



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

Contracting

Machine Id

7650 7650

Component

Diesel Engine

Fluid

MOBIL DELVAC 1300 SUPER15W40 (2 GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0861847	WC0852480	WC0579823
Sample Date		Client Info		23 Feb 2024	12 Sep 2023	12 May 2021
Machine Age	hrs	Client Info		5962	5923	5699
Oil Age	hrs	Client Info		5962	224	358
Filter Age	hrs	Client Info		5962	224	358
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				ABNORMAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	47	80	64
Chromium	ppm	ASTM D5185m	>6	2	2	2
Nickel	ppm	ASTM D5185m	>2	1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	7	17	8
Lead	ppm	ASTM D5185m	>95	4	8	<1
Copper	ppm	ASTM D5185m	>85	6	8	3
Tin	ppm	ASTM D5185m	>9	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

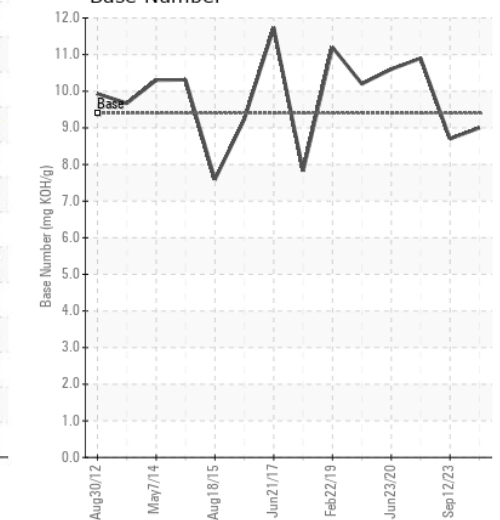
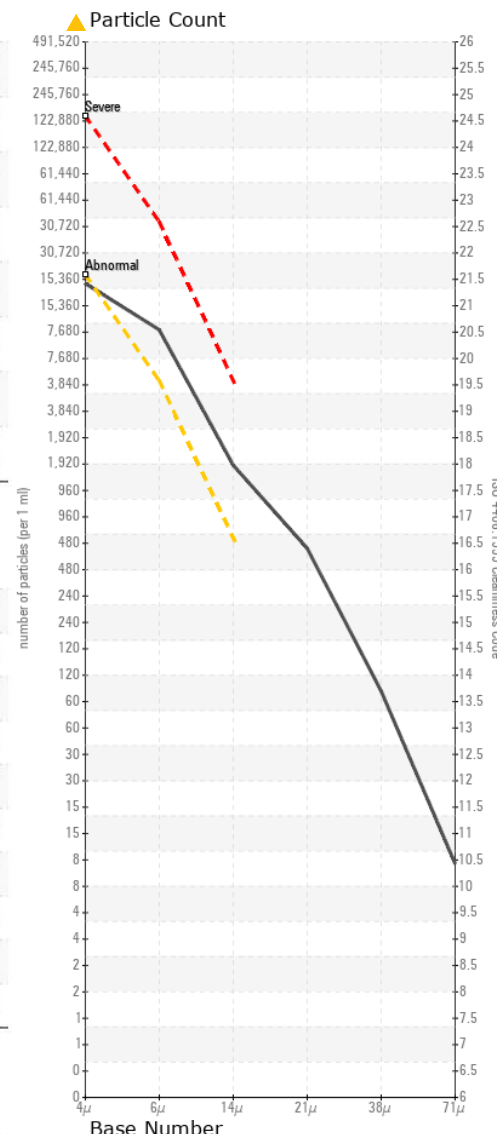
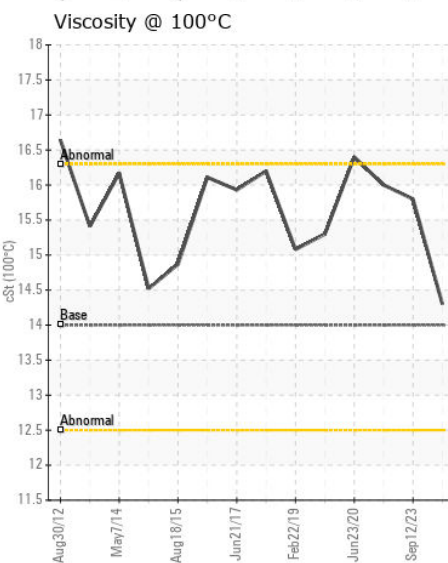
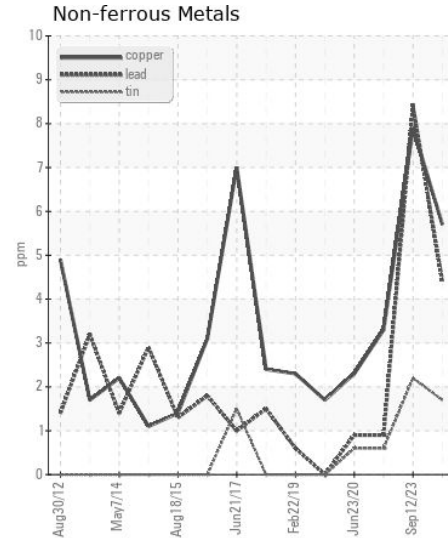
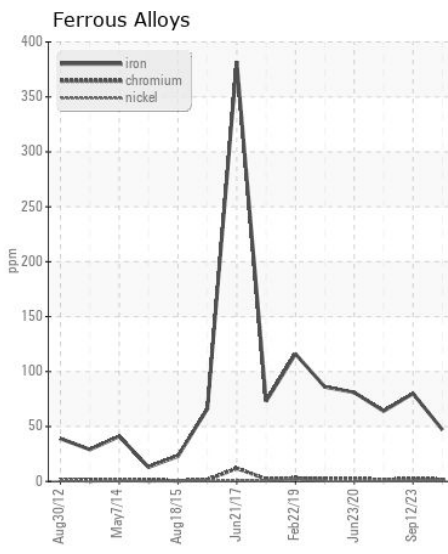
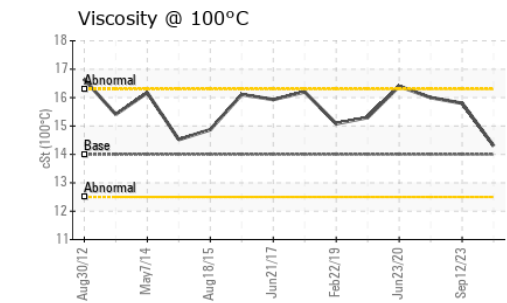
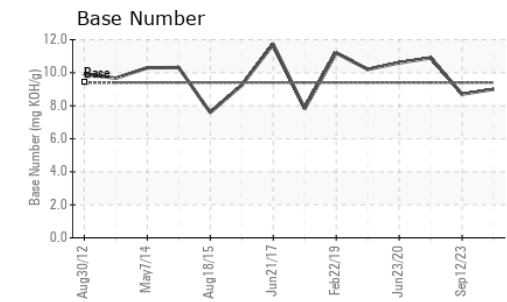
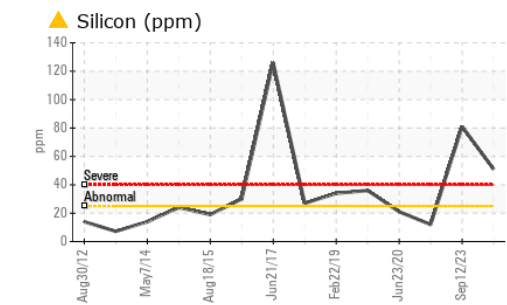
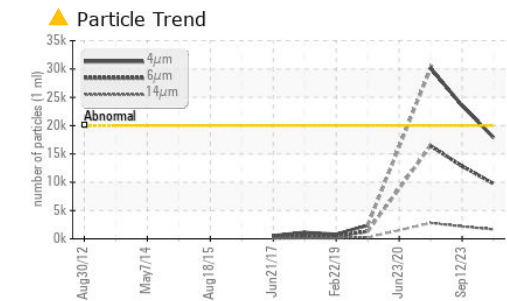
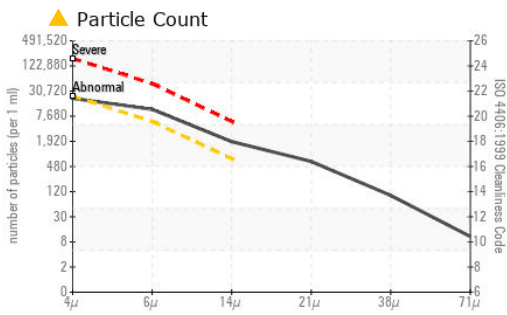
There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>25	51	81	12
Potassium	ppm	ASTM D5185m	>20	6	3	3
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.3	0.1	1.3
Nitration	Abs/cm	*ASTM D7624	>20	6.8	5.9	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	15.6	28.7
Particles >4µm		ASTM D7647	>20000	17852	23541	30142
Particles >6µm		ASTM D7647	>5000	9725	12824	16420
Particles >14µm		ASTM D7647	>640	1655	2183	2795
Particles >21µm		ASTM D7647	>160	557	735	941
Particles >38µm		ASTM D7647	>40	86	113	145
Particles >71µm		ASTM D7647	>10	9	12	15
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/20/18	22/21/18	22/21/19
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	>0.1	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		19	22	3
Boron	ppm	ASTM D5185m	0	23	2	67
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	23	3	32
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m	0	230	30	734
Calcium	ppm	ASTM D5185m		1770	2369	1937
Phosphorus	ppm	ASTM D5185m		739	867	906
Zinc	ppm	ASTM D5185m		1025	1404	1048
Sulfur	ppm	ASTM D5185m		3285	4576	2584
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	9.0	25
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.0	8.7	10.9
Visc @ 100°C	cSt	ASTM D445	14	14.3	15.8	16.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0861847
Lab Number : 06101499
Unique Number : 10899729
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Jonathan Hester

CAROLINA SUNROCK
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 US 27509

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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)