

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

CITGO 600 15W40

New (Unused) Oil

{not provided} (--- GAL)

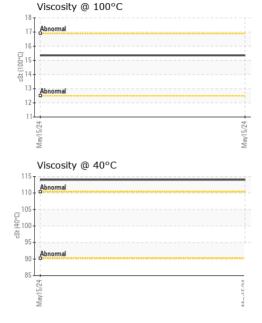
Recommendation

This is a baseline read-out on the submitted sample.

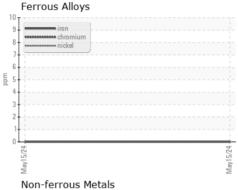
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number	., (11011	Client Info	mmebass	WC0759312		
Sample Date		Client Info		15 May 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed	1110	Client Info		N/A		
Sample Status				NORMAL		
			11 11 11			
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		0		
Chromium	ppm	ASTM D5185m		0		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m		<1		
Lead	ppm	ASTM D5185m		<1		
Copper	ppm	ASTM D5185m		0		
Tin	ppm	ASTM D5185m		0		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		35		
Managanaca		ASTM D5185m		0		
Manganese	ppm	710 1111 20 100111				
Magnesium	ppm	ASTM D5185m		689		
•				689 890		
Magnesium	ppm	ASTM D5185m				
Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m		890		
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		890 898		
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	890 898 1010		
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	890 898 1010 3073		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	890 898 1010 3073		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	890 898 1010 3073 current		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		890 898 1010 3073 current 3 <1		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20	890 898 1010 3073 current 3 <1	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	>20 limit/base	890 898 1010 3073 current 3 <1 <1	 history1 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *Visual	>20 limit/base NONE	890 898 1010 3073 current 3 <1 <1 current NONE	history1 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m method *Visual	>20 limit/base NONE NONE	890 898 1010 3073 current 3 <1 <1 current NONE	history1 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 limit/base NONE NONE	890 898 1010 3073 current 3 <1 <1 current NONE NONE	history1 history1	history2 history2 history2
Magnesium 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 Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE	890 898 1010 3073 current 3 <1 <1 current NONE NONE NONE NONE	history1 history1 history1	history2 history2
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 scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE	890 898 1010 3073 current 3 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2 history2
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 scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE	890 898 1010 3073 current 3 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2 history2 history2
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 scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM U5185m ASTM U5185m Method *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	890 898 1010 3073 current 3 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2 history2
Magnesium 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 ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM U5185m ASTM U5185m METHOD *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	890 898 1010 3073 current 3 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	history1 history1	history2 history2

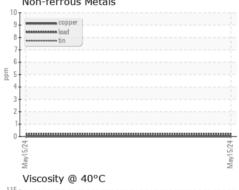


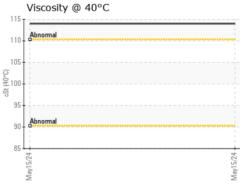
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		114.0		
Visc @ 100°C	cSt	ASTM D445		15.35		
Viscosity Index (VI)	Scale	ASTM D2270		141		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				20170	no image	no image
Bottom					no image	no image
GRAPHS						











Certificate 12367

Sample No. : WC0759312 Lab Number : 06205254 Unique Number : 11072715

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 10 Jun 2024 Tested : 18 Jun 2024 Diagnosed

: 18 Jun 2024 - Sean Felton Test Package : IND 1 (Additional Tests: FT-IR, ICP-NewOil, KV100, VI)

US 25081 Contact: R. GRIMMETT rgrimmett@rtrogers.com T:

813 NORTH EISENHOWER DRIVE

RT ROGERS OIL CO

BECKLEY, WV

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)

Report Id: RTRBEC [WUSCAR] 06205254 (Generated: 06/22/2024 18:56:51) Rev: 1

Contact/Location: R. GRIMMETT - RTRBEC

F: