



# OIL ANALYSIS REPORT

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

Area

**Engine room**

Machine Id

**G5-0601 Diesel - Air Compressor - Emergency (S/N 08018632TR2A01)**

Component

**Diesel Engine**

Fluid

**SHELL ROTELLA T 30 (4 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0603786</b>	WC0432941	WC0342102
Sample Date		Client Info		<b>04 Nov 2021</b>	31 Oct 2020	11 Jul 2019
Machine Age	yrs	Client Info		<b>0</b>	11	0
Oil Age	yrs	Client Info		<b>1</b>	1	1
Filter Age	yrs	Client Info		<b>1</b>	1	1
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	7	1
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	5	<1
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	4	<1
Copper	ppm	ASTM D5185(m)	>330	<b>6</b>	11	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

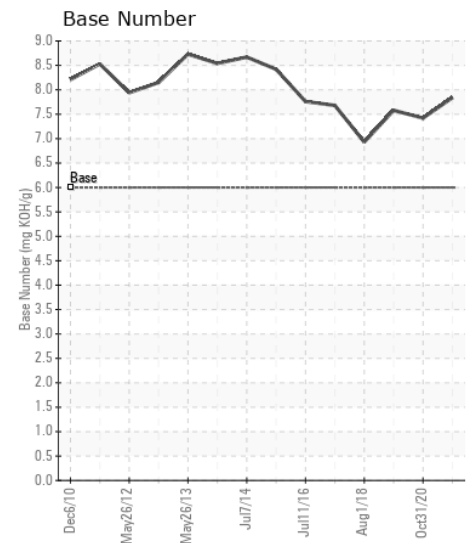
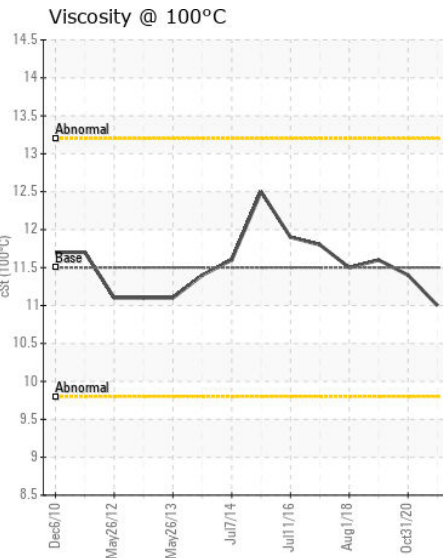
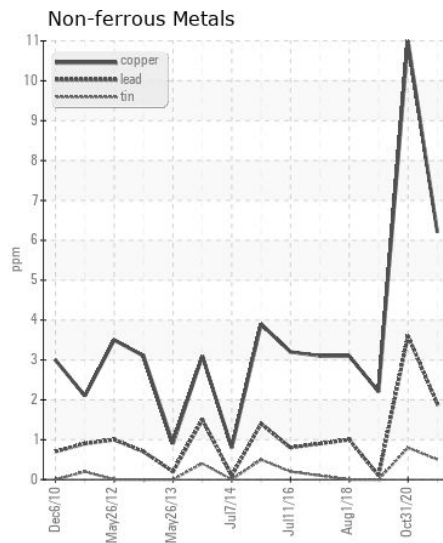
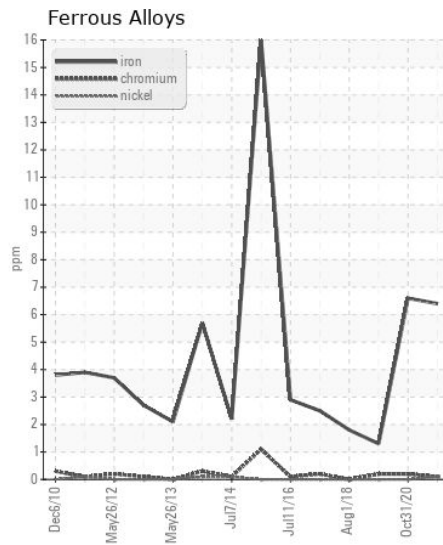
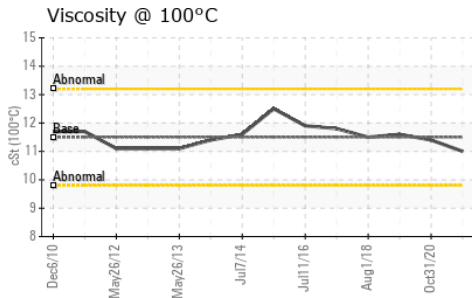
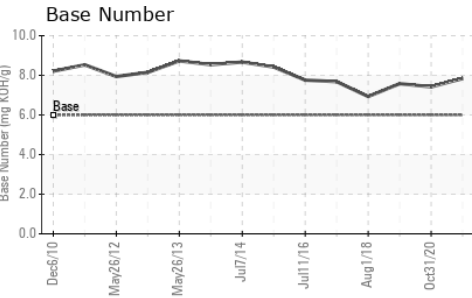
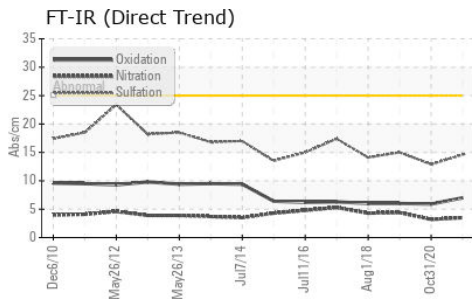
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>13</b>	18	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
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</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>3.5</b>	3.2	4.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>14.6</b>	12.9	15.0
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 D5185(m)		<b>2</b>	3	1
Boron	ppm	ASTM D5185(m)	0	<b>6</b>	6	5
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>99</b>	87	90
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>79</b>	195	195
Calcium	ppm	ASTM D5185(m)	1890	<b>2327</b>	2057	2230
Phosphorus	ppm	ASTM D5185(m)	680	<b>906</b>	768	846
Zinc	ppm	ASTM D5185(m)	750	<b>986</b>	902	914
Sulfur	ppm	ASTM D5185(m)		<b>2349</b>	2184	4109
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>7.0</b>	5.9	6.0
Base Number (BN)	mg KOH/g	ASTM D2896*	6.0	<b>7.84</b>	7.42	7.58
Visc @ 100°C	cSt	ASTM D7279(m)	11.5	<b>11.0</b>	11.4	11.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0603786  
**Lab Number** : 02456931  
**Unique Number** : 5316492  
**Test Package** : MAR 2  
**Received** : 17 Nov 2021  
**Tested** : 18 Nov 2021  
**Diagnosed** : 18 Nov 2021 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.