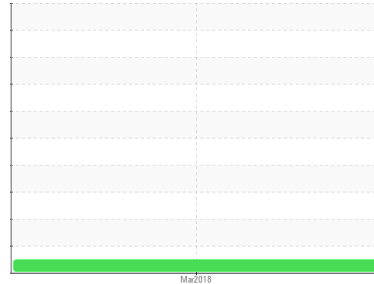




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**CD3 EMOD**  
 Machine Id  
**CD3E-U-703001-G1**

Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

Metal levels are typical for a new component breaking in.

### 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 condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WCI2318260</b>	---	---
Sample Date	Client Info			<b>09 Mar 2018</b>	---	---
Machine Age	hrs	Client Info		<b>242</b>	---	---
Oil Age	hrs	Client Info		<b>190</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2		<b>NEG</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>4</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185m		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>76</b>	---	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	450	<b>8</b>	---	---
Calcium	ppm	ASTM D5185m	3000	<b>2540</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1035</b>	---	---
Zinc	ppm	ASTM D5185m	1350	<b>1051</b>	---	---
Sulfur	ppm	ASTM D5185m	4250	<b>4730</b>	---	---

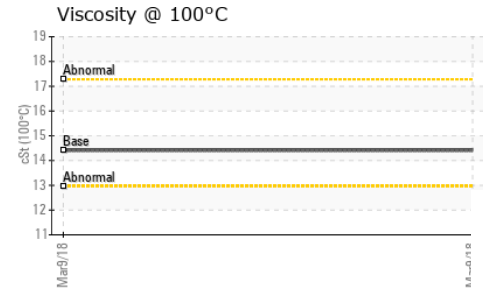
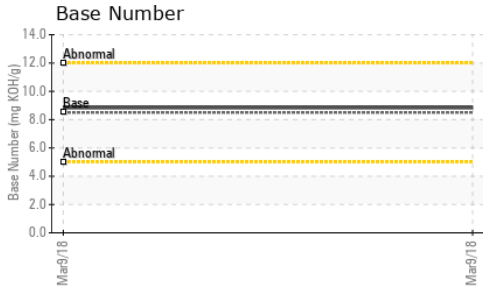
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>10</b>	---	---
Sodium	ppm	ASTM D5185m		<b>9</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>25	<b>6.</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>35	<b>18.</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.84</b>	---	---



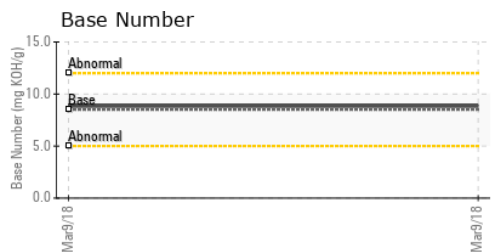
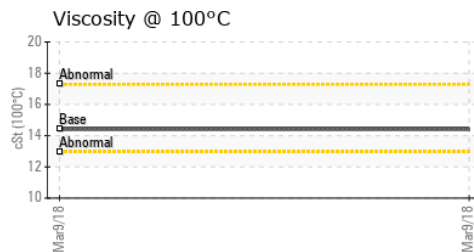
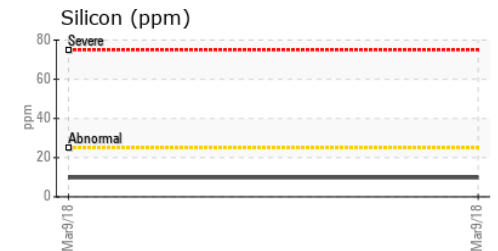
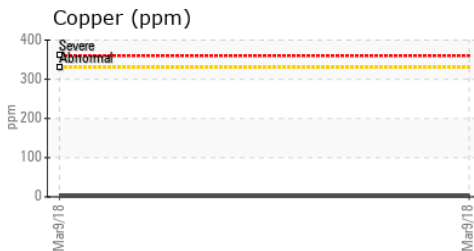
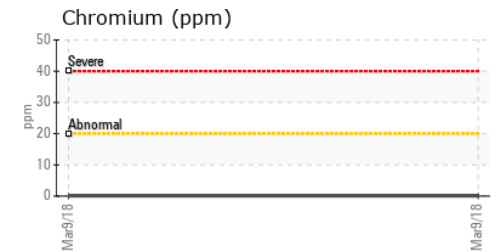
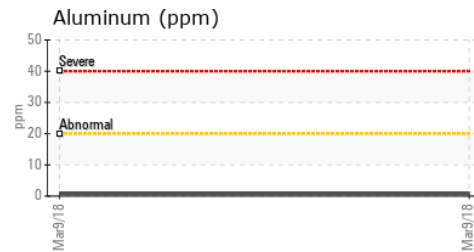
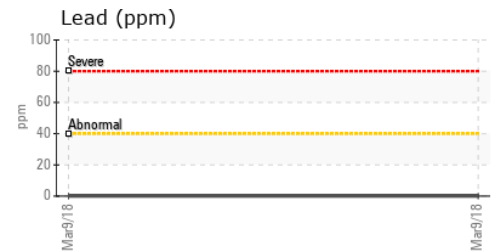
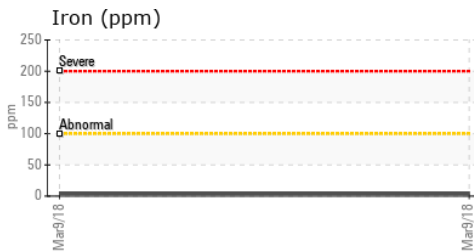
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	14.42	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC12318260  
**Lab Number** : 04427726  
**Unique Number** : 8131456  
**Test Package** : MOB 2

**Received** : 14 Mar 2018  
**Tested** : 15 Mar 2018  
**Diagnosed** : 15 Mar 2018 - Wes Davis

**Conoco Phillips ALASKA INC**  
 C/O LAF (ALPINE), 6441 S AIRPARK PL  
 ANCHORAGE, AK  
 US 99502  
 Contact: Chris Van Ryzin Ben DeRaeve  
 alp1084@conocophillips.com  
 T: (907)670-4128  
 F: (907)670-4137

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)