



# OIL ANALYSIS REPORT



Area  
**KANSAS/44/HY - SKID STEER**  
 Machine Id  
**53.157L [KANSAS^44^HY - SKID STEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (2 GAL)**

### Sample Rating Trend



FUEL



### DIAGNOSIS

#### ● Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

Light fuel dilution occurring.

#### ● Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0703463</b>	WC0672461	---
Sample Date	Client Info		<b>18 Jul 2022</b>	05 May 2022	---
Machine Age	hrs	Client Info	<b>489</b>	327	---
Oil Age	hrs	Client Info	<b>0</b>	327	---
Oil Changed	Client Info		<b>Changed</b>	Not Changd	---
Sample Status			<b>ATTENTION</b>	ABNORMAL	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>14</b>	15	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	3	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>24</b>	14	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>55</b>	47	---
Barium	ppm	ASTM D5185m 0	<b>1</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>40</b>	40	---
Manganese	ppm	ASTM D5185m	<b>2</b>	3	---
Magnesium	ppm	ASTM D5185m 0	<b>471</b>	532	---
Calcium	ppm	ASTM D5185m	<b>1751</b>	1911	---
Phosphorus	ppm	ASTM D5185m	<b>760</b>	911	---
Zinc	ppm	ASTM D5185m	<b>969</b>	1077	---
Sulfur	ppm	ASTM D5185m	<b>3215</b>	2938	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	14	---
Sodium	ppm	ASTM D5185m	<b>3</b>	4	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	---
Fuel	%	ASTM D3524 >5	<b>▲ 4.3</b>	▲ 4.8	---

### INFRA-RED

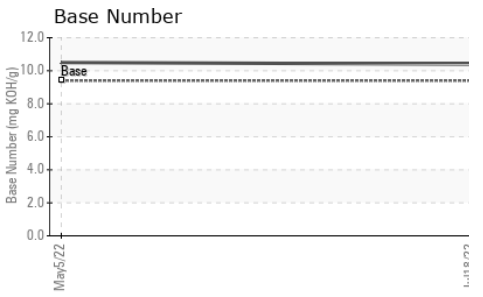
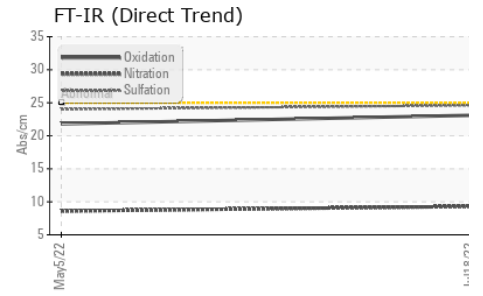
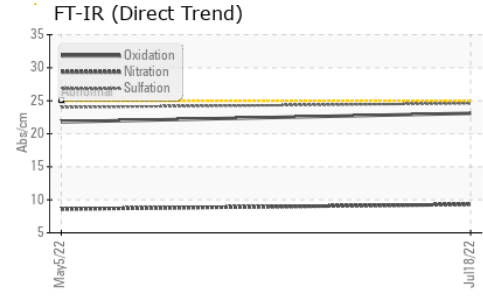
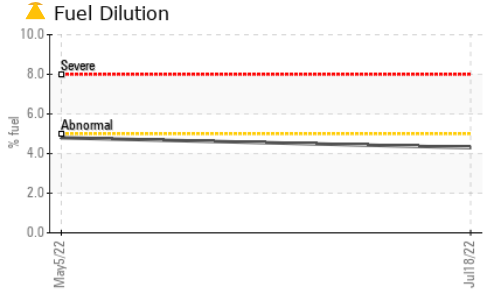
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.6</b>	24.0	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.1</b>	21.8	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>10.4</b>	10.5	---



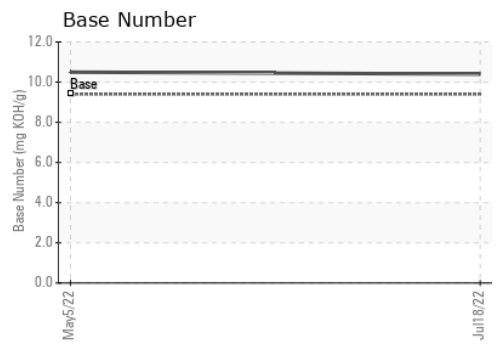
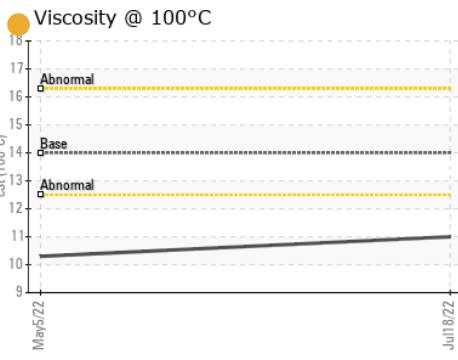
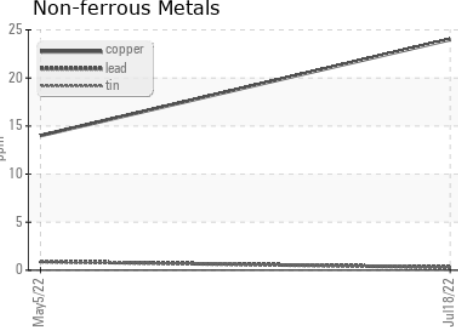
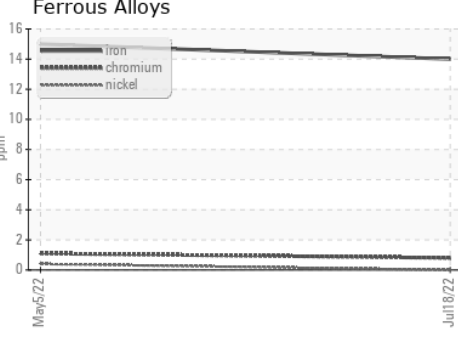
# OIL ANALYSIS REPORT



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	● 11.0	▲ 10.3	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0703463      **Received** : 22 Jul 2022  
**Lab Number** : 05598651      **Tested** : 27 Jul 2022  
**Unique Number** : 10063131      **Diagnosed** : 27 Jul 2022 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PercentFuel, TBN )

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 US 67213  
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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)