



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**SEAGRAVE M00082**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0034090</b>	DC0028342	DC0023059
Sample Date		Client Info		<b>15 Apr 2024</b>	12 Oct 2023	19 Dec 2022
Machine Age	mls	Client Info		<b>65342</b>	6905	63704
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>3</b>	8	21
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	6	22
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

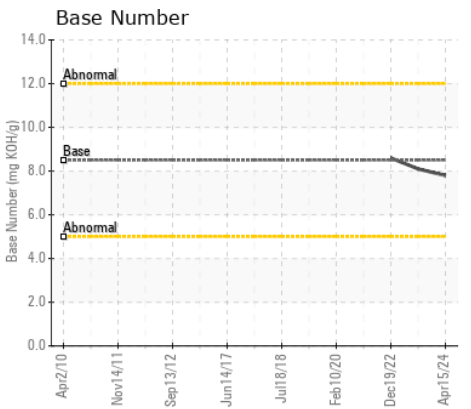
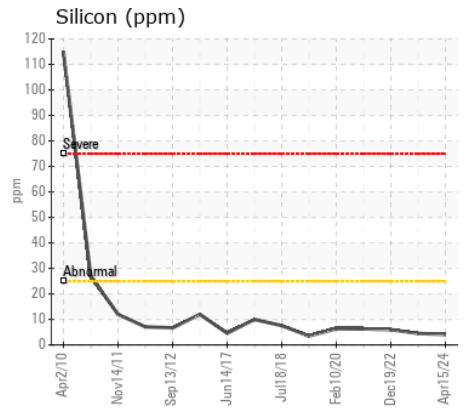
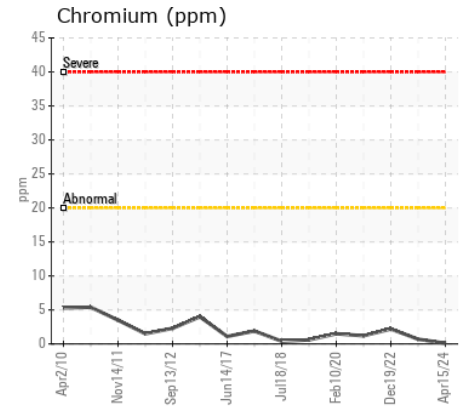
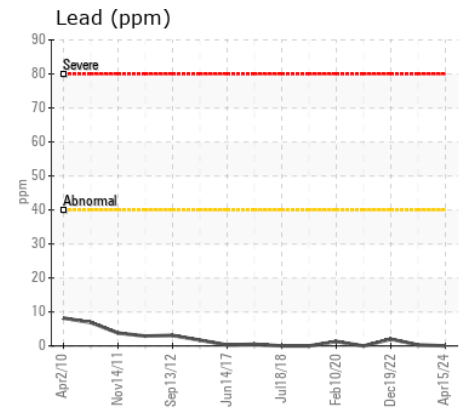
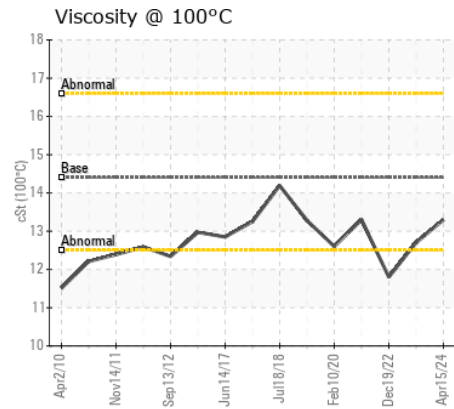
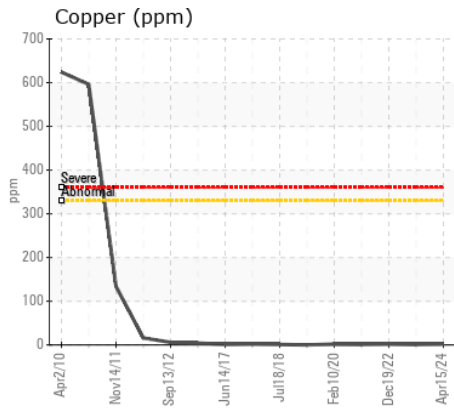
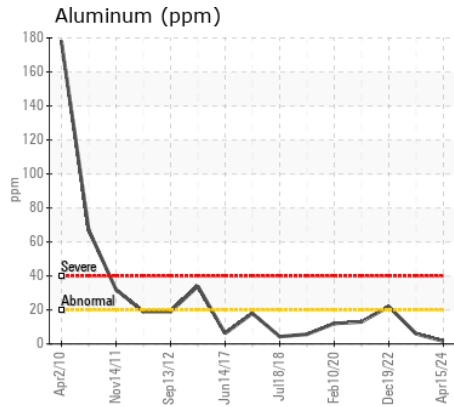
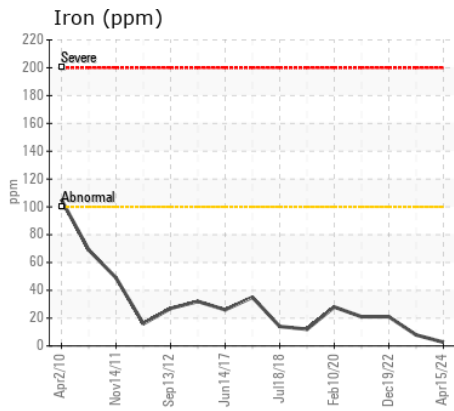
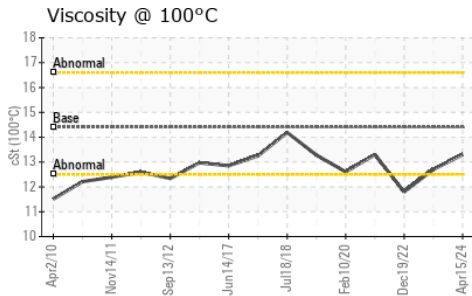
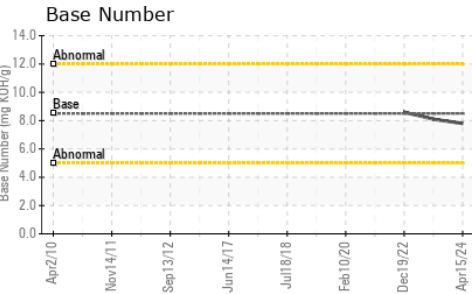
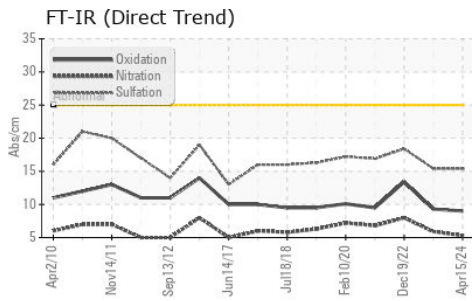
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 3.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.3</b>	5.9	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.4</b>	15.4	18.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>158	<b>2</b>	0	4
Boron	ppm	ASTM D5185m	250	<b>3</b>	2	4
Barium	ppm	ASTM D5185m	10	<b>4</b>	2	0
Molybdenum	ppm	ASTM D5185m	100	<b>2</b>	7	50
Manganese	ppm	ASTM D5185m		<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>50</b>	86	801
Calcium	ppm	ASTM D5185m	3000	<b>2257</b>	2126	1374
Phosphorus	ppm	ASTM D5185m	1150	<b>920</b>	873	994
Zinc	ppm	ASTM D5185m	1350	<b>1036</b>	1042	1279
Sulfur	ppm	ASTM D5185m	4250	<b>4312</b>	3829	3689
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.0</b>	9.3	13.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.8</b>	8.1	8.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	12.7	● 11.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034090 **Received** : 22 Apr 2024  
**Lab Number** : 06155717 **Tested** : 23 Apr 2024  
**Unique Number** : 10991140 **Diagnosed** : 23 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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