

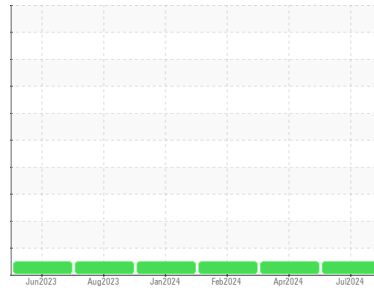


# OIL ANALYSIS REPORT



Machine Id  
**JOHN DEERE 644K LDR009**  
 Component  
**Transmission (Manual)**  
 Fluid  
**ESSO HYDRAUL 56 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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 fluid.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of fluid. The condition of the fluid is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0925820</b>	WC0920177	WC0904237
Sample Date	Client Info		<b>01 Jul 2024</b>	11 Apr 2024	10 Feb 2024
Machine Age	hrs	Client Info	<b>13081</b>	12652	12116
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	<b>31</b>	31	28
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>7	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>3</b>	3	3
Lead	ppm	ASTM D5185(m)	>45	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>225	<b>7</b>	7	7
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

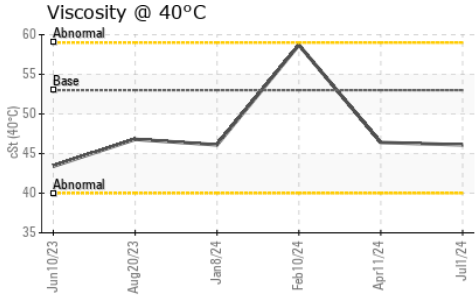
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>18</b>	20	16
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)		<b>78</b>	83	81
Calcium	ppm	ASTM D5185(m)		<b>3215</b>	3338	3266
Phosphorus	ppm	ASTM D5185(m)		<b>1000</b>	1036	1036
Zinc	ppm	ASTM D5185(m)		<b>1228</b>	1254	1206
Sulfur	ppm	ASTM D5185(m)		<b>3160</b>	3226	3284
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>125	<b>12</b>	12	13
Sodium	ppm	ASTM D5185(m)		<b>6</b>	7	6
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	2



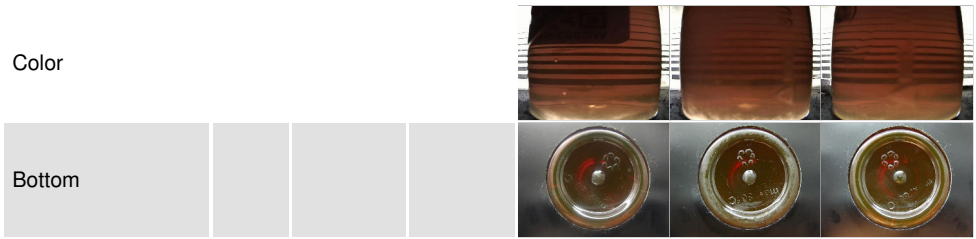
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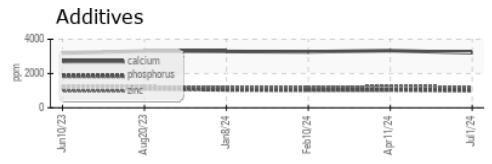
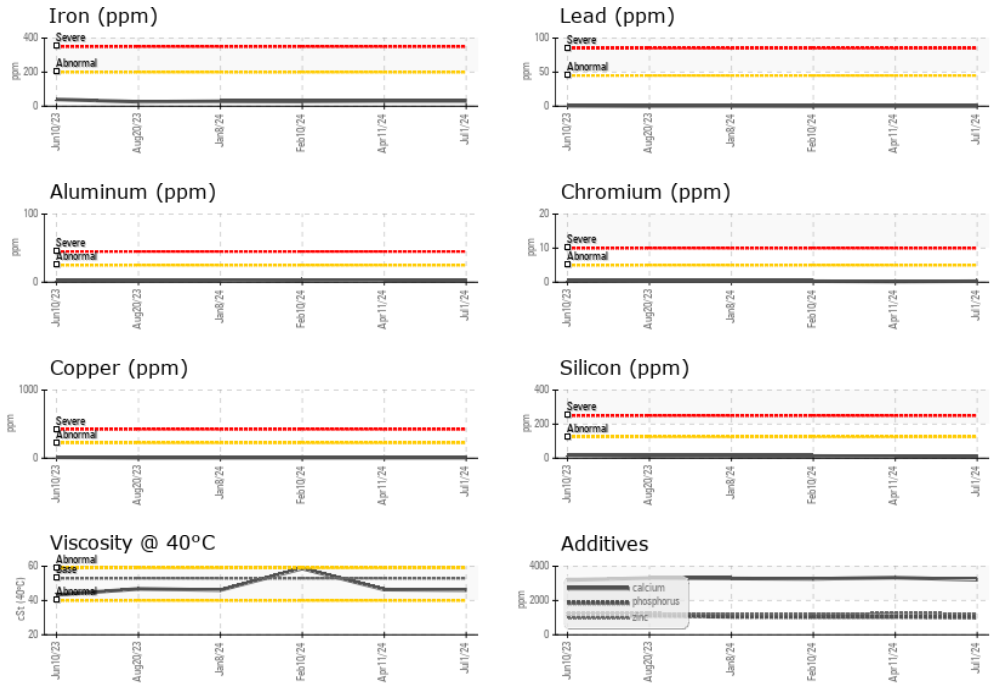
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	53	<b>46.1</b>	46.4	58.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0925820  
**Lab Number** : **02645531**  
**Unique Number** : 5803070  
**Test Package** : MOB 1

**Agnico Eagle Canada**  
 1350 Government Rd. W, MACASSA COMPLEX  
 Kirkland Lake, ON  
 CA P2N 3J1

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.

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