



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



Area  
**[W68304]**  
Machine Id  
**ATLAS COPCO DM30 1E-7912**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (12 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: W68304 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0219665</b>	JR0151111	JR0143311
Sample Date		Client Info		<b>08 Jul 2024</b>	01 May 2023	22 Dec 2022
Machine Age	hrs	Client Info		<b>23561</b>	22177	21272
Oil Age	hrs	Client Info		<b>1384</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>59</b>	49	25
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	<1	8
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>9</b>	5	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
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.

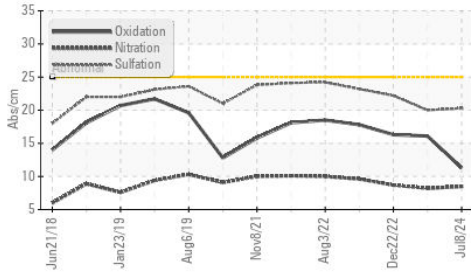
Silicon	ppm	ASTM D5185m	>25	<b>12</b>	8	20
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.2	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	20.0	22.2
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

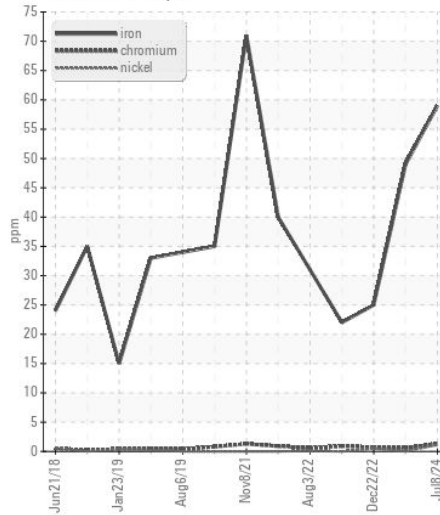
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>4</b>	0	2
Boron	ppm	ASTM D5185m	250	<b>10</b>	91	176
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>16</b>	111	209
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>68</b>	531	738
Calcium	ppm	ASTM D5185m	3000	<b>2570</b>	2194	1485
Phosphorus	ppm	ASTM D5185m	1150	<b>956</b>	1233	862
Zinc	ppm	ASTM D5185m	1350	<b>1173</b>	1523	1082
Sulfur	ppm	ASTM D5185m	4250	<b>3637</b>	4026	3403
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.3</b>	16.1	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.9</b>	6.8	9.2
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.1</b>	14.1	13.2

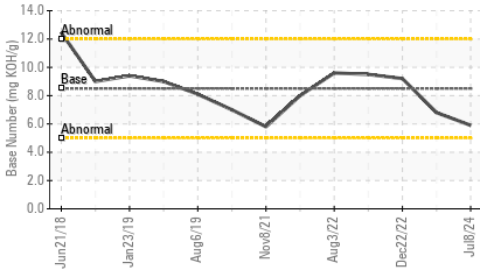
**FT-IR (Direct Trend)**



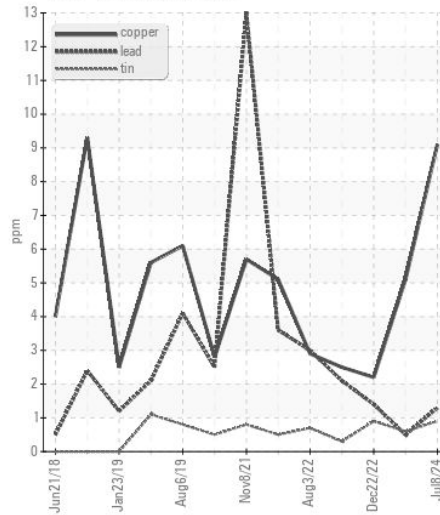
**Ferrous Alloys**



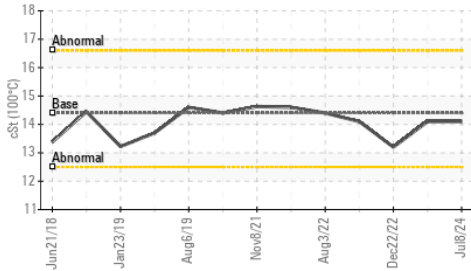
**Base Number**



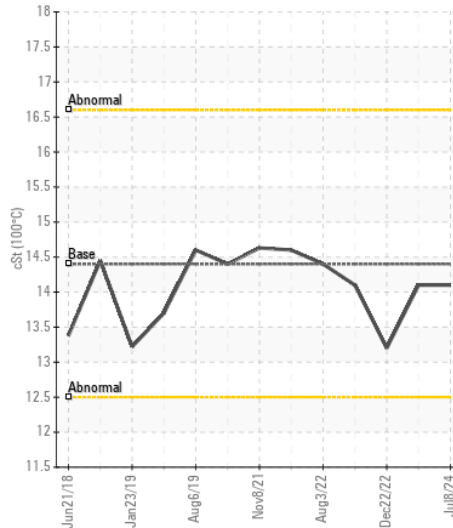
**Non-ferrous Metals**



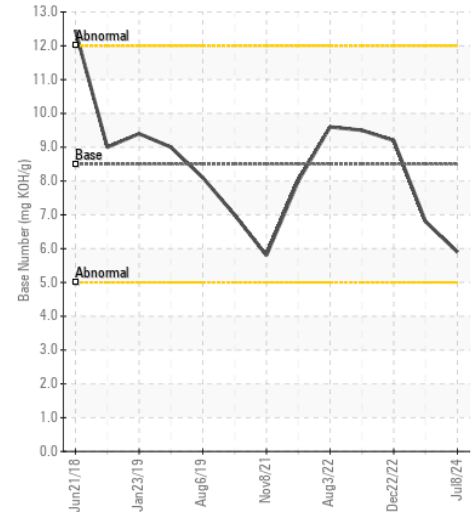
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0219665 **Received** : 10 Jul 2024  
**Lab Number** : 06232040 **Tested** : 11 Jul 2024  
**Unique Number** : 11115533 **Diagnosed** : 11 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)