

# **OIL ANALYSIS REPORT**

Sample Rating Trend



## Machine Id **3471** Component **Diesel Engine** Fluid **DYNA-PLEX 21C 15W40 (--- GAL)**

#### DIAGNOSIS

# Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

# Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

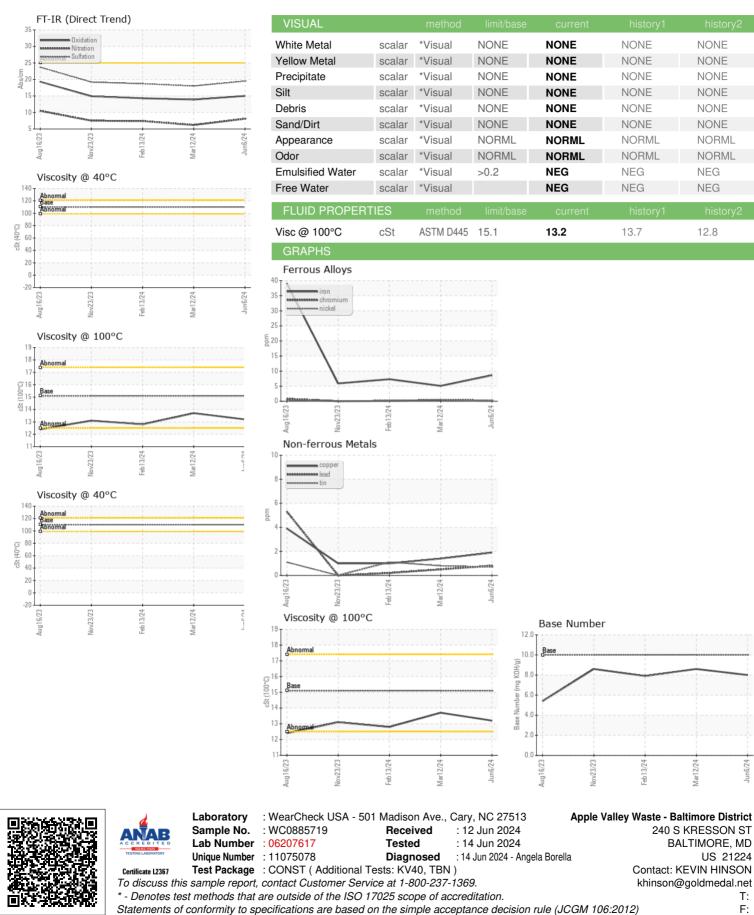
## Fluid Condition

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	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0885719	WC0885674	WC0885704
Sample Date		Client Info		06 Jun 2024	12 Mar 2024	13 Feb 2024
Machine Age	hrs	Client Info		0	14499	14288
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	9	5	7
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 9	history1 6	history2 7
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	9	6	7
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	9 0	6 0	7 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	9 0 69	6 0 60	7 0 65
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	9 0 69 0	6 0 60 <1	7 0 65 <1 888 1088
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	9 0 69 0 903 1057 1040	6 0 60 <1 922 1110 1082	7 0 65 <1 888
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	9 0 69 0 903 1057 1040 1236	6 0 60 <1 922 1110	7 0 65 <1 888 1088 928 1162
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		9 0 69 0 903 1057 1040	6 0 60 <1 922 1110 1082	7 0 65 <1 888 1088 928
Boron Barium Molybdenum 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 ASTM D5185m		9 0 69 0 903 1057 1040 1236	6 0 60 <1 922 1110 1082 1258 3679 history1	7 0 65 <1 888 1088 928 1162 2825 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 limit/base	9 0 69 0 903 1057 1040 1236 3198 current 4	6 0 60 <1 922 1110 1082 1258 3679 history1 3	7 0 65 <1 888 1088 928 1162 2825 history2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 limit/base	9 0 69 0 903 1057 1040 1236 3198 current 4 4	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2	7 0 65 <1 888 1088 928 1162 2825 history2 3 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1300 limit/base >25	9 0 69 0 903 1057 1040 1236 3198 current 4	6 0 60 <1 922 1110 1082 1258 3679 history1 3	7 0 65 <1 888 1088 928 1162 2825 history2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m	1300 limit/base >25	9 0 69 0 903 1057 1040 1236 3198 current 4 4	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm	ASTM D5185m ASTM D5185m	1300 limit/base >25 >20	9 0 69 0 903 1057 1040 1236 3198 <u>current</u> 4 <1 2 <u>current</u> 0.4	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1 0.2	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 0 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 limit/base >25 >20 limit/base	9 0 69 0 903 1057 1040 1236 3198 current 4 <1 2 2	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm	ASTM D5185m ASTM D5185m	1300 limit/base >25 >20 limit/base >3	9 0 69 0 903 1057 1040 1236 3198 <u>current</u> 4 <1 2 <u>current</u> 0.4	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1 0.2	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 0 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 1imit/base >25 >20 1imit/base >3 >20	9 0 69 0 903 1057 1040 1236 3198 <i>current</i> 4 <1 2 <i>current</i> 0.4 8.1	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1 0.2 6.2	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 2 0 history2 0 .3 7.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1300 1imit/base >25 >20 1imit/base >3 >20 >3 >20	9 0 69 0 903 1057 1040 1236 3198 <u>current</u> 4 <1 2 <u>current</u> 0.4 8.1 19.5	6 0 60 <1 922 1110 1082 1258 3679 history1 3 2 2 2 history1 0.2 6.2 18.0	7 0 65 <1 888 1088 928 1162 2825 history2 3 2 0 history2 0.3 7.4 18.7



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Report Id: APPLEVWB [WUSCAR] 06207617 (Generated: 06/15/2024 09:44:01) Rev: 1

Contact/Location: KEVIN HINSON - APPLEVWB

US 21224

T:

F:

Mar12/24

240 S KRESSON ST

BALTIMORE, MD

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

12.8