TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR 972H L10 A7D01072
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

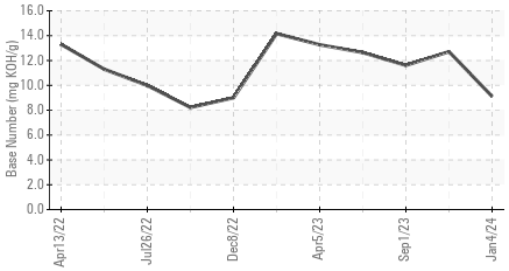
There is no indication of any contamination in the oil.

FLUID CONDITION

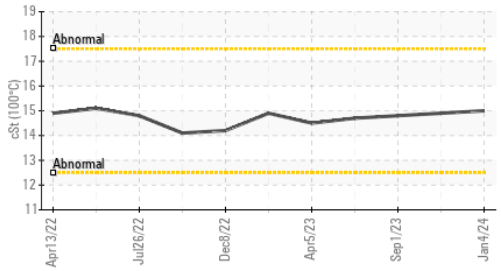
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06055068	TR06018433	TR05948276
Sample Date		Client Info		04 Jan 2024	17 Nov 2023	01 Sep 2023
Machine Age	hrs	Client Info		11282	11021	10690
Oil Age	hrs	Client Info		1821	1560	1229
Filter Age	hrs	Client Info		1821	1560	1229
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	96	72	63
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	3	0
Lead	ppm	ASTM D5185m	>40	7	4	3
Copper	ppm	ASTM D5185m	>330	13	10	8
Tin	ppm	ASTM D5185m	>15	2	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	12	11	8
Potassium	ppm	ASTM D5185m	>20	4	<1	3
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	2.1	1.8	1.6
Nitration	Abs/cm	*ASTM D7624	>20	14.0	12.8	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.5	26.6	24.7
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
Sodium	ppm	ASTM D5185m		<1	5	4
Boron	ppm	ASTM D5185m		6	6	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		132	131	126
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		68	66	77
Calcium	ppm	ASTM D5185m		4199	4086	4033
Phosphorus	ppm	ASTM D5185m		835	958	880
Zinc	ppm	ASTM D5185m		1092	1060	1079
Sulfur	ppm	ASTM D5185m		4640	4121	4917
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	16.2	15.4
Base Number (BN)	mg KOH/g	ASTM D2896		9.11	12.71	11.61
Visc @ 100°C	cSt	ASTM D445		15.0	14.9	14.8

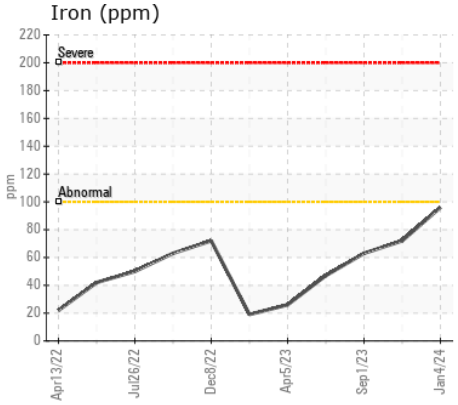
Base Number



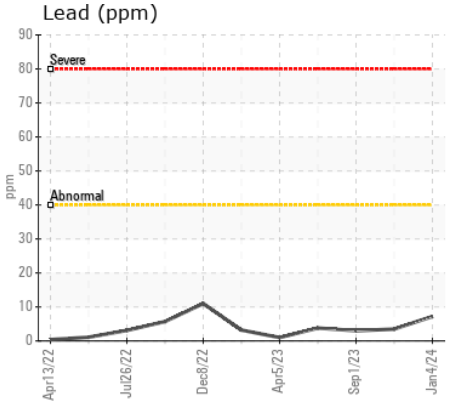
Viscosity @ 100°C



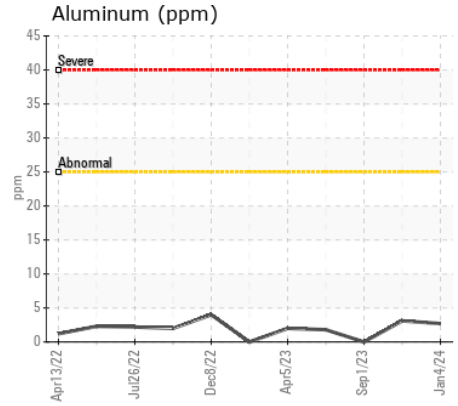
Iron (ppm)



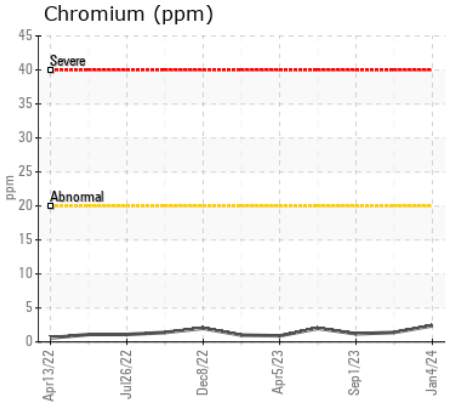
Lead (ppm)



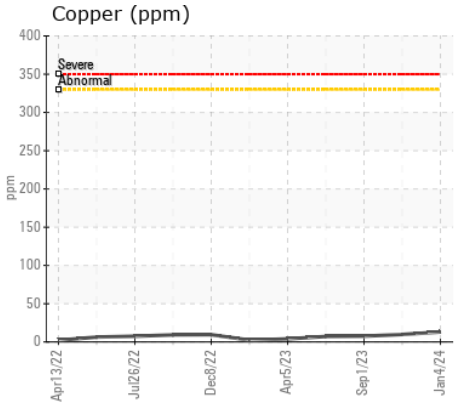
Aluminum (ppm)



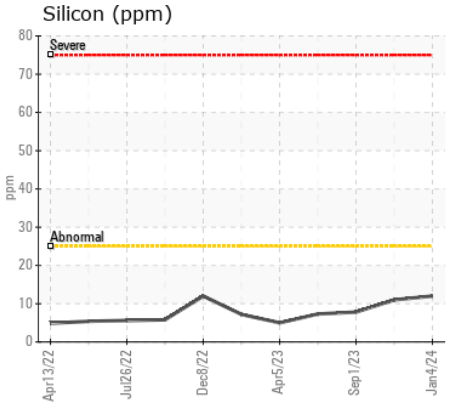
Chromium (ppm)



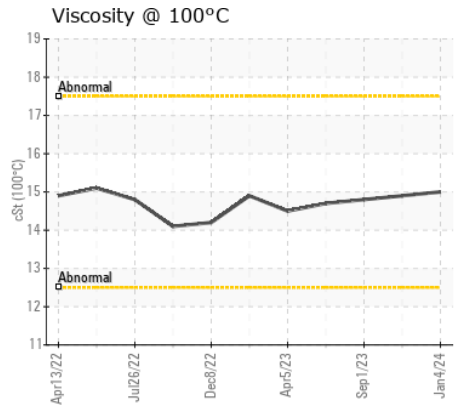
Copper (ppm)



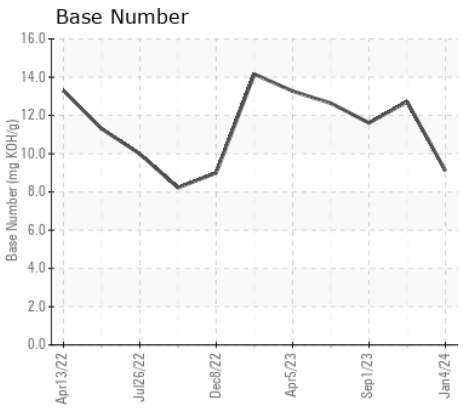
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06055068
Lab Number : 06055068
Unique Number : 10821017
Test Package : MOB 2

Recieved : 08 Jan 2024
Diagnosed : 10 Jan 2024
Diagnostician : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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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