12.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.7	11.21	7.3	10.02



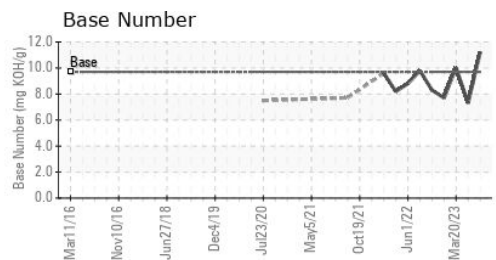
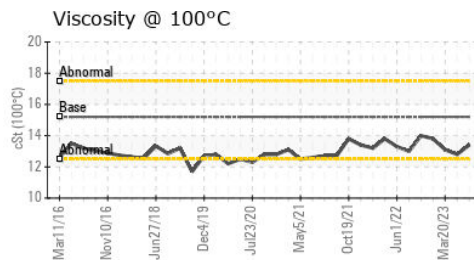
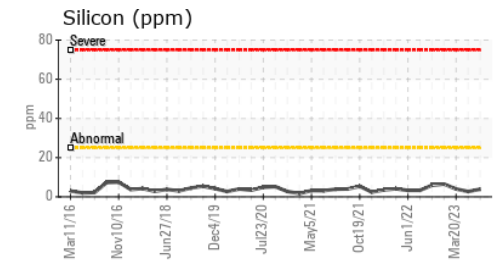
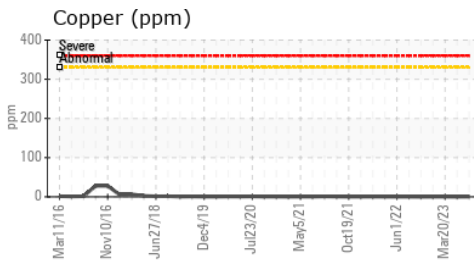
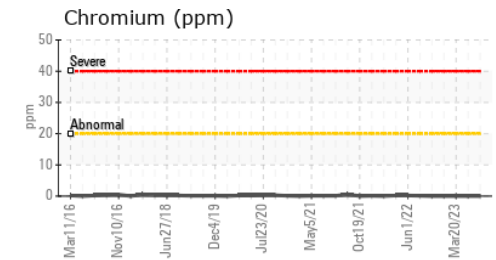
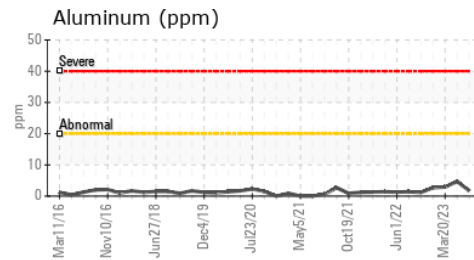
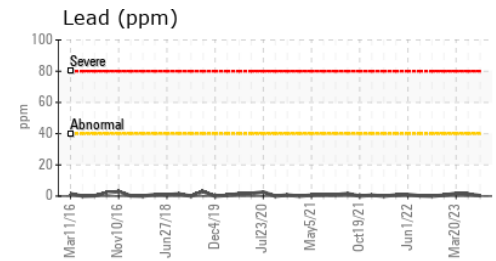
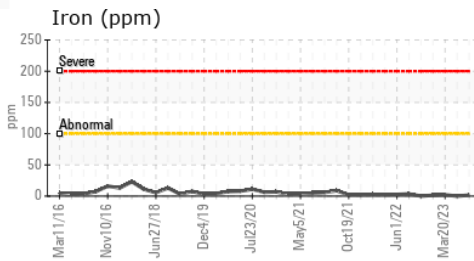
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.2	13.4	12.8	13.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0803178 **Received** : 14 Jul 2023
Lab Number : **05899406** **Diagnosed** : 18 Jul 2023
Unique Number : 10560762 **Diagnostician** : Angela Borella
Test Package : MOB 2

AES USA - NORTH CHARLESTON
 5400 INTERNATIONAL BLVD, BLDG 88-20
 NORTH CHARLESTON, SC
 US 29418
 Contact: Vanessa Macias
 vanessa.macias@aes-gse.com

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)

F: x