

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area **ROUNDHOUSE** BC-12 BC-12

Component Gear Reducer Fluid SHELL MORLINA S4 B 220 (--- GAL)

DIAGNOSIS

Recommendation

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 oil.

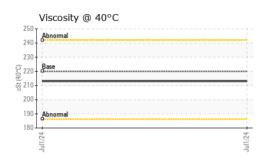
Fluid Condition

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

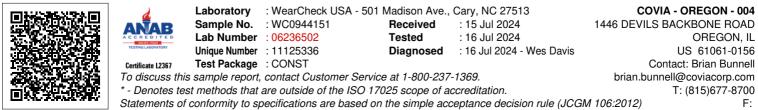
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0944151		
Sample Date		Client Info		01 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>250	69		
Chromium	ppm	ASTM D5185m	>5	<1		
Nickel	ppm	ASTM D5185m	>5	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>50	0		
Copper	ppm	ASTM D5185m	>50	<1		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		5		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		<1		
Vanganese	ppm	ASTM D5185m		1		
Magnesium	nnm	ASTM D5185m		2		
nagnosium	ppm					
•	ppm	ASTM D5185m		11		
Calcium		ASTM D5185m ASTM D5185m		11 297		
Calcium Phosphorus	ppm					
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m		297		
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base	297 7		
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		297 7 2152		
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>60	297 7 2152 current	 history1	 history2
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>60	297 7 2152 current 37	 history1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>60	297 7 2152 current 37 0	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>60 >20	297 7 2152 current 37 0 2	 history1 	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m Method	>60 >20 limit/base	297 7 2152 current 37 0 2 2 current	 history1 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>60 >20 limit/base NONE	297 7 2152 current 37 0 2 2 current NONE	 history1 history1 	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>60 >20 limit/base NONE NONE	297 7 2152 current 37 0 2 current NONE NONE	 history1 history1 	 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>60 >20 limit/base NONE NONE NONE	297 7 2152 current 37 0 2 2 current NONE NONE NONE	 history1 history1 	 history2 history2 history2
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 scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>60 >20 limit/base NONE NONE NONE NONE	297 7 2152 current 37 0 2 2 current NONE NONE NONE NONE MODER	 history1 history1 	 history2 history2 history2 history2
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 scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	>60 >20 Imit/base NONE NONE NONE NONE NONE	297 7 2152 current 37 0 2 2 current NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2
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 scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>60 >20 Iimit/base NONE NONE NONE NONE NONE	297 7 2152 current 37 0 2 2 current NONE NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>60 >20 Iimit/base NONE NONE NONE NONE NONE NONE NONE NONE	297 7 2152 current 37 0 2 2 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 	 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>60 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE	297 7 2152 current 37 0 2 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 -	 history2 history2 history2 history2



OIL ANALYSIS REPORT



/isc @ 40°C	cSt	ASTM D445	220	213		
SAMPLE IMAGE		method	limit/base	current	history1	history2
Color				no image	no image	no image
				no image	nonnage	no image
ottom				no image	no image	no image
				0		
GRAPHS						
Ferrous Alloys						
iron						
nickel						
Jul1/24			Jul1/24			
Non-ferrous Met	als					
copper						
tin						
Jul1/24			Jul1/24			
			٦٢ ۲			
Viscosity @ 40°C	,					
Abnormal						
Base						
Abnormal						
Jul1/24			Jul1/24			
-			-			



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