



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
1521
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is negative.

FLUID CONDITION

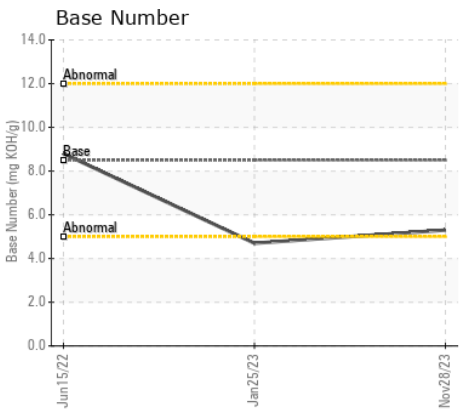
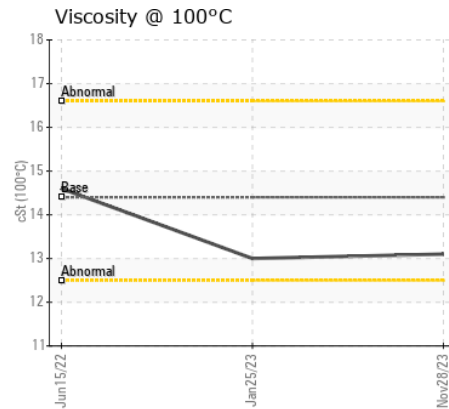
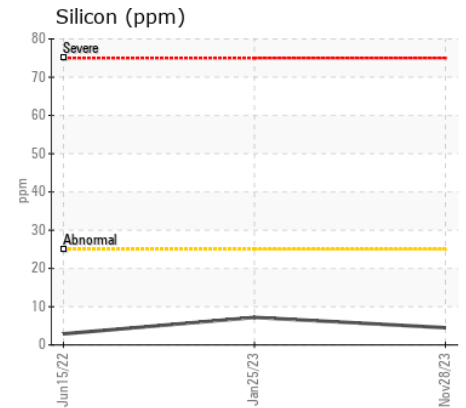
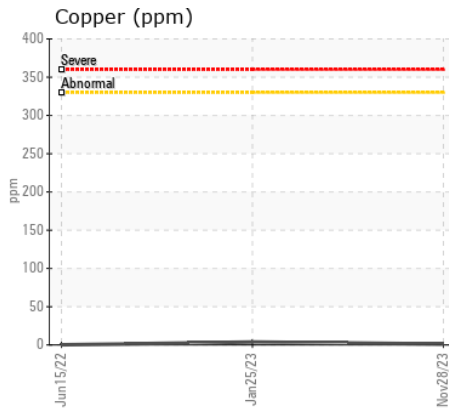
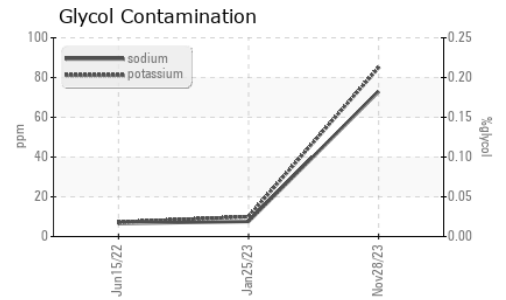
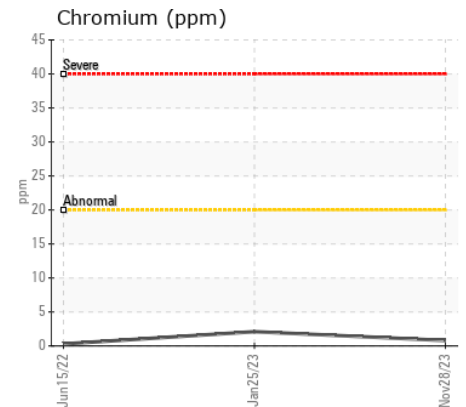
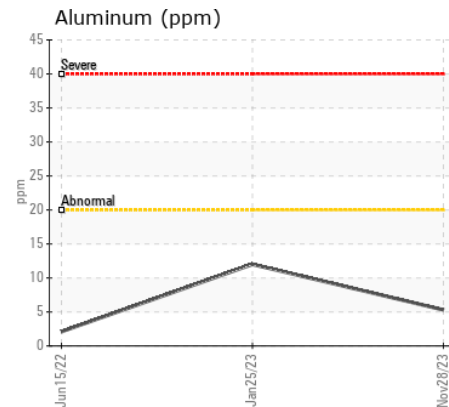
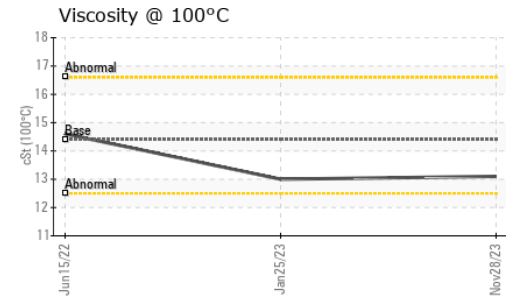
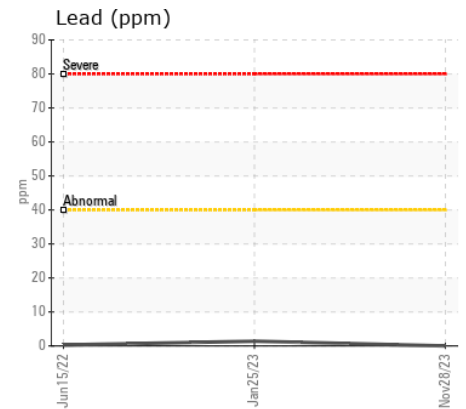
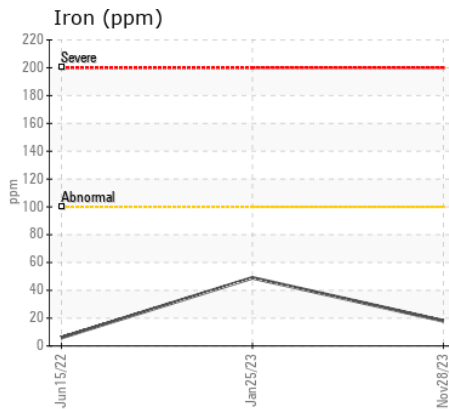
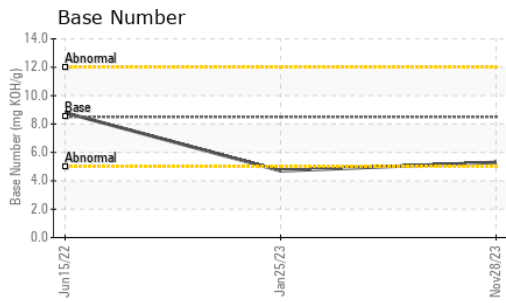
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0870708	WC0773008	WC0706498
Sample Date		Client Info		28 Nov 2023	25 Jan 2023	15 Jun 2022
Machine Age	mls	Client Info		174151	160028	182958
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>100	18	49	6
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	12	2
Lead	ppm	ASTM D5185m	>40	0	1	<1
Copper	ppm	ASTM D5185m	>330	1	4	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>25	4	7	3
Potassium	ppm	ASTM D5185m	>20	▲ 85	10	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	1.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.8	13.0	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	27.5	18.6
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

Sodium	ppm	ASTM D5185m	>158	▲ 73	8	7
Boron	ppm	ASTM D5185m	250	29	14	32
Barium	ppm	ASTM D5185m	10	4	0	0
Molybdenum	ppm	ASTM D5185m	100	86	84	52
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	116	22	94
Calcium	ppm	ASTM D5185m	3000	1844	2068	2001
Phosphorus	ppm	ASTM D5185m	1150	942	843	916
Zinc	ppm	ASTM D5185m	1350	1101	1024	1081
Sulfur	ppm	ASTM D5185m	4250	3574	3898	3498
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	23.2	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.3	4.7	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.0	14.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0870708 **Received** : 12 Jan 2024
Lab Number : 06059785 **Diagnosed** : 18 Jan 2024
Unique Number : 10831167 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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 T: (919)856-8076
 F: x:

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)