

OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Area [20983] Machine Id 40-98

Component Right Final Drive

CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

🔺 Wear

All component wear rates are normal.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

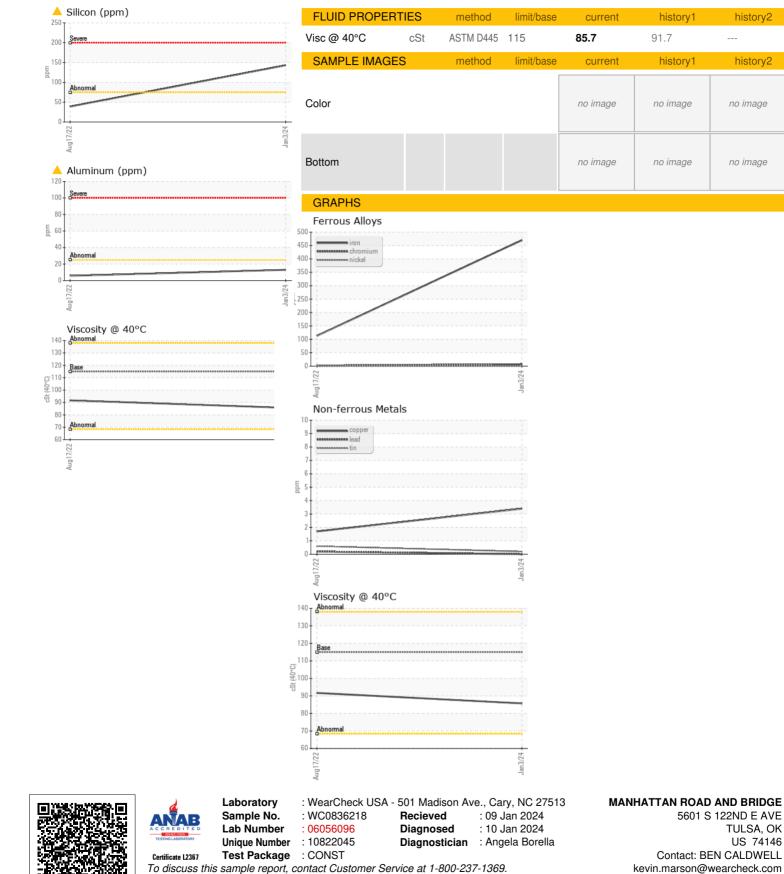
Fluid Condition

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

(GAL)			Aug2022	Jan 2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836218	WC0709443	
Sample Date		Client Info		03 Jan 2024	17 Aug 2022	
Machine Age	hrs	Client Info		5084	4593	
Dil Age	hrs	Client Info		1084	500	
Dil Changed		Client Info		Not Changd	Not Changd	
Sample Status				ABNORMAL	NORMAL	
CONTAMINATION	١	method	limit/base	current	history1	history2
Nater		WC Method	>0.2	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>500	470	113	
Chromium	ppm	ASTM D5185m	>10	7	2	
Nickel	ppm	ASTM D5185m	>10	<1	<1	
Fitanium	ppm	ASTM D5185m		2	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	1 3	6	
_ead	ppm	ASTM D5185m	>25	0	<1	
Copper	ppm	ASTM D5185m	>50	3	2	
Tin	ppm	ASTM D5185m	>10	<1	<1	
/anadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	85	106	133	
Barium	ppm	ASTM D5185m		0	<1	
Volybdenum	ppm	ASTM D5185m		12	12	
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		12 4	12 1	
-			350			
Manganese	ppm	ASTM D5185m	350 1800	4	1	
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		4 653	1 581	
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1800	4 653 1398	1 581 1293	
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1800 1000	4 653 1398 1121	1 581 1293 935	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1800 1000 1100	4 653 1398 1121 1237	1 581 1293 935 1119	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1800 1000 1100 3500 limit/base	4 653 1398 1121 1237 3860	1 581 1293 935 1119 3461	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1800 1000 1100 3500 limit/base	4 653 1398 1121 1237 3860 current	1 581 1293 935 1119 3461 history1	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1800 1000 1100 3500 limit/base >75	4 653 1398 1121 1237 3860 current ▲ 143	1 581 1293 935 1119 3461 history1 39	 history2
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 method ASTM D5185m ASTM D5185m	1800 1000 1100 3500 limit/base >75	4 653 1398 1121 1237 3860 <u>current</u> ▲ 143 3	1 581 1293 935 1119 3461 history1 39 2	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Yethod	1800 1000 1100 3500 limit/base >75 >20 limit/base NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m *Visual	1800 1000 1100 3500 imit/base >75 >20 imit/base NONE NONE	4 653 1398 1121 1237 3860 current ▲ 143 3 6 current NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 2 history1 NONE NONE	 history2 history2
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 scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	1800 1000 1100 3500 imit/base >75 >20 imit/base NONE NONE NONE NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE	 history2 history2
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 scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	1800 1000 1100 3500 imit/base >75 >20 imit/base NONE NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 2 history1 NONE NONE	 history2 history2
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 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	1800 1000 1100 3500 Iimit/base >75 >20 Iimit/base NONE NONE NONE NONE NONE NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE LIGHT NONE	 history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	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 ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	1800 1000 1100 3500 Iimit/base >75 >20 Iimit/base NONE NONE NONE NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE NONE LIGHT	 history2 history2 history2
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 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	1800 1000 1100 3500 Iimit/base >75 >20 Iimit/base NONE NONE NONE NONE NONE NONE	4 653 1398 1121 1237 3860 current 143 3 6 current NONE NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE LIGHT NONE	 history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Ddor	ppm 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 ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	1800 1000 1100 3500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	4 653 1398 1121 1237 3860 current ▲ 143 3 6 current NONE NONE NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE LIGHT NONE LIGHT NONE	 history2 history2
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 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	1800 1000 1100 3500 imit/base >75 >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	4 653 1398 1121 1237 3860 current ▲ 143 3 6 current NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	1 581 1293 935 1119 3461 history1 39 2 2 2 history1 NONE NONE NONE LIGHT NONE LIGHT NONE NONE NONE NONE	 history2 history2



OIL ANALYSIS REPORT



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)

Submitted By: JAMES STEELMON

history1

history1

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history2

history2

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