



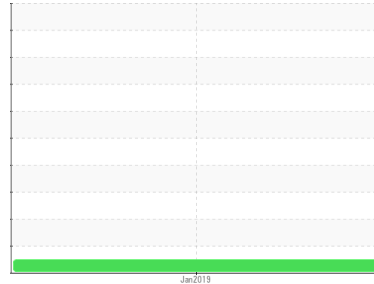
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**G3**  
 Component  
**CATERPILLAR G3612 Reservoir Natural Gas Engine**  
 Fluid  
**ECOSYN GE 4004 (1200 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			<b>WC101726</b>	WC101496	WC101503
Sample Date			<b>21 Jan 2019</b>	14 Sep 2018	24 Aug 2018
Machine Age	hrs		<b>28704</b>	27203	26703
Oil Age	hrs		<b>16235</b>	14734	821
Oil Changed			<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185 >50	<b>7</b>	6	6
Chromium	ppm	ASTM D5185 >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185 >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185	<b>0</b>	0	0
Silver	ppm	ASTM D5185 >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185 >9	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185 >30	<b>14</b>	16	14
Copper	ppm	ASTM D5185 >35	<b>2</b>	2	2
Tin	ppm	ASTM D5185 >4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185 75	<b>81</b>	85	84
Barium	ppm	ASTM D5185 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185 0	<b>2</b>	2	2
Manganese	ppm	ASTM D5185	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185 5	<b>8</b>	8	7
Calcium	ppm	ASTM D5185 1050	<b>1479</b>	1467	1435
Phosphorus	ppm	ASTM D5185 200	<b>268</b>	271	275
Zinc	ppm	ASTM D5185 250	<b>353</b>	353	341
Sulfur	ppm	ASTM D5185 900	<b>757</b>	774	758
Lithium	ppm	ASTM D5185	<b>0</b>	0	<1

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185 >+100	<b>2</b>	2	1
Sodium	ppm	ASTM D5185	<b>2</b>	3	4
Potassium	ppm	ASTM D5185 >20	<b>&lt;1</b>	<1	1

## INFRA-RED

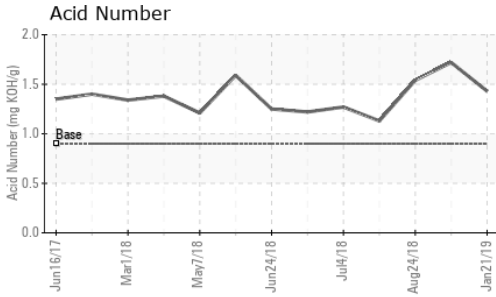
	method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7686	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624 >30	<b>20.6</b>	20.7	20.7
Sulfation	Abs/.1mm	ASTM D7415 >110	<b>109.0</b>	113.3	105.3

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414 >195	<b>192.8</b>	175.2	172.6
Acid Number (AN)	mg KOH/g	ASTM D664 0.9	<b>1.43</b>	1.72	1.54
Base Number (BN)	mg KOH/g	ASTM D2896 4.2	<b>4.09</b>	3.57	3.49
i-pH	Scale 0-14	ASTM D7946 <4.5	<b>3.9</b>	4.0	---



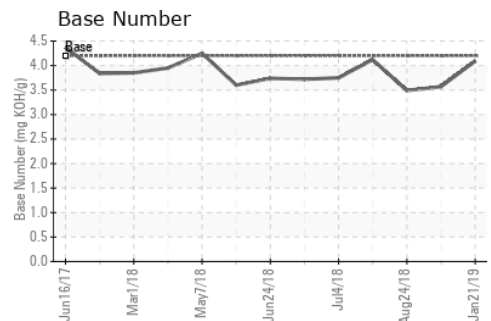
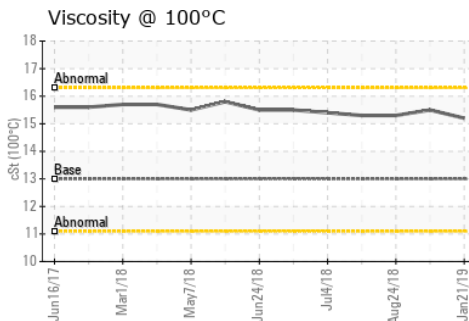
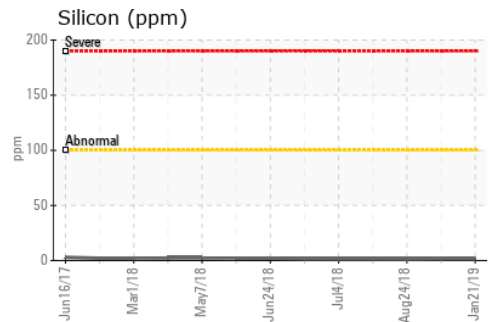
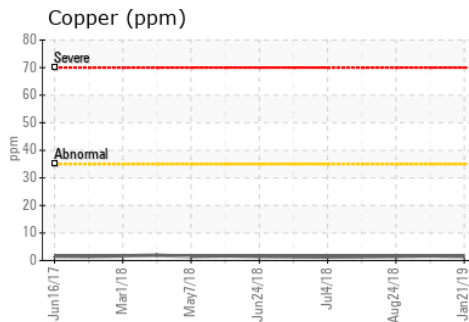
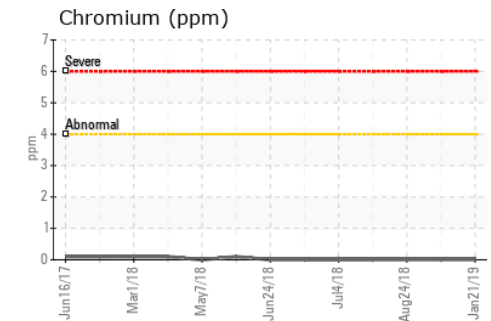
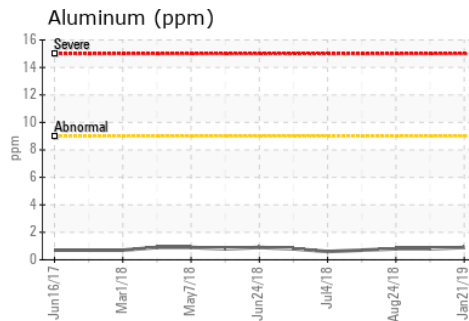
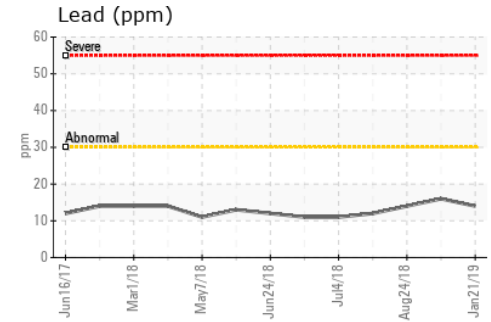
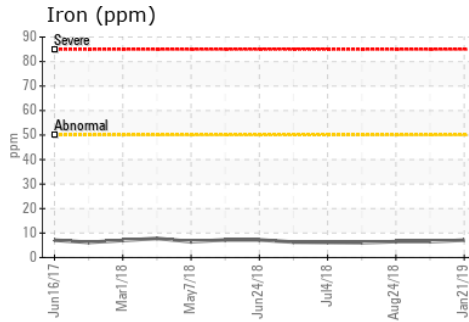
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual	>0.1	<b>NEG</b>	NEG
Free Water	scalar	Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279	13.0	<b>15.2</b>	15.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC1234567      **Received** : 22 Jan 2019  
**Lab Number** : 01234567      **Diagnosed** : 24 Jan 2019  
**Unique Number** : 12345678      **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: i-pH, TAN Auto )

**Cusany Logistics Inc.**  
 1212 Industrial Place  
 Centerville, OH  
 USA 75900  
 Contact: Jim Leduc  
 jim.leduc@cusanylogisticsinc.com  
 T: (305)555-1212  
 F: (305)555-1222

*To discuss diagnosis or test data, contact Technical Support at 1-800-268-2131.  
 To change component or sample information, contact Customer Service at 1-800-268-2131.*