

Area (TEMP) Walgreens - Yard Horse [Walgreens - Yard Horse] 136A81252

Diesel Engine Fluic

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

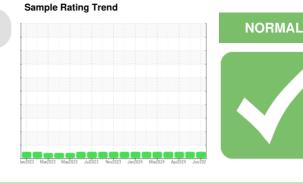
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

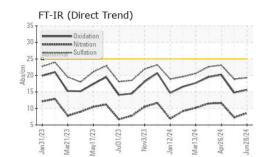
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

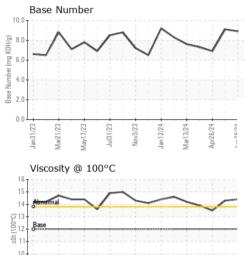


SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0119129	PCA0119132	PCA0119124
Sample Date		Client Info		28 Jun 2024	31 May 2024	26 Apr 2024
Machine Age	hrs	Client Info		8129	7967	7770
Oil Age	hrs	Client Info		200	197	1200
Oil Changed		Client Info		Oil Added	Oil Added	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	11	11	28
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	1	1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	0	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm ppm					
Boron		ASTM D5185m	2	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	0 0	0 0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 0 59	0 0 62	0 0 63
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	0 0 59 0	0 0 62 0	0 0 63 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 0 59 0 949	0 0 62 0 957	0 0 63 <1 1119
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	0 0 59 0 949 1098	0 0 62 0 957 1070	0 0 63 <1 1119 1229
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 0 59 0 949 1098 1087	0 0 62 0 957 1070 1172	0 0 63 <1 1119 1229 1170
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	0 0 59 0 949 1098 1087 1276	0 0 62 0 957 1070 1172 1267	0 0 63 <1 1119 1229 1170 1497
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	2 0 50 950 1050 995 1180 2600	0 0 59 0 949 1098 1087 1276 2901	0 0 62 0 957 1070 1172 1267 3369	0 0 63 <1 1119 1229 1170 1497 4092
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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	2 0 50 950 1050 995 1180 2600	0 0 59 0 949 1098 1087 1276 2901 current	0 0 62 0 957 1070 1172 1267 3369 history1	0 0 63 <1 1119 1229 1170 1497 4092 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 0 59 0 949 1098 1087 1276 2901 current 3	0 0 62 0 957 1070 1172 1267 3369 history1 4	0 0 63 <1 1119 1229 1170 1497 4092 history2 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 0 59 0 949 1098 1087 1276 2901 current 3 <1	0 0 62 0 957 1070 1172 1267 3369 history1 4 0	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 0 59 0 949 1098 1087 1276 2901 current 3 < 1 1	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base	0 0 59 0 949 1098 1087 1276 2901 current 3 <1 1 1	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2 2 history1	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	0 0 59 0 949 1098 1087 1276 2901 <i>current</i> 3 <1 1 <i>current</i> 0.6	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2 <u>history1</u> 0.5	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2 2 history2 1.2
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 ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 i mit/base >25 >20 i mit/base >3 >20	0 0 59 0 949 1098 1087 1276 2901 <i>current</i> 3 <1 1 <i>current</i> 0.6 8.6	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2 history1 0.5 7.3	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2 history2 1.2 1.2 11.6
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 ASTM D5185m	2 0 50 1050 955 1050 995 1180 2600 imit/base >25 imit/base >3 >20 >3 >20	0 0 59 0 949 1098 1087 1276 2901 <i>current</i> 3 <1 1 1 <i>current</i> 0.6 8.6 19.3	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2 <u>history1</u> 0.5 7.3 18.9	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2 <u>history2</u> 1.2 1.2 1.2 1.2 11.6 23.1
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 TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 0 50 0 950 1050 995 1180 2600 2600 255 20 220 20 20 33 20 330	0 0 59 0 949 1098 1087 1276 2901 current 3 <1 1 current 0.6 8.6 19.3 current	0 0 62 0 957 1070 1172 1267 3369 history1 4 0 2 history1 0.5 7.3 18.9 history1	0 0 63 <1 1119 1229 1170 1497 4092 history2 6 2 2 history2 1.2 1.2 11.6 23.1 history2



OIL ANALYSIS REPORT





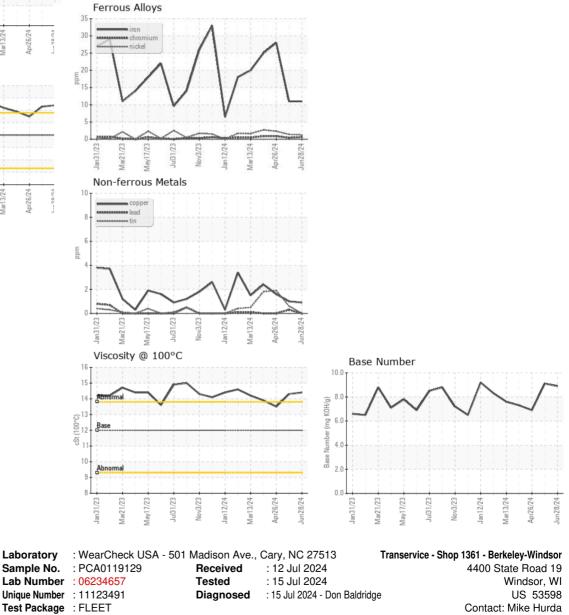
Jul31/23

01/2/23

Jan 12/24

Mar13/24 pr26/24

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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	14.4	14.3	13.5
GRAPHS						





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8

Jan31/23 Mar21/23 /lav17/23

> Test Package : FLEET Certificate 12367 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)

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Submitted By: Mike Hurda