



LUBE PLUS+

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ATTENTION



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

RECOMMENDATION

Check for low coolant level. We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0000983	LP0000507	WC0721157
Sample Date		Client Info		12 Jun 2024	13 Oct 2023	20 Dec 2022
Machine Age	hrs	Client Info		49399	48937	41672
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	MARGINAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	21	48
Chromium	ppm	ASTM D5185m	>20	0	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	1
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	<1
Lead	ppm	ASTM D5185m	>40	1	0	2
Copper	ppm	ASTM D5185m	>330	18	2	7
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

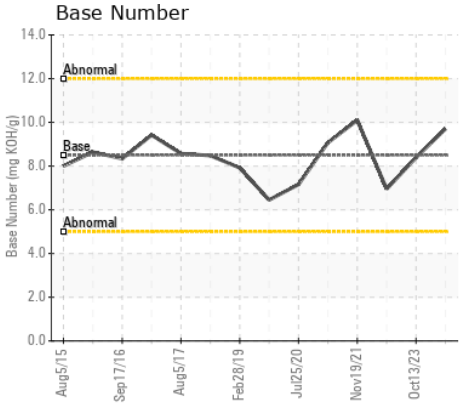
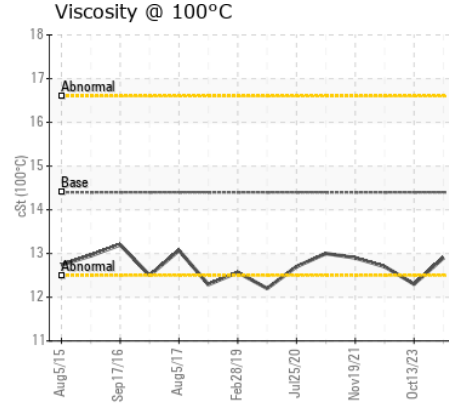
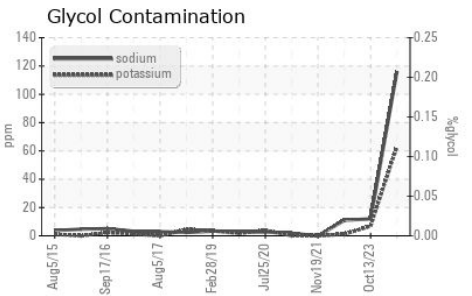
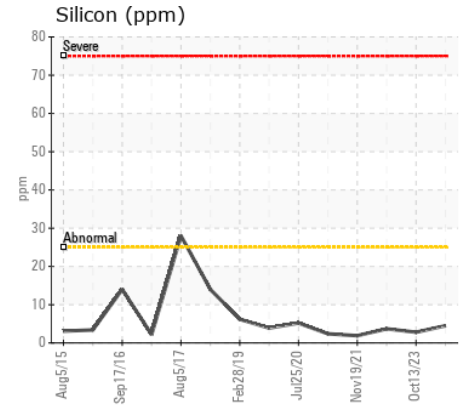
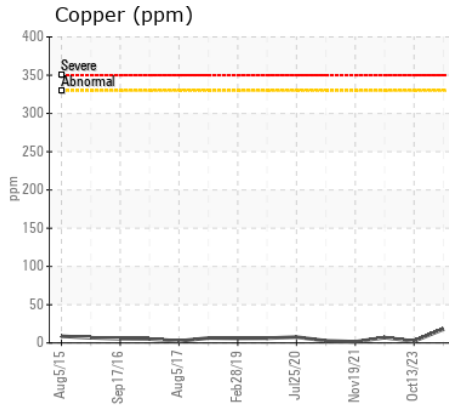
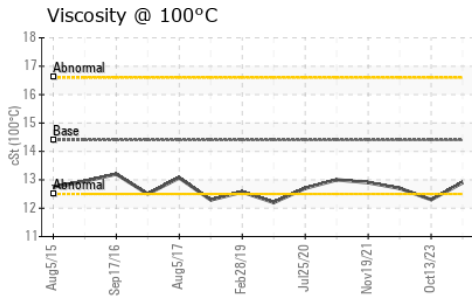
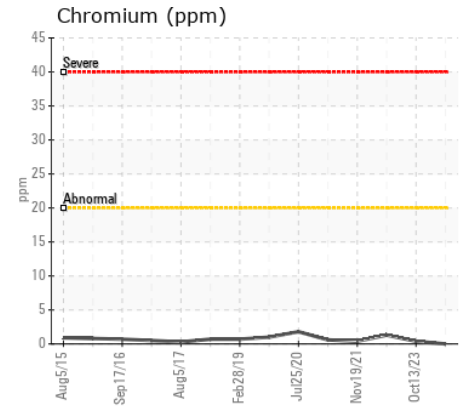
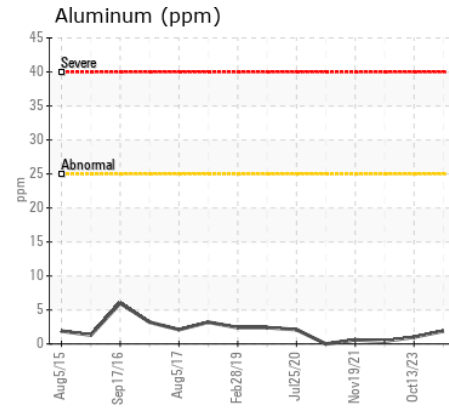
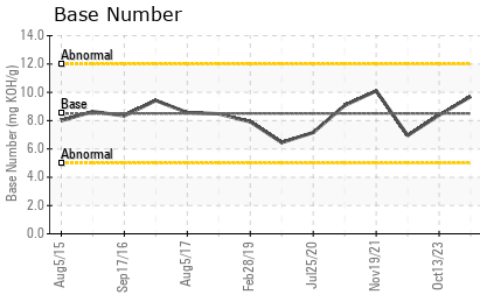
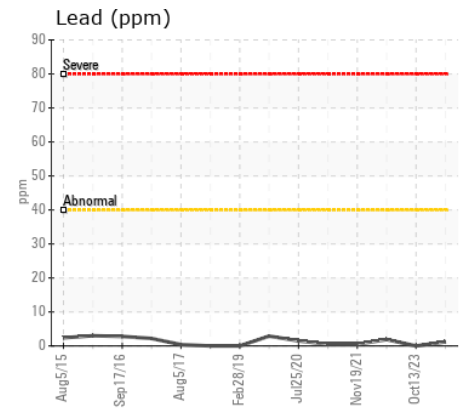
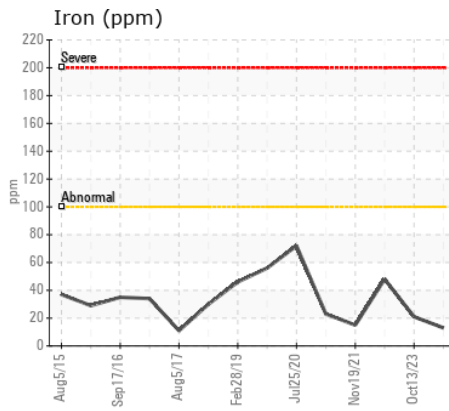
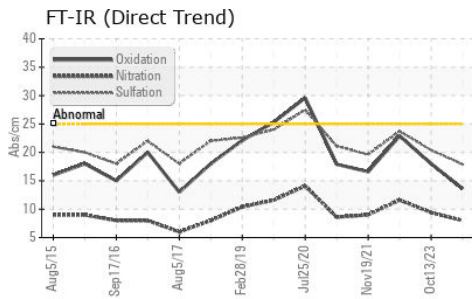
Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	63	7	1
Fuel		WC Method	>5	<1.0	▲ 4.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	8.0	9.4	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	20.4	23.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>158	116	12	11
Boron	ppm	ASTM D5185m	250	14	3	9
Barium	ppm	ASTM D5185m	10	0	0	12
Molybdenum	ppm	ASTM D5185m	100	75	63	56
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	663	914	777
Calcium	ppm	ASTM D5185m	3000	1337	1079	968
Phosphorus	ppm	ASTM D5185m	1150	1055	1046	832
Zinc	ppm	ASTM D5185m	1350	1178	1261	1036
Sulfur	ppm	ASTM D5185m	4250	3861	3097	2628
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	18.0	22.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.70	8.39	6.95
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.3	12.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0000983
Lab Number : 06212565
Unique Number : 11085429
Test Package : MOB 2 (Additional Tests: Glycol)

TRESCA BROS SAND & GRAVEL INC
 66 MAIN ST
 MILLIS, MA
 US 02054

Contact: JACK GALIANO
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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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