



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**CATERPILLAR 305E 52 (S/N QXFA03968)**  
 Component  
**Diesel Engine**  
 Fluid  
**CAT DIESEL ENGINE OIL 15W40 (3 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0191816</b>	JR0144515	JR0115513
Sample Date		Client Info		<b>27 Feb 2024</b>	23 Feb 2023	02 May 2022
Machine Age	hrs	Client Info		<b>3238</b>	2684	2684
Oil Age	hrs	Client Info		<b>3238</b>	176	804
Filter Age	hrs	Client Info		<b>3238</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	6	27
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	2	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

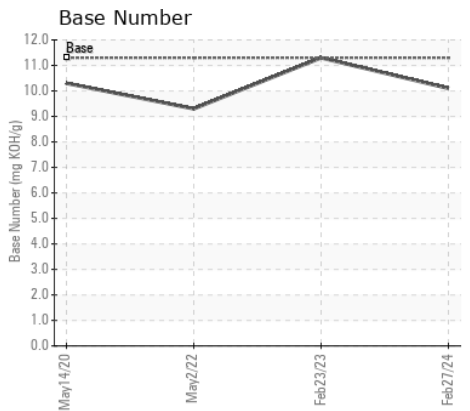
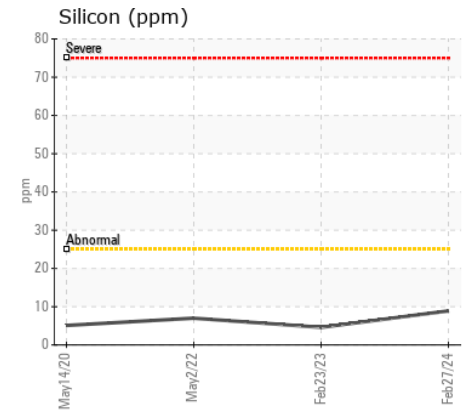
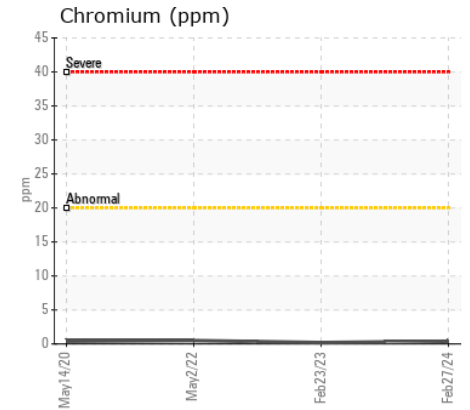
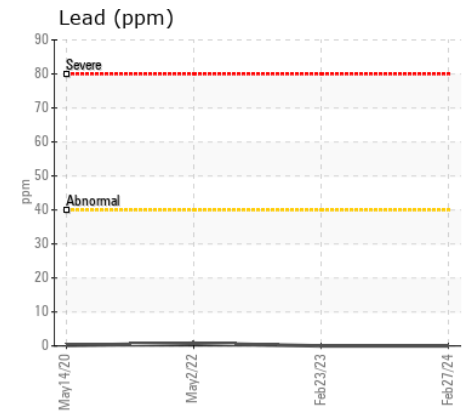
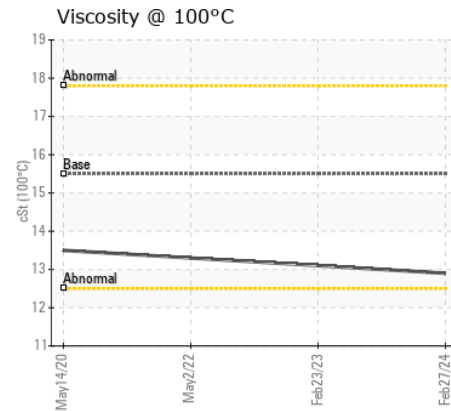
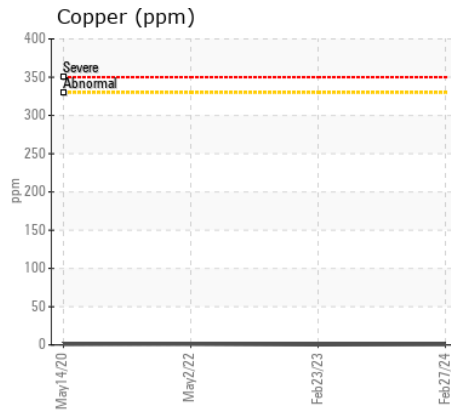
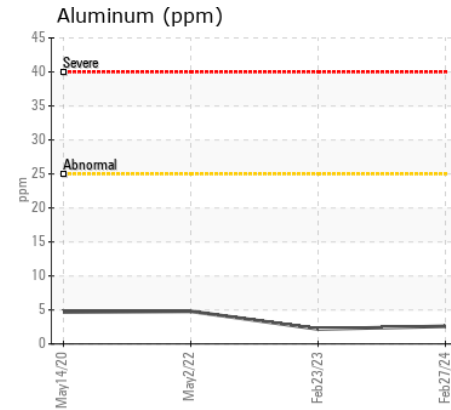
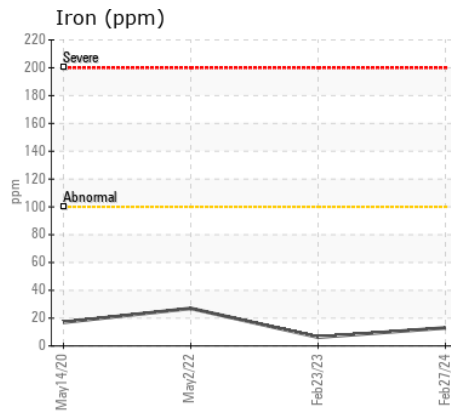
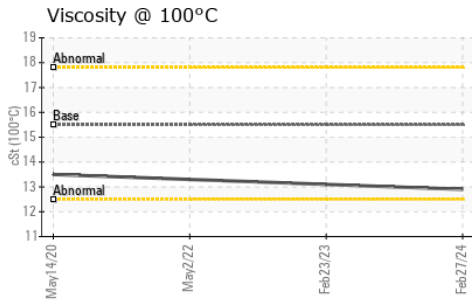
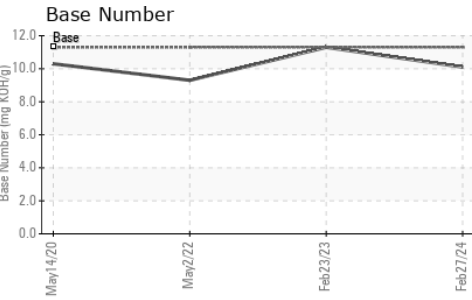
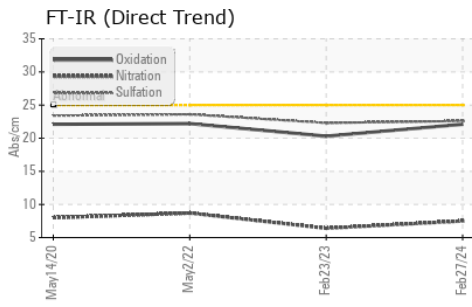
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
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
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	6.4	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	22.3	23.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### 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.

Sodium	ppm	ASTM D5185m		<b>2</b>	3	3
Boron	ppm	ASTM D5185m		<b>65</b>	66	46
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>45</b>	45	45
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>524</b>	508	575
Calcium	ppm	ASTM D5185m		<b>1803</b>	1744	1837
Phosphorus	ppm	ASTM D5185m		<b>1090</b>	933	950
Zinc	ppm	ASTM D5185m	1460	<b>1190</b>	1141	1173
Sulfur	ppm	ASTM D5185m		<b>3283</b>	3476	2474
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.1</b>	20.3	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	11.3	<b>10.1</b>	11.3	9.3
Visc @ 100°C	cSt	ASTM D445	15.5	<b>12.9</b>	13.1	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0191816 **Received** : 15 Apr 2024  
**Lab Number** : 06148529 **Tested** : 16 Apr 2024  
**Unique Number** : 10978607 **Diagnosed** : 16 Apr 2024 - Wes Davis  
**Test Package** : MOBCE ( Additional Tests: TBN )

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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