

# **OIL ANALYSIS REPORT**



DT862

Component

**Front Differential** 

GEAR OIL SAE 75W90 (--- GAL)

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

All component wear rates are normal.

## Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

### **Fluid Condition**

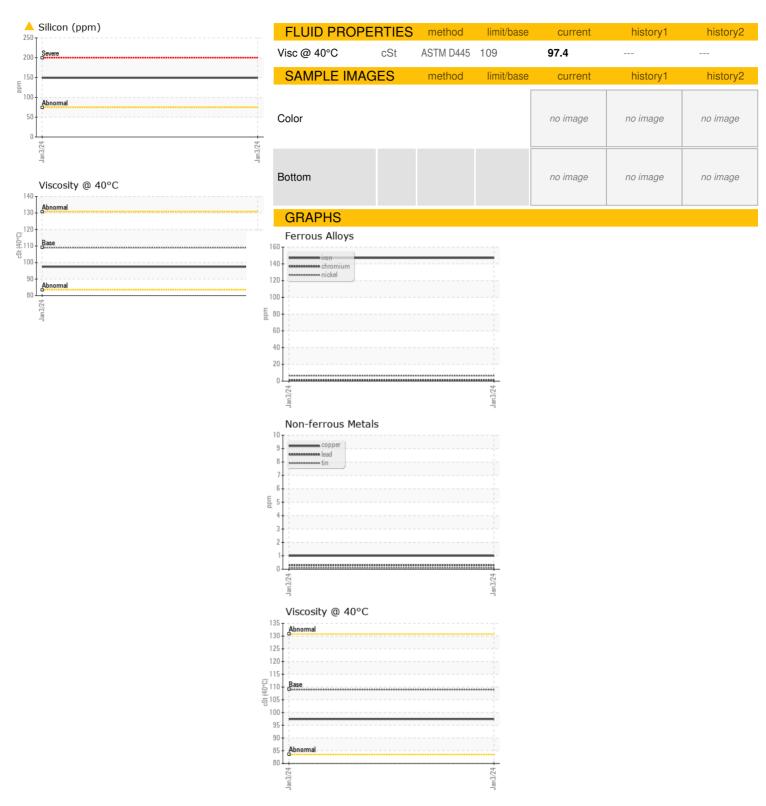
The condition of the oil is acceptable for the time in service.

Sample	e Rating Trend			DIRT
	Jan 202	4		
thod	limit/base	current	history1	history2

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111654		
Sample Date		Client Info		03 Jan 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	147		
Chromium	ppm	ASTM D5185m	>10	1		
Nickel	ppm	ASTM D5185m	>10	6		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	2		
Lead	ppm	ASTM D5185m	>25	<1		
Copper	ppm	ASTM D5185m	>100	1		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	165		
Barium	ppm	ASTM D5185m	200	1		
Molybdenum	ppm	ASTM D5185m	12	0		
Manganese	ppm	ASTM D5185m		3		
		ACTA DE LOS	10	<1		
Magnesium	ppm	ASTM D5185m	12	<1		
Magnesium Calcium	ppm	ASTM D5185m	150	21		
-						
Calcium	ppm	ASTM D5185m	150	21		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	150 1650	21 1152		
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125	21 1152 0		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125 22500 limit/base	21 1152 0 25104		
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	150 1650 125 22500 limit/base	21 1152 0 25104 current	   history1	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	150 1650 125 22500 limit/base >75	21 1152 0 25104 current	   history1	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	150 1650 125 22500 limit/base >75	21 1152 0 25104 current  149	  history1	history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	150 1650 125 22500 limit/base >75 >20 limit/base	21 1152 0 25104 current  149 3 4 current NONE	  history1 	history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	150 1650 125 22500 limit/base >75 >20 limit/base NONE	21 1152 0 25104 current  149 3 4 current NONE NONE	history1	history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE	21 1152 0 25104  current  ▲ 149 3 4  current  NONE  NONE  NONE	history1 history1	history2 history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m  ASTM D5185m  *Visual  *Visual  *Visual  *Visual	150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE	21 1152 0 25104  current  149 3 4  current  NONE  NONE  NONE  NONE	history1 history1	history2 history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m  *Visual *Visual *Visual *Visual *Visual *Visual	150 1650 125 22500 limit/base >75  >20 limit/base NONE NONE NONE NONE NONE NONE	21 1152 0 25104  current  149 3 4  current  NONE NONE NONE NONE LIGHT	history1 history1 history1	history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	150 1650 125 22500  limit/base >75 >20  limit/base NONE NONE NONE NONE NONE NONE NONE NON	21 1152 0 25104 current  149 3 4 current NONE NONE NONE NONE LIGHT NONE	history1 history1	history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN 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 scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m  ASTM D5185m  Method  *Visual  *Visual	150 1650 125 22500  limit/base >75 >20  limit/base NONE NONE NONE NONE NONE NONE NONE NON	21 1152 0 25104  current  149 3 4  current  NONE  NONE	history1 history1	history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium  VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	21 1152 0 25104  current  149 3 4  current  NONE NONE NONE NONE NONE NONE NONE NO	history1 history1	history2 history2
Calcium Phosphorus Zinc Sulfur  CONTAMINAN 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 scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m  ASTM D5185m  Method  *Visual  *Visual	150 1650 125 22500  limit/base >75 >20  limit/base NONE NONE NONE NONE NONE NONE NONE NON	21 1152 0 25104  current  149 3 4  current  NONE  NONE	history1 history1	history2 history2



## **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10836584

: PCA0111654 : 06065202 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 18 Jan 2024 : 22 Jan 2024 Diagnosed

Diagnostician : Sean Felton

NW WHITE & CO - BEAUFORT DIVISION 1491 YENMASSEE HIGHWAY VARNVILLE, SC

US 29944 Contact: VINCENT BULLOCK bullockvince514@gmail.com

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)

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