



# LUBE PLUS+

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR END DUMP 773B ED3**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (6 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LP0001452</b>	WC0802318	WC0570056
Sample Date		Client Info		<b>12 Jun 2024</b>	09 May 2023	05 Mar 2022
Machine Age	hrs	Client Info		<b>51229</b>	48446	46415
Oil Age	hrs	Client Info		<b>500</b>	500	500
Filter Age	hrs	Client Info		<b>500</b>	500	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	9	26
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	0	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

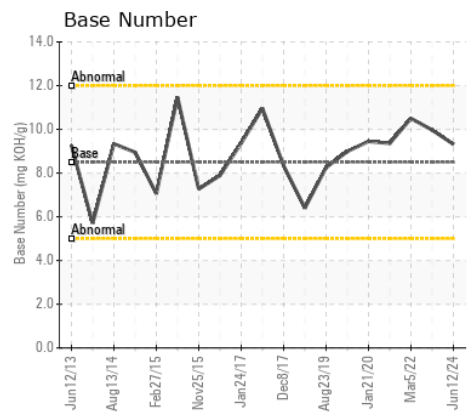
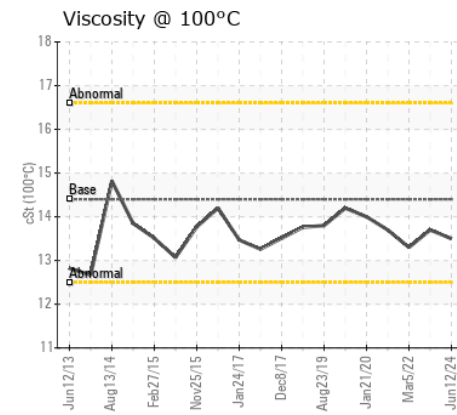
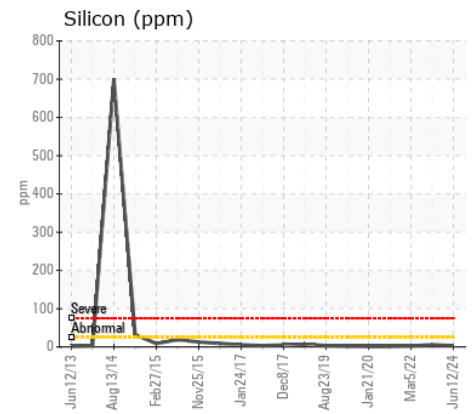
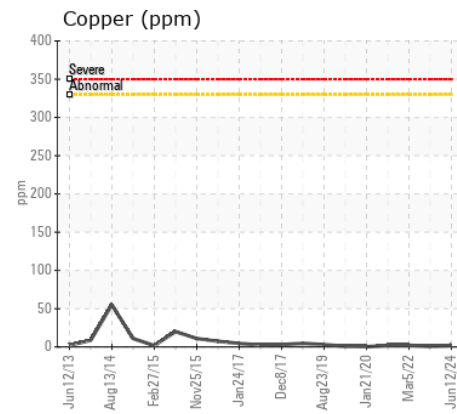
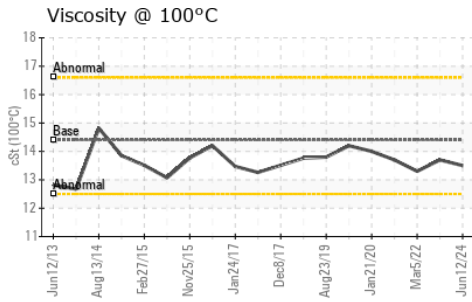
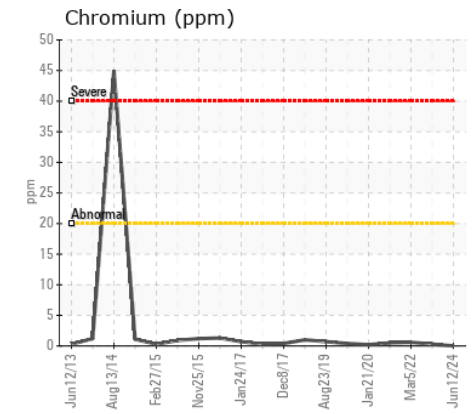
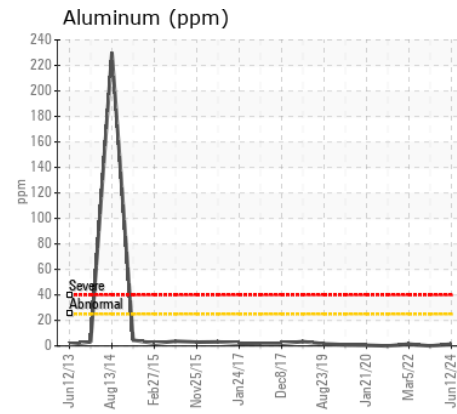
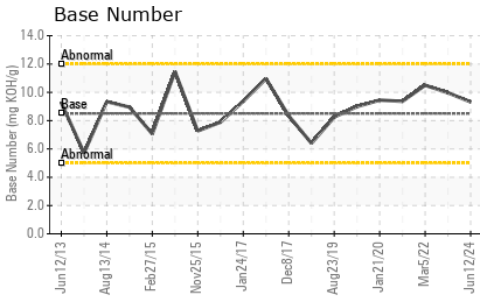
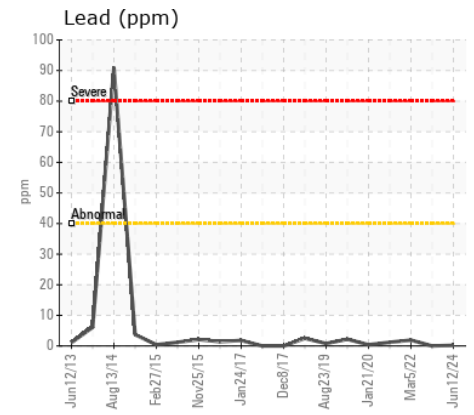
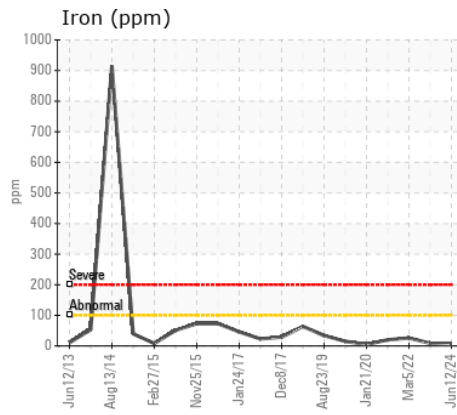
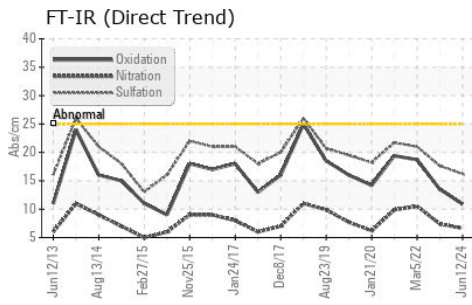
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	0	0
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>6.6</b>	7.4	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.2</b>	17.6	21.0
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	>158	<b>4</b>	2	2
Boron	ppm	ASTM D5185m	250	<b>12</b>	31	12
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>23</b>	69	63
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>284</b>	609	1014
Calcium	ppm	ASTM D5185m	3000	<b>1850</b>	1442	1205
Phosphorus	ppm	ASTM D5185m	1150	<b>955</b>	1029	1106
Zinc	ppm	ASTM D5185m	1350	<b>1079</b>	1215	1274
Sulfur	ppm	ASTM D5185m	4250	<b>4042</b>	3463	2934
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.9</b>	13.5	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.32</b>	9.97	10.5
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	13.7	13.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LP0001452  
**Lab Number** : 06212564  
**Unique Number** : 11085428  
**Test Package** : MOB 2  
**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Angela Borella

**TRESCA BROS SAND & GRAVEL INC**  
 66 MAIN ST  
 MILLIS, MA  
 US 02054  
 Contact: JACK GALIANO  
 jgaliano@trescaconcrete.com  
 T: (508)376-2957  
 F: (508)376-4333

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)