



# OIL ANALYSIS REPORT

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



Area  
**OKLAHOMA/102**  
Machine Id  
**74.28 [OKLAHOMA^102]**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (14 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0914446</b>	WC0808003	WC0758725
Sample Date		Client Info		<b>26 Apr 2024</b>	20 Apr 2023	10 Feb 2023
Machine Age	hrs	Client Info		<b>2257</b>	1676	1322
Oil Age	hrs	Client Info		<b>581</b>	354	230
Filter Age	hrs	Client Info		<b>581</b>	354	230
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>18</b>	39	34
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>330	<b>24</b>	71	72
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	1
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.

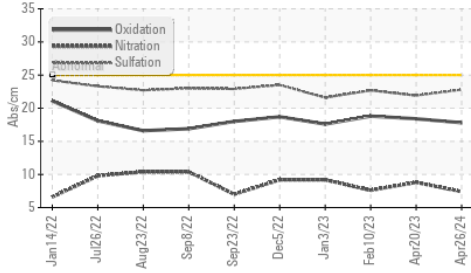
Silicon	ppm	ASTM D5185m	>25	<b>13</b>	26	26
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	8.8	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	21.9	22.7
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

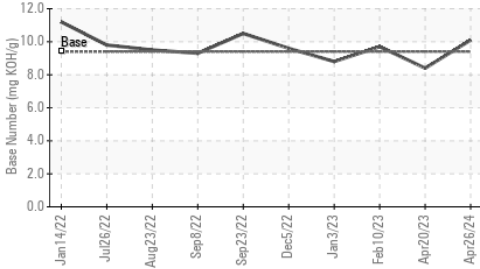
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	1
Boron	ppm	ASTM D5185m	0	<b>34</b>	20	38
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>29</b>	28	36
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>344</b>	313	429
Calcium	ppm	ASTM D5185m		<b>2090</b>	2202	2013
Phosphorus	ppm	ASTM D5185m		<b>916</b>	854	837
Zinc	ppm	ASTM D5185m		<b>1048</b>	1041	1012
Sulfur	ppm	ASTM D5185m		<b>3602</b>	3464	3210
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	18.4	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>10.1</b>	8.4	9.7
Visc @ 100°C	cSt	ASTM D445	14	<b>12.7</b>	12.8	12.6

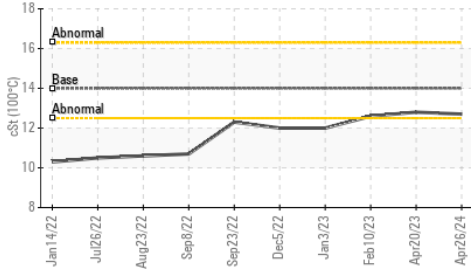
**FT-IR (Direct Trend)**



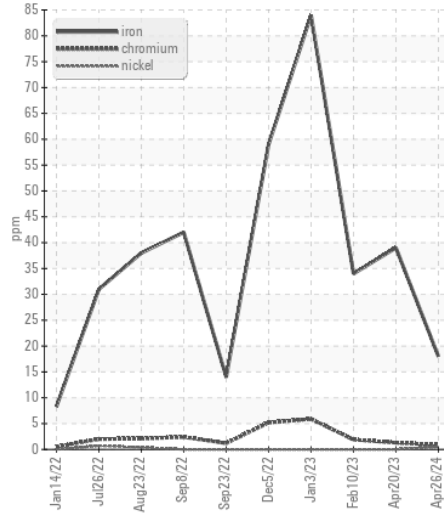
**Base Number**



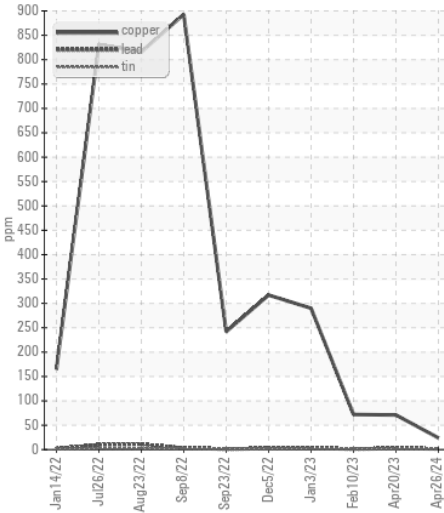
**Viscosity @ 100°C**



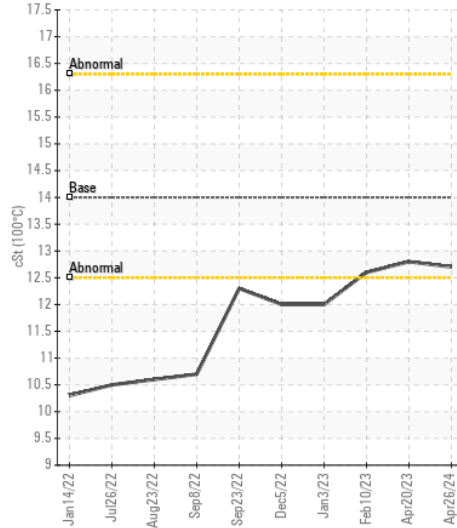
**Ferrous Alloys**



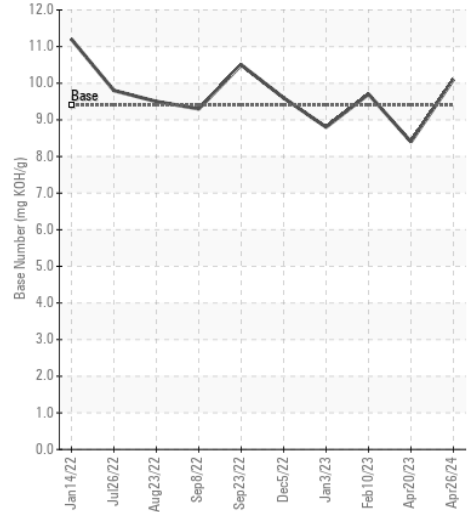
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0914446 **Received** : 09 May 2024  
**Lab Number** : 06174949 **Tested** : 10 May 2024  
**Unique Number** : 11021002 **Diagnosed** : 13 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: RANDY ROBERTS  
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 T: (316)943-6491  
 F: x:

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)