

OIL ANALYSIS REPORT



Machine Id

ACE WHITEWATER

Component Diesel Engine Fluid CITGO CITGUARD 600 15W40 (--- QTS)

DIAGNOSIS

A Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is a light concentration of water present in the oil.

Fluid Condition

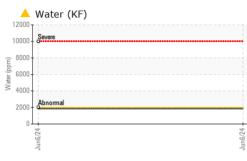
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0953276		
Sample Date		Client Info		06 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	0		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium		ASTM D5185m	>15	0		
Cadmium	ppm	ASTM D5185m		0		
	ppm			0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	13	0		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	57	62		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m	825	429		
Calcium	ppm	ASTM D5185m	1100	1761		
Phosphorus	ppm	ASTM D5185m	933	1091		
Zinc	ppm	ASTM D5185m	1089	1324		
Sulfur	ppm	ASTM D5185m	2769	4110		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6		
Sodium	ppm	ASTM D5185m		3		
Potassium	ppm	ASTM D5185m	>20	2		
Water	%	ASTM D6304	>0.2	A 0.188		
ppm Water	ppm	ASTM D6304	>2000	<u> </u>		
Glycol	%	*ASTM D2982		NEG		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0		
Nitration	Abs/cm	*ASTM D7644		0 4.1		
Sulfation	Abs/cm Abs/.1mm	*ASTM D7624	>20	4.1		
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9		
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	9.6		
:08:37) Rev: 1				Contact/Loca	ation: R. GRIMN	ETT - RTRBEC

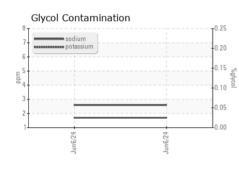
Contact/Location: R. GRIMMETT - RTRBEC



OIL ANALYSIS REPORT









Jun6/24 **Glycol** Contamination 0.25 adiun 0.20 0.15 0.10 0.05 L_{0.00}

VISUAL		method	limit/base	current	history1	histor
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	A MODER		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	6.2%		
Free Water	scalar	*Visual		NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	histor
Visc @ 100°C	cSt	ASTM D445		14.7		
GRAPHS						
Ferrous Alloys						
iron						
8 - nickel						
6						
b						
4						
1						
2						
2						
Jun6/24			Jun6/24			
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta			Jun624			
Non-ferrous Meta			Jun624			
Non-ferrous Meta						
Non-ferrous Meta	ls		Jun624	Base Number		
Non-ferrous Meta	ls		Jun624	Base Number		
Non-ferrous Meta	ls		42/gunf	Base		
Non-ferrous Meta	ls		42/gunr	Base		
Non-ferrous Meta	ls		42/gunr	.0 Base		
Non-ferrous Meta	ls		42/gunr	0 0 0		
Non-ferrous Meta	ls		42/gunr	0 0 0		
Non-ferrous Meta	ls		42/gunr	.0 .0 .0 .0		
Non-ferrous Meta	ls		42/gunr	.0 .0 .0 .0		
Non-ferrous Meta	ls		Jun6/24 0 8 9 2 21	0 Base		
Non-ferrous Meta	ls		Jun624	Base 		
Non-ferrous Meta	ls		+2/gunn +2/gunn 12 (0)H03 βul) Ja-gunn 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0	Base Base 0 0 0 0 0 0 0 0 0 0 0 0 0		
Non-ferrous Meta	ls		Jun624	Base 		



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RT ROGERS OIL CO : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 10 Jun 2024 813 NORTH EISENHOWER DRIVE Tested : 13 Jun 2024 BECKLEY, WV : 13 Jun 2024 - Jonathan Hester Diagnosed US 25081 Test Package : FLEET (Additional Tests: Glycol, KF) Contact: R. GRIMMETT To discuss this sample report, contact Customer Service at 1-800-237-1369. rgrimmett@rtrogers.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Report Id: RTRBEC [WUSCAR] 06204479 (Generated: 06/13/2024 15:08:37) Rev: 1

Certificate 12367

Laboratory

Sample No.

Lab Number : 06204479

Unique Number : 11071940

: WC0953276

Contact/Location: R. GRIMMETT - RTRBEC

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