



WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**MARGINAL**

Machine Id  
**59508**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- QTS)**

### RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0033318</b>	IL0027112	IL0015565
Sample Date		Client Info		<b>11 Jun 2024</b>	03 Apr 2023	09 Nov 2021
Machine Age	mls	Client Info		<b>334211</b>	249057	159429
Oil Age	mls	Client Info		<b>53921</b>	24568	26592
Filter Age	mls	Client Info		<b>53921</b>	24568	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>62</b>	25	17
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	<1	<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>24</b>	4	6
Lead	ppm	ASTM D5185m	>40	<b>6</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>19</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>4</b>	<1	0
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

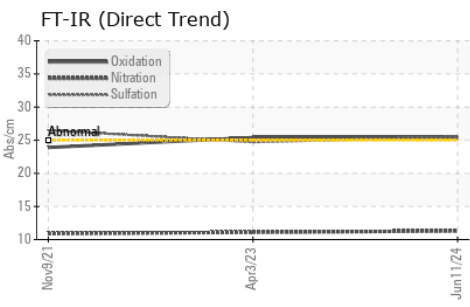
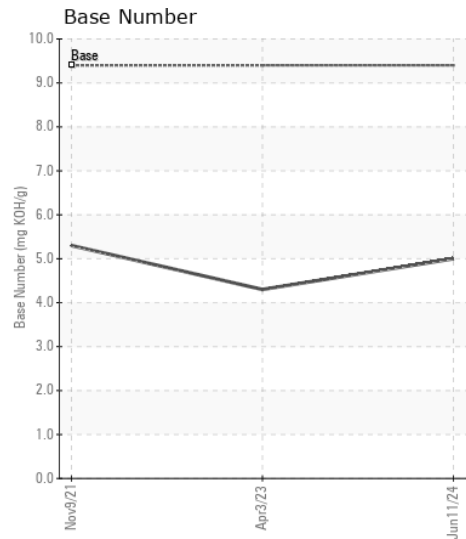
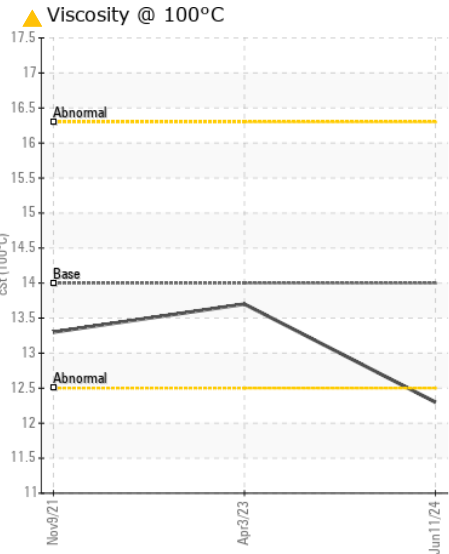
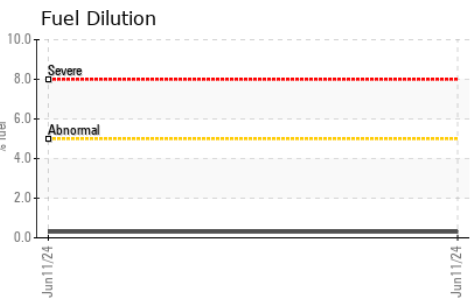
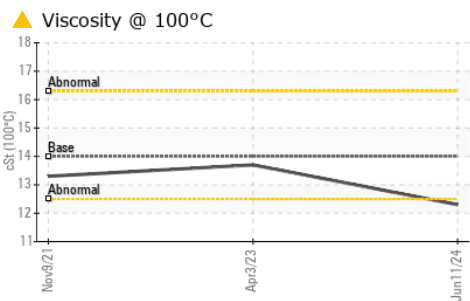
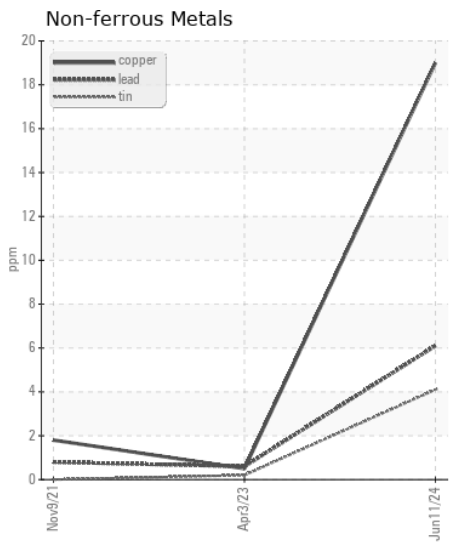
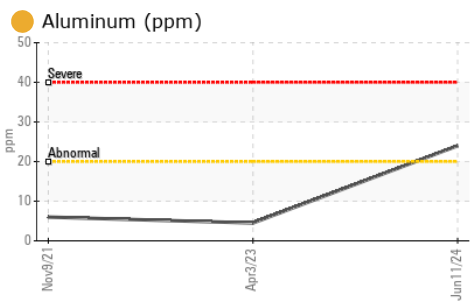
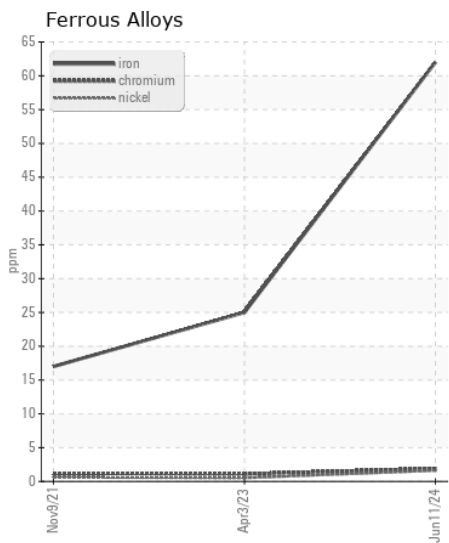
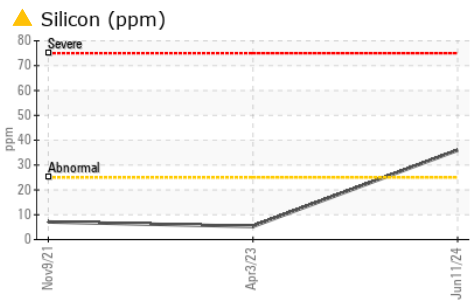
Fuel content negligible. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	<b>36</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>67</b>	10	15
Fuel	%	ASTM D3524	>5	<b>0.3</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>0.5</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	11.1	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.5</b>	24.7	26.5
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>3</b>	2	3
Boron	ppm	ASTM D5185m	0	<b>21</b>	13	22
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>62</b>	25	7
Manganese	ppm	ASTM D5185m		<b>5</b>	1	<1
Magnesium	ppm	ASTM D5185m	0	<b>451</b>	649	752
Calcium	ppm	ASTM D5185m		<b>1660</b>	1203	1556
Phosphorus	ppm	ASTM D5185m		<b>841</b>	803	737
Zinc	ppm	ASTM D5185m		<b>1182</b>	1045	830
Sulfur	ppm	ASTM D5185m		<b>2712</b>	3302	3701
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>25.4</b>	25.4	23.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>5.0</b>	4.3	5.3
Visc @ 100°C	cSt	ASTM D445	14	<b>12.3</b>	13.7	13.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0033318 **Received** : 14 Jun 2024  
**Lab Number** : 06209857 **Tested** : 19 Jun 2024  
**Unique Number** : 11082721 **Diagnosed** : 19 Jun 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**RUSH TRUCK LEASING - EFFINGHAM Idealease**  
 1701 WEST FAYETTE AVENUE  
 EFFINGHAM, IL  
 US 62401  
 Contact: JACKIE OHNESORGE  
 ohnesorgej@rushenterprises.com  
 T: (217)342-9761  
 F: (217)342-9642

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)