



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
DE Samples - CAT LAB
Machine Id
CATERPILLAR 775D 6441 (S/N 8AS00350)
Component
Diesel Engine
Fluid
TULCO LUBSOIL CK-4 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO10001703	TO10003080	TO10002876
Sample Date		Client Info		20 Feb 2024	28 Dec 2023	13 Nov 2023
Machine Age	hrs	Client Info		43280	43061	42811
Oil Age	hrs	Client Info		469	250	539
Filter Age	hrs	Client Info		469	250	539
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	17	32
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	1	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	1	1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

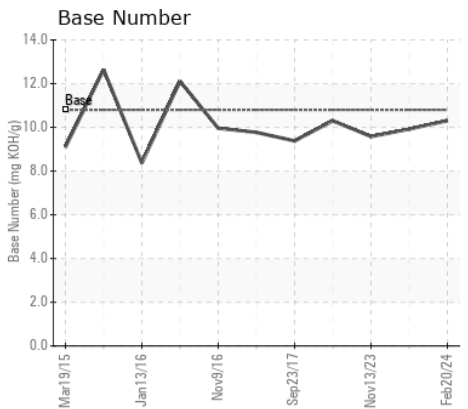
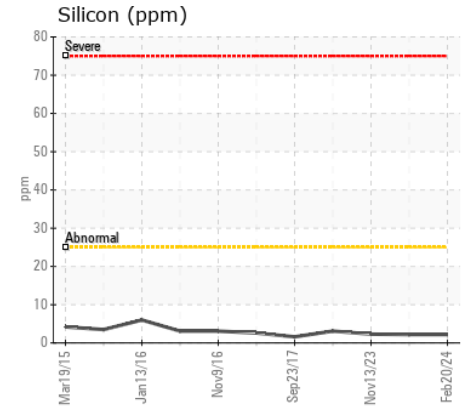
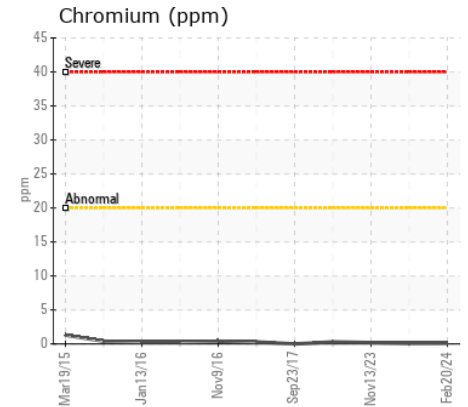
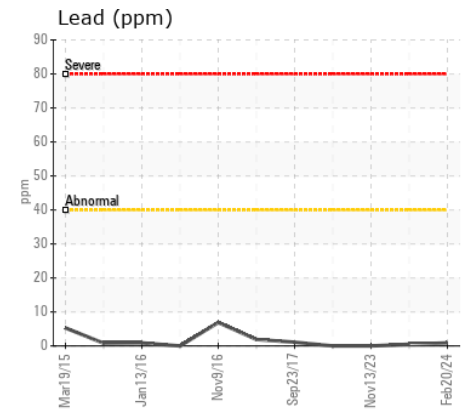
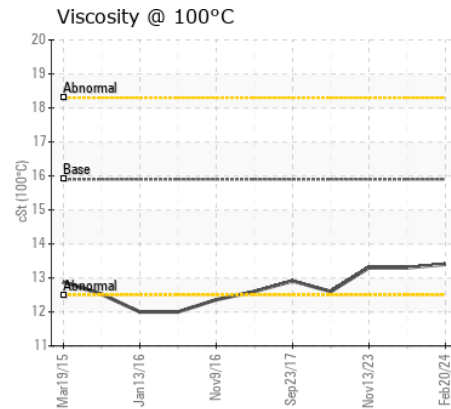
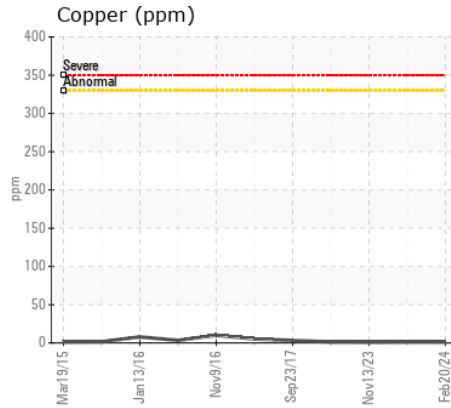
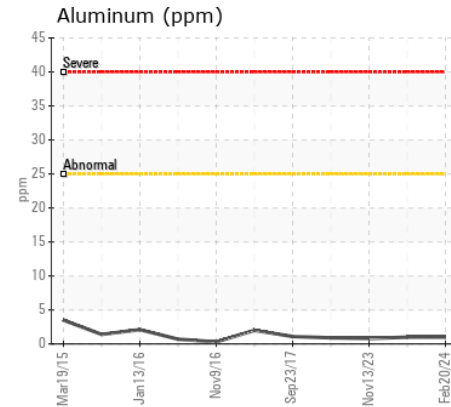
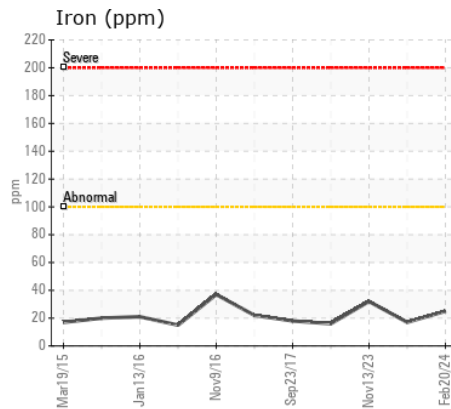
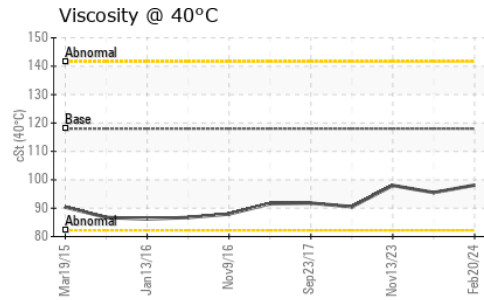
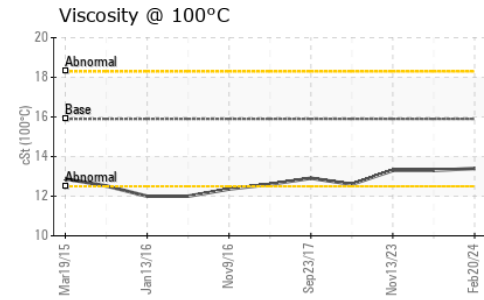
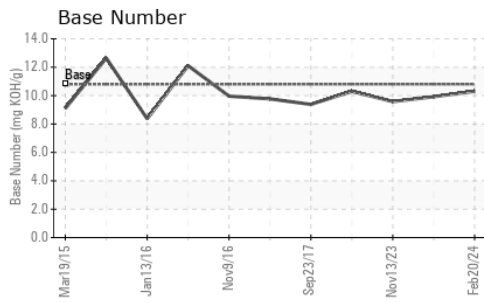
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	2	2	2
Potassium	ppm	ASTM D5185m	>20	0	0	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	7.5	6.6	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.0	20.6
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m		7	6	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	65	61	61	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1060	959	988	960
Calcium	ppm	ASTM D5185m	1140	1056	1086	1111
Phosphorus	ppm	ASTM D5185m	1170	1066	1090	1084
Zinc	ppm	ASTM D5185m	1230	1304	1307	1291
Sulfur	ppm	ASTM D5185m	3130	3242	3253	3185
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.7	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.8	10.31	9.92	9.58
Visc @ 40°C	cSt	ASTM D445	118	98.1	95.5	98.0
Visc @ 100°C	cSt	ASTM D445	15.9	13.4	13.3	13.3
Viscosity Index (VI)	Scale	ASTM D2270	143	136	138	134



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10001703
Lab Number : 06105428
Unique Number : 10903658
Test Package : MOB 2 (Additional Tests: KV40, VI)

Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

ANCHOR STONE TULSA ROCK
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 TULSA, OK
 US 74137
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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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