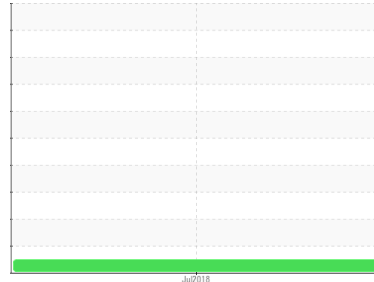




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**TUMBLER VACUUM C-6**  
 Component  
**Pump**  
 Fluid  
**MOBIL DTE OIL HEAVY (4 QTS)**

## 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. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>USP172619</b>	---	---
Sample Date	Client Info			<b>17 Jul 2018</b>	---	---
Machine Age	mths	Client Info		<b>0</b>	---	---
Oil Age	mths	Client Info		<b>1</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>1</b>	---	---
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>7	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>12	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>30	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>9	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185m		<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	---	---
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>167</b>	---	---
Zinc	ppm	ASTM D5185m		<b>12</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>526</b>	---	---

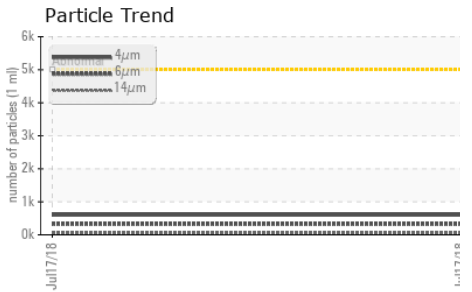
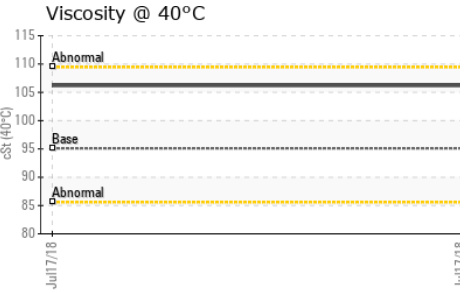
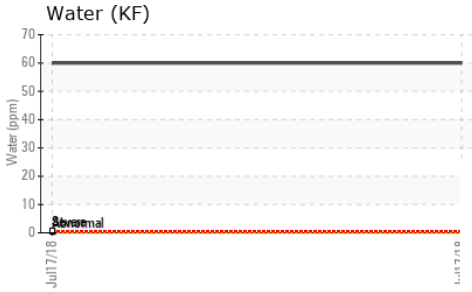
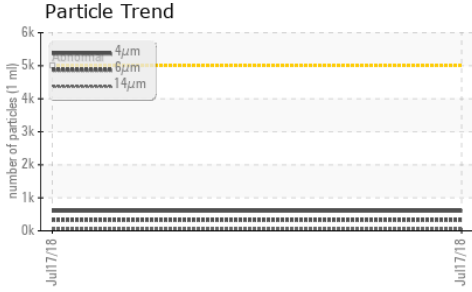
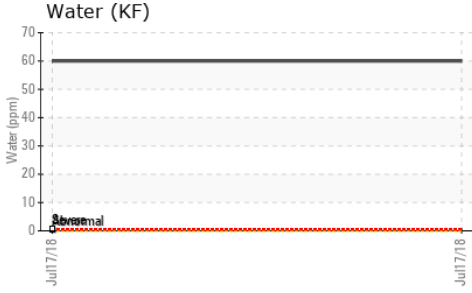
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<b>2</b>	---	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	---	---
Water	%	ASTM D6304		<b>0.006</b>	---	---
ppm Water	ppm	ASTM D6304	>.1	<b>60</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>602</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>328</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>55</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>18</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>2</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>16/16/13</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.527</b>	---	---



# OIL ANALYSIS REPORT



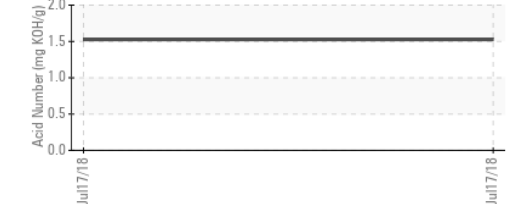
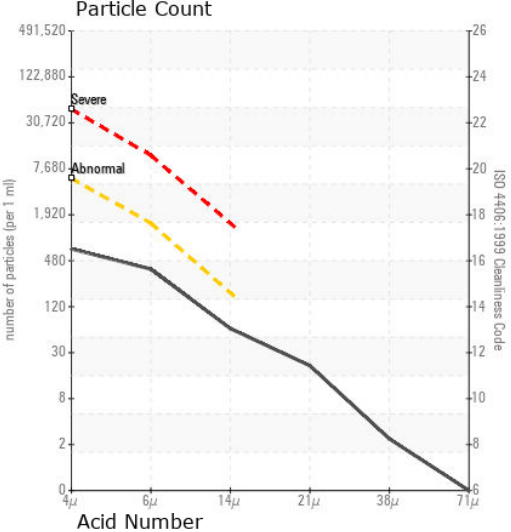
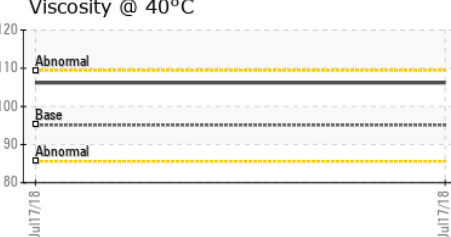
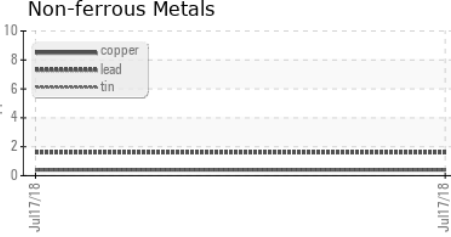
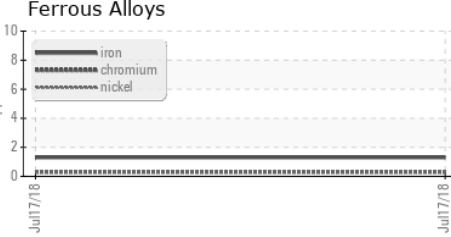
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	95.1	106.2	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP172619      **Received** : 31 Jul 2018  
**Lab Number** : 04521043      **Tested** : 02 Aug 2018  
**Unique Number** : 8279872      **Diagnosed** : 02 Aug 2018 - Doug Bogart  
**Test Package** : IND 2

**KraftHeinz - Kirksville - Plant 8333 USP**  
 2504 INDUSTRIAL RD  
 KIRKSVILLE, MO  
 US 63501  
 Contact: LARRY WISKIRCHEN  
 larry.wiskirchen@kraftfoods.com  
 T: (660)627-1031  
 F:

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)