



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ATTENTION</b>

Machine Id  
**IOWA COLONY E-2121**  
 Component  
**Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0941917</b>	WC0823035	WC0792348
Sample Date		Client Info		<b>30 Jun 2024</b>	05 Dec 2023	01 May 2023
Machine Age	mls	Client Info		<b>0</b>	0	0
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>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>17</b>	11	39
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	0	<1
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

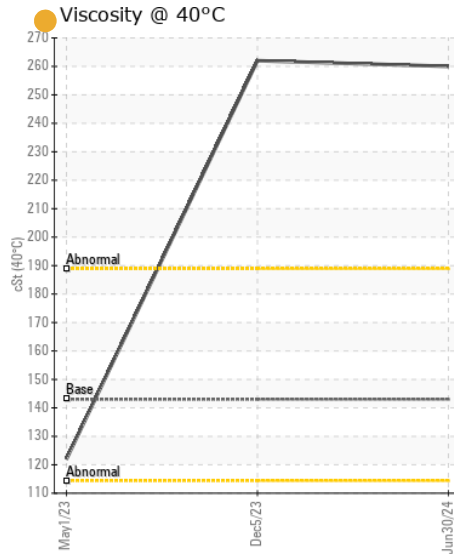
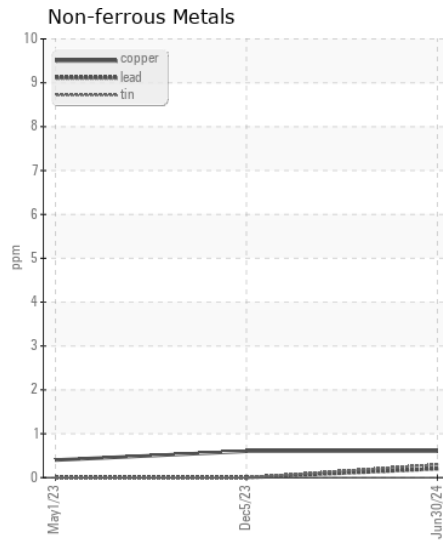
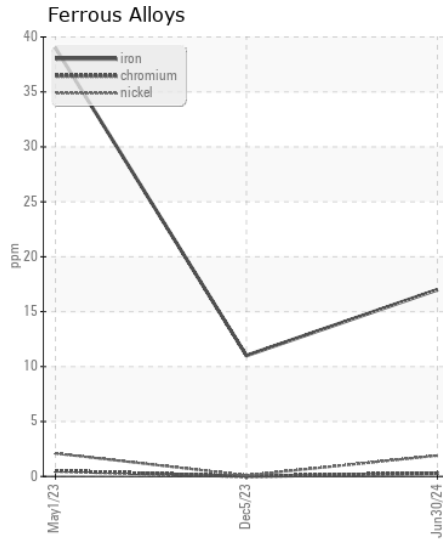
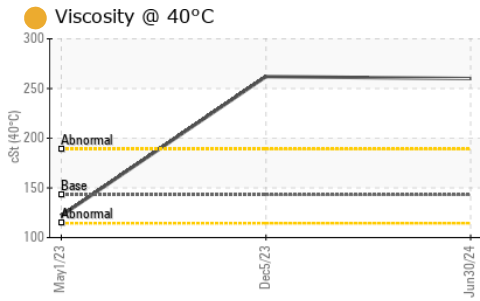
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>4</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The oil viscosity is higher than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m	>170	<b>&lt;1</b>	3	3
Boron	ppm	ASTM D5185m	400	<b>301</b>	266	189
Barium	ppm	ASTM D5185m	200	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	3
Magnesium	ppm	ASTM D5185m	12	<b>3</b>	0	5
Calcium	ppm	ASTM D5185m	150	<b>25</b>	28	33
Phosphorus	ppm	ASTM D5185m	1650	<b>1160</b>	969	1080
Zinc	ppm	ASTM D5185m	125	<b>24</b>	17	22
Sulfur	ppm	ASTM D5185m	22500	<b>23975</b>	20582	26668
Visc @ 40°C	cSt	ASTM D445	143	<b>260</b>	262	122



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0941917  
**Lab Number** : 06224903  
**Unique Number** : 11103100  
**Test Package** : CONST

**Received** : 01 Jul 2024  
**Tested** : 02 Jul 2024  
**Diagnosed** : 02 Jul 2024 - Don Baldrige

**SIDDONS-MARTIN EMERGENCY GROUP**  
 4401 REX RD  
 FRIENDSWOOD, TX  
 US 77546

Contact: Natalie Perrone  
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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)

T:  
 F: