



WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**

Machine Id  
**I4605**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)**

### 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>IL0033179</b>	IL0033136	IL0029464
Sample Date		Client Info		<b>29 May 2024</b>	30 Nov 2023	15 Apr 2023
Machine Age	mls	Client Info		<b>82953</b>	73702	60053
Oil Age	mls	Client Info		<b>9251</b>	8011	0
Filter Age	mls	Client Info		<b>9251</b>	8011	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	MARGINAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>39</b>	13	25
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	1	2
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	10	20
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

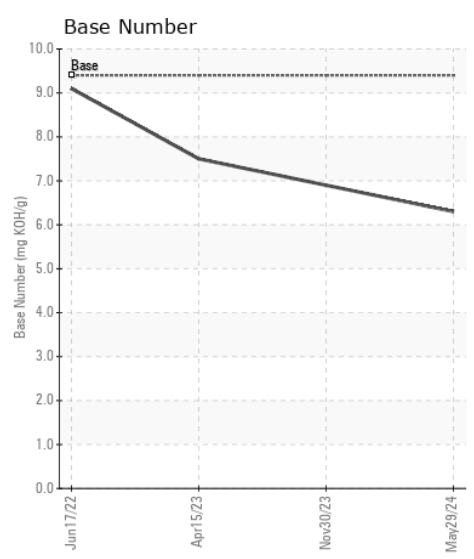
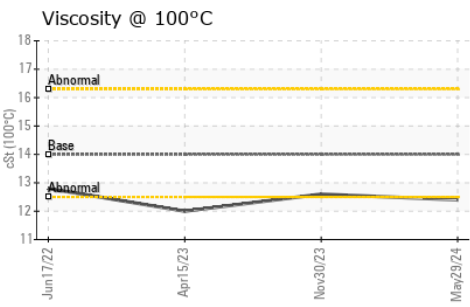
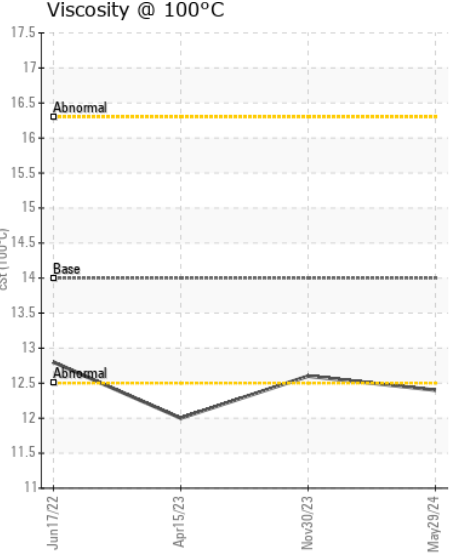
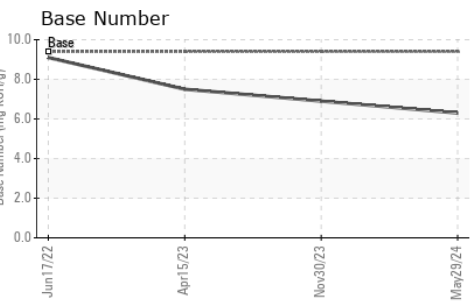
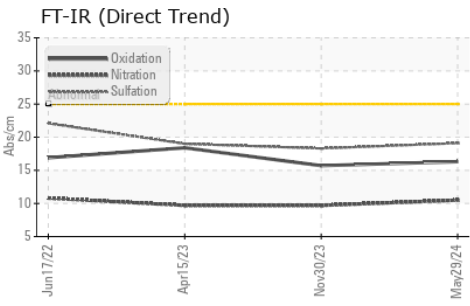
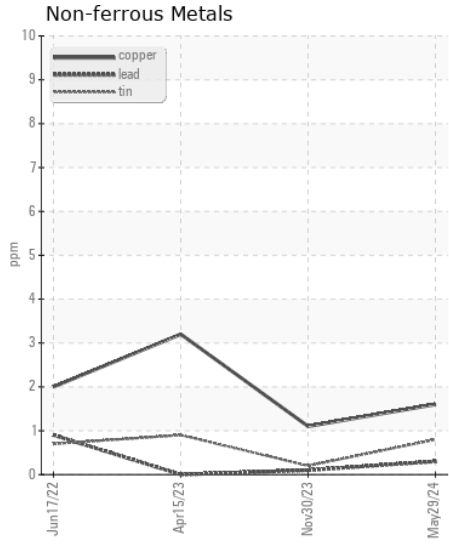
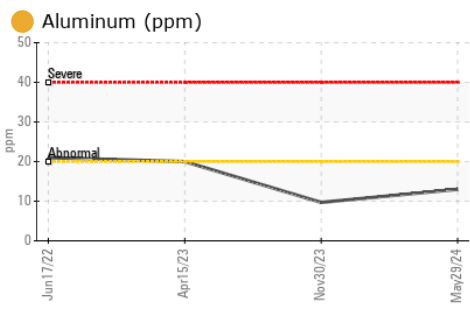
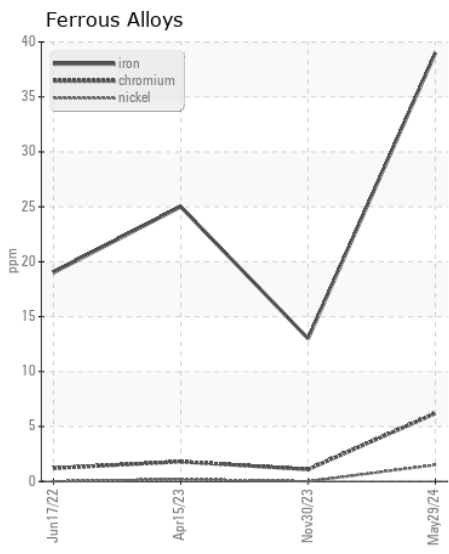
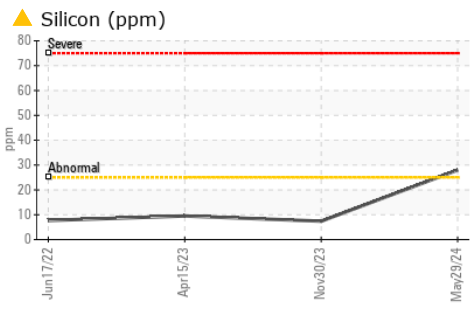
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	<b>28</b>	7	10
Potassium	ppm	ASTM D5185m	>20	<b>20</b>	16	32
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<b>4.6</b>
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>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	9.7	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.1</b>	18.3	19.0
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	2	1
Boron	ppm	ASTM D5185m	0	<b>73</b>	80	24
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>113</b>	112	48
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>669</b>	723	802
Calcium	ppm	ASTM D5185m		<b>1213</b>	1304	1417
Phosphorus	ppm	ASTM D5185m		<b>679</b>	798	921
Zinc	ppm	ASTM D5185m		<b>893</b>	947	1084
Sulfur	ppm	ASTM D5185m		<b>3215</b>	3217	3270
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	15.7	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>6.3</b>	6.9	7.5
Visc @ 100°C	cSt	ASTM D445	14	<b>12.4</b>	12.6	12.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0033179  
**Lab Number** : 06209897  
**Unique Number** : 11082761  
**Test Package** : FLEET  
**Received** : 14 Jun 2024  
**Tested** : 17 Jun 2024  
**Diagnosed** : 17 Jun 2024 - Don Baldrige

**RUSH TRUCK LEASING - BOISE IDEALEASE**  
 770 WEST AMITY ROAD  
 BOISE, ID  
 US 83705  
 Contact: MATT BORCHARDT  
 borchardtm@rushenterprises.com  
 T:  
 F: (208)639-4859

Certificate L2367  
 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)