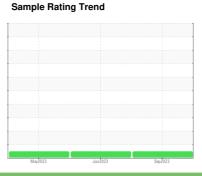


# **OIL ANALYSIS REPORT**

# (AY881H) Supermarket - Tractor FREIGHTLINER 107A3672

Component **Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 GAL)





### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

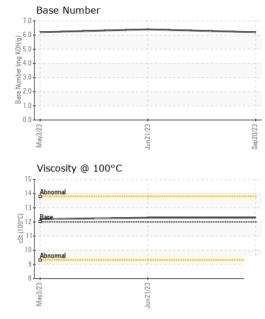
### **Fluid Condition**

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number	VIII (11.01 <b>.</b>	Client Info		PCA0104095	PCA0099861	PCA0097058
Sample Date		Client Info		20 Sep 2023	21 Jun 2023	03 May 2023
Machine Age	mls	Client Info		360099	327613	310725
Oil Age	mls	Client Info		32486	40897	24009
Oil Changed	0	Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	27	34	25
Chromium	ppm	ASTM D5185m	>5	2	1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	10	7	6
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>150	8	17	15
Tin	ppm	ASTM D5185m	>5	1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
				•	0	
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base			history2
ADDITIVES				current	history1	
ADDITIVES Boron	ppm	ASTM D5185m	2	current 9	history1	38
ADDITIVES Boron Barium	ppm	ASTM D5185m ASTM D5185m	2	current 9 0	history1 19	38
ADDITIVES Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 9 0 70	history1 19 0 74	38 0 70
ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 9 0 70 <1	history1 19 0 74 <1	38 0 70 <1
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current  9  0  70  <1  961	history1  19 0 74 <1 801	38 0 70 <1 849
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current  9  0  70  <1  961  1286	history1  19 0 74 <1 801 1208 991 1217	38 0 70 <1 849 1174 987 1247
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	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 ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current  9  0  70  <1  961  1286  1058	history1  19 0 74 <1 801 1208 991 1217 2450	38 0 70 <1 849 1174 987 1247 3292
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current  9 0 70 <1 961 1286 1058 1369 3295 current	history1  19 0 74 <1 801 1208 991 1217 2450 history1	38 0 70 <1 849 1174 987 1247 3292 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current  9  0  70  <1  961  1286  1058  1369  3295  current  6	history1  19 0 74 <1 801 1208 991 1217 2450 history1 7	38 0 70 <1 849 1174 987 1247 3292 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current  9  0  70  <1  961  1286  1058  1369  3295  current  6  2	history1  19 0 74 <1 801 1208 991 1217 2450 history1 7 0	38 0 70 <1 849 1174 987 1247 3292 history2 6 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current  9  0  70  <1  961  1286  1058  1369  3295  current  6	history1  19 0 74 <1 801 1208 991 1217 2450 history1 7	38 0 70 <1 849 1174 987 1247 3292 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINAN  Silicon  Sodium  Potassium  INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	current  9  0  70  <1  961  1286  1058  1369  3295  current  6  2  5  current	history1  19 0 74 <1 801 1208 991 1217 2450 history1  7 0 5	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base	current  9  0  70  <1  961  1286  1058  1369  3295  current  6  2  5  current  2.1	history1  19  0  74  <1  801  1208  991  1217  2450  history1  7  0  5  history1  1.7	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m  method  *ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base	current  9 0 70 <1 961 1286 1058 1369 3295 current 6 2 5 current 2.1 10.5	history1  19  0  74  <1  801  1208  991  1217  2450  history1  7  0  5  history1  1.7  10.1	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4 history2 1 8.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base	current  9  0  70  <1  961  1286  1058  1369  3295  current  6  2  5  current  2.1	history1  19  0  74  <1  801  1208  991  1217  2450  history1  7  0  5  history1  1.7	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  *ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base	current  9 0 70 <1 961 1286 1058 1369 3295 current 6 2 5 current 2.1 10.5	history1  19  0  74  <1  801  1208  991  1217  2450  history1  7  0  5  history1  1.7  10.1	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4 history2 1 8.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  *ASTM D5185m ASTM D7844  *ASTM D7624  *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >3	current  9 0 70 <1 961 1286 1058 1369 3295 current 6 2 5 current 2.1 10.5 24.5	history1  19  0  74  <1  801  1208  991  1217  2450  history1  7  0  5  history1  1.7  10.1  24.5	38 0 70 <1 849 1174 987 1247 3292 history2 6 0 4 history2 1 8.2 19.4



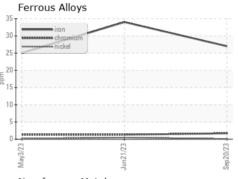
# **OIL ANALYSIS REPORT**

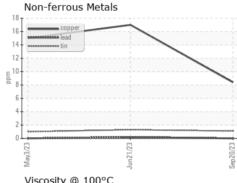


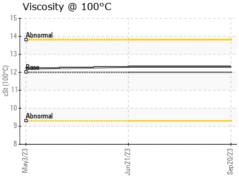
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

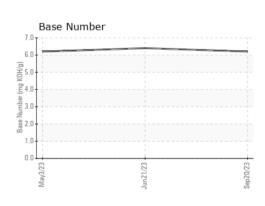
FLUID FROF		memod			HISTORY	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	12.00	12.3	12.3	12.2

### **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10659652

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0104095 : 05958439

Received Diagnosed

: 22 Sep 2023 : 22 Sep 2023 Diagnostician : Wes Davis

Transervice - Shop 1071 - Supermarket-Dayton

60 A Tower Road Dayton, NJ US 08810

Contact: Brian Quinn bquinn@transervice.com

T: F:

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)