

OIL ANALYSIS REPORT

Area KANSAS/44/EG - TRUCK-ON-HWY-HEAVY DUTY 04.163 [KANSAS^44^EG - TRUCK-ON-HWY-HEAVY DUTY]

Rear Differential

GEAR OIL SAE 85W140 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

📥 Wear

Gear wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. Confirm oil type.



		method	limit/base	current	history1	history2
Sample Number		Client Info		WC0918041		
Sample Date		Client Info		23 May 2024		
Machine Age	mls	Client Info		169977		
Oil Age	mls	Client Info		169977		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
			11 1. 11			
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	maa	ASTM D5185m	>500	521		
Chromium	maa	ASTM D5185m	>10	1		
Nickel	ppm	ASTM D5185m	>10	2		
Titanium	maa	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	0		
Lead	ppm	ASTM D5185m	>25	0		
Copper	ppm	ASTM D5185m	>100	5		
Tin	mag	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	maa	ASTM D5185m		0		
	1- 1-		11 1. 11	-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	119		
Barium	ppm	ASTM D5185m	200	0		
Molybdenum	ppm	ASTM D5185m	12	0		
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	12	0 33		
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	12 12	0 33 <1		
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150	0 33 <1 57	 	
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650	0 33 <1 57 969		
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125	0 33 <1 57 969 52	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500	0 33 <1 57 969 52 22535	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	12 12 150 1650 125 22500 limit/base	0 33 <1 57 969 52 22535 current	 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base >75	0 33 <1 57 969 52 22535 current 7	 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base >75	0 33 <1 57 969 52 22535 current 7 5	 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base >75 >20	0 33 <1 57 969 52 22535 <u>current</u> 7 5 2	 history1 	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base >75 >20 limit/base	0 33 <1 57 969 52 22535 current 7 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XBTM D5185m	12 12 150 1650 125 22500 Iimit/base >75 >20 Iimit/base NONE	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE	 history1 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Yisual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE NONE	history1 history1 history1	history2 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE NONE NONE	history1 history1 history1	history2 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE NONE NONE NONE NONE	history1 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 20 limit/base NONE NONE NONE NONE NONE NONE	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE NONE NONE NONE NONE NONE	history1 history1 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	0 33 <1 57 969 52 22535 current 7 5 2 2 current NONE NONE NONE NONE NONE NONE NONE	history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	0 33 <1 57 969 52 22535 current 7 5 2 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 Iimit/base >75 >20 Iimit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	0 33 <1 57 969 52 22535 current 7 5 2 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	

Free Water

scalar *Visual

Submitted By: KEVIN HOHEISEL

NEG



OIL ANALYSIS REPORT



FLUID FROFER	TIES	method	iinii/base	current	Thistory I	Thistory
Visc @ 40°C	cSt	ASTM D445	368	97.4		
SAMPLE IMAGE	S	method	limit/base	current	history1	history
Color				na imaga	na imaga	no imog
Color				no image	no image	no imag
D						
Bottom				no image	no image	no imag
GRAPHS					·	
▲ Ferrous Alloys						
500 iron 450 chromium						
400						
350						
ā 250 -						
150						
100						
v/23/24			y23/24			
≊ Non-ferrous Mota	alc		Me			
	113					
9 copper lead						
7-						
6- E -						
d. 5 4						
3-						
2						
0						
lay23/2			lay23/2 [,]			
Viscosity @ 40°C			2			
400 -						
Base 350 -						
300-						
250 - Abnormal						
200						
150						
100 -						
50 4 *			/24			
May23			May23			
: WearCheck USA - 50	01 Madison	Ave., Cary	, NC 27513	SHERV	VOOD CONSTRU	JCTION CO
: WC0918041 : 06199652	Receiv Tested	red :04 I ∙05	Jun 2024		3219	WEST MAY WICHITA
: 11061775	Diagno	osed : 05	Jun 2024 - Do	n Baldridge		US 67



 Unique Number
 : 11061775
 Diagnosed
 : 06 Jun 2024 - Don Baldridge

 Certificate 12367
 Test Package
 : CONST
 Cont

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 randy

 * - 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)

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