

# **OIL ANALYSIS REPORT**



Machine Id KHS L4 FILLER INFEED

Component Gearbox Fluid KLUBER KLUBEROIL 4 UH1-460 N (--- GAL)

## DIAGNOSIS

#### A Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

#### 🛑 Wear

Aluminum ppm levels are noted. All other component wear rates are normal.

#### Contamination

There is a moderate concentration of water present in the oil. Excessive free water present.

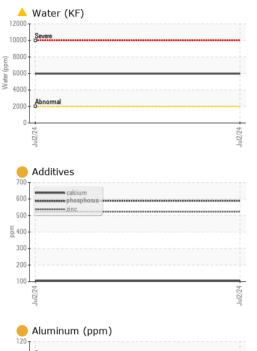
### Fluid Condition

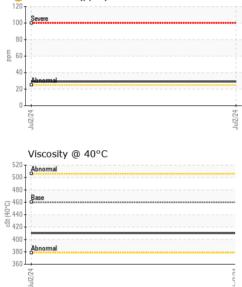
Additive levels indicate the addition of a different brand, or type of oil.

SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0954013		
Sample Date		Client Info		02 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	18		
Chromium	ppm	ASTM D5185(m)	>15	1		
Nickel	ppm	ASTM D5185(m)	>15	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>25	<mark> </mark> 29		
Lead	ppm	ASTM D5185(m)	>100	3		
Copper	ppm	ASTM D5185(m)	>200	16		
Tin	ppm	ASTM D5185(m)	>25	<1		
Antimony	ppm	ASTM D5185(m)	>5	<1		
Vanadium	ppm	ASTM D5185(m)		0		
Descrifterer				-		
Beryllium	ppm	ASTM D5185(m)		0		
Beryllium Cadmium	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0		
,			limit/base		  history1	
Cadmium		ASTM D5185(m)	limit/base	0		
Cadmium ADDITIVES	ppm	ASTM D5185(m)	limit/base	0 current	 history1	 history2
Cadmium ADDITIVES Boron	ppm ppm	ASTM D5185(m) method ASTM D5185(m)	limit/base	0 current <1	 history1 	 history2 
Cadmium ADDITIVES Boron Barium	ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1	 history1 	 history2 
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 <u>current</u> <1 <1 0	 history1  	 history2  
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 <1 0 <1	 history1  	 history2   
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 <1 0 <1 <1 <1	 history1   	 history2   
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 <1 0 105	 history1    	 history2    
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 <1 105 589	 history1      	 history2     
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 <1 105 589 522	 history1       	 history2      
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 <1 105 589 522 1138	 history1        -	 history2       
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 current <1 <1 0 <1 <1 105 589 522 1138 <1	 history1        -	 history2       
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 <1 105 589 522 1138 <1 current	 history1        -	 history2        -
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 current <1 <1 0 <1 <1 105 589 522 522 1138 <1 current 32	 history1        -	 history2        -
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base >50	0 current <1 <1 0 <1 <1 105 589 522 1138 <1 current 32 16	 history1        	 history2        -



# **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	VLITE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	🔺 LAYRD		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	<u> </u>		
Free Water	scalar	Visual*		<mark>▲</mark> >10%		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	410		
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys						
20 iron						
15 - chromium						
E 10-						
5						
0						
Jul2/24			Jul2/24 .			
	_		7			
Non-ferrous Metal	5					
15 - copper						
톱 10						
5-						
******						
Jul2/24			Jul2/24			
			Ju			
Viscosity @ 40°C						
Abnormal						
Base						
450						
400 Abnormal						
350			+			
Jul2/24			Jul2/24			

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 COCA COLA CANADA BOTTLING LTD. CALA Sample No. : WC0954013 Received 15 WEST CREEK BLVD : 16 Jul 2024 Lab Number : 02648249 Tested : 19 Jul 2024 BRAMPTON, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5813801 Diagnosed : 19 Jul 2024 - Kevin Marson CA L6T 5T4 Test Package : IND 1 (Additional Tests: KF) Contact: Chandan Ahuja To discuss this sample report, contact Customer Service at 1-800-268-2131. cahuja@cokecanada.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (635)440-5087 Validity of results and interpretation are based on the sample and information as supplied. F:

Report Id: COC15BRA [WCAMIS] 02648249 (Generated: 07/19/2024 10:05:04) Rev: 1

cSt (40°C)

Contact/Location: Chandan Ahuja - COC15BRA Page 2 of 2