



# OIL ANALYSIS REPORT

## Sample Rating Trend



GLYCOL



Area

{UNASSIGNED}

Machine Id

P 28 (Dodge Ram 3500)

Component

Diesel Engine

Fluid

SHELL ROTELLA T4 15W40 (--- GAL)

### DIAGNOSIS

#### Recommendation

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

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

#### 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PE0002314	---	---
Sample Date	Client Info		21 Jun 2024	---	---
Machine Age	mls	Client Info	63000	---	---
Oil Age	mls	Client Info	2500	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	19	---
Chromium	ppm	ASTM D5185m	>20	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	---
Silver	ppm	ASTM D5185m	>2	<1	---
Aluminum	ppm	ASTM D5185m	>20	3	---
Lead	ppm	ASTM D5185m	>40	<1	---
Copper	ppm	ASTM D5185m	>330	1	---
Tin	ppm	ASTM D5185m	>15	<1	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		<1	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		158	---
Barium	ppm	ASTM D5185m		<1	---
Molybdenum	ppm	ASTM D5185m		6	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		53	---
Calcium	ppm	ASTM D5185m		2068	---
Phosphorus	ppm	ASTM D5185m		857	---
Zinc	ppm	ASTM D5185m		1100	---
Sulfur	ppm	ASTM D5185m		3314	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	---
Sodium	ppm	ASTM D5185m		4	---
Potassium	ppm	ASTM D5185m	>20	▲ 162	---
Glycol	%	*ASTM D2982		NEG	---

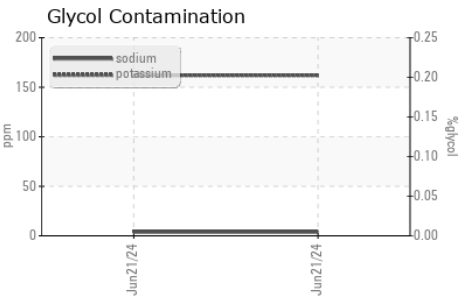
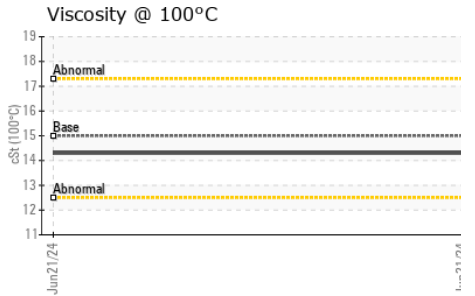
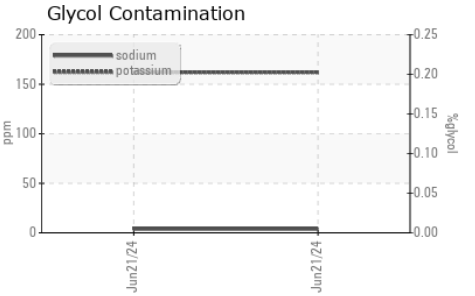
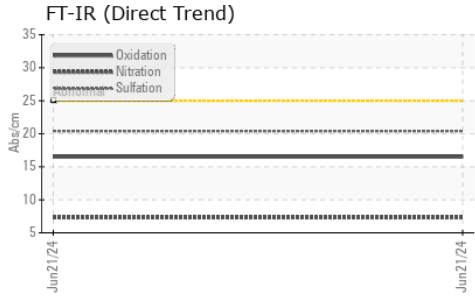
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.8	---

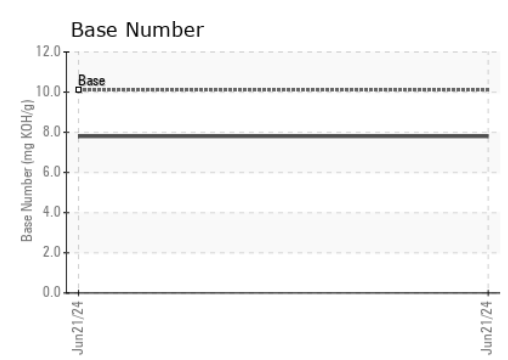
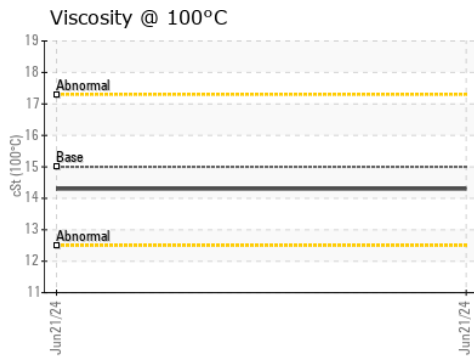
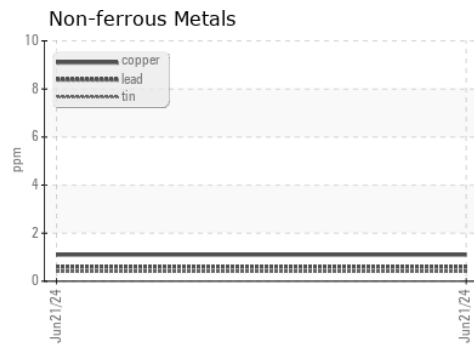
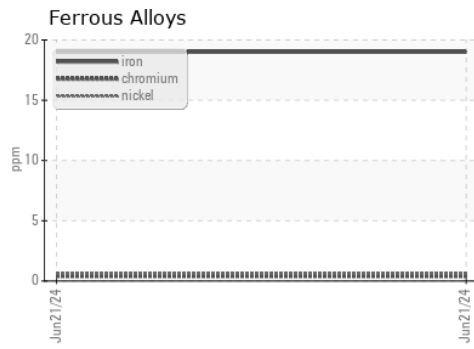
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
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	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15	14.3	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0002314      **Received** : 25 Jun 2024  
**Lab Number** : 06219549      **Tested** : 27 Jun 2024  
**Unique Number** : 11097746      **Diagnosed** : 27 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FT-IR, Glycol, ICP, KV100, SCREEN, TBN )

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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)