

# (TEMP) Walgreens - Yard Horse [Walgreens - Yard Horse] 136A81259

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

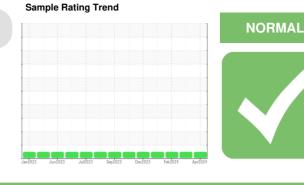
All component wear rates are normal.

#### 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 INFOR	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PCA0105929	PCA0105880	PCA0105938		
Sample Date		Client Info		05 Apr 2024	06 Mar 2024	12 Feb 2024		
Machine Age	hrs	Client Info		5749	5601	5481		
Oil Age	hrs	Client Info		200	200	200		
Oil Changed		Client Info		Oil Added	Oil Added	Oil Added		
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 METALS method limit/base current history1 history2								
Iron	ppm	ASTM D5185m	>100	18	14	11		
Chromium	ppm	ASTM D5185m	>20	2	1	1		
Nickel	ppm	ASTM D5185m	>4	2	1	2		
Titanium	ppm	ASTM D5185m		<1	0	<1		
Silver	ppm	ASTM D5185m	>3	0	0	<1		
Aluminum	ppm	ASTM D5185m	>20	4	5	1		
Lead	ppm	ASTM D5185m	>40	<1	0	<1		
Copper	ppm	ASTM D5185m	>330	4	3	1		
Tin	ppm	ASTM D5185m	>15	<1	<1	<1		
Vanadium	ppm	ASTM D5185m		0	0	<1		
Cadmium	ppm	ASTM D5185m		<1	0	<1		
ADDITIVES		method	limit/base	current	history1	history2		
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current <1	history1 1	history2 1		
	ppm ppm	ASTM D5185m						
Boron		ASTM D5185m	2	<1	1	1		
Boron Barium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0	<1 0	1 0	1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	<1 0 61	1 0 60	1 0 56		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	<1 0 61 <1	1 0 60 <1	1 0 56 <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	<1 0 61 <1 926	1 0 60 <1 987	1 0 56 <1 882		
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	<1 0 61 <1 926 1071	1 0 60 <1 987 1105	1 0 56 <1 882 991		
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	<1 0 61 <1 926 1071 1081	1 0 60 <1 987 1105 1103	1 0 56 <1 882 991 991		
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 0 950 1050 995 1180	<1 0 61 <1 926 1071 1081 1241	1 0 60 <1 987 1105 1103 1304	1 0 56 <1 882 991 991 1140		
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	<1 0 61 <1 926 1071 1081 1241 3242	1 0 60 <1 987 1105 1103 1304 3476	1 0 56 <1 882 991 991 1140 3434		
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	2 0 50 0 950 1050 995 1180 2600	<1 0 61 <1 926 1071 1081 1241 3242 current	1 0 60 <1 987 1105 1103 1304 3476 history1	1 0 56 <1 882 991 991 1140 3434 history2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b>	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	2 0 50 0 950 1050 995 1180 2600	<1 0 61 <1 926 1071 1081 1241 3242 current 5	1 0 60 <1 987 1105 1103 1304 3476 history1 4	1 0 56 <1 882 991 991 1140 3434 history2 4		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	2 0 50 950 1050 995 1180 2600 Limit/base	<1 0 61 <1 926 1071 1081 1241 3242 current 5 2 6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4	1 0 56 <1 882 991 991 1140 3434 history2 4 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20	<1 0 61 <1 926 1071 1081 1241 3242 current 5 2 6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 6	1 0 56 <1 882 991 991 1140 3434 history2 4 0 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 0 950 1050 995 1180 2600 <b>limit/base</b> >25	<1 0 61 <1 926 1071 1081 1241 3242 current 5 2 6 6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 6 history1	1 0 56 <1 882 991 991 1140 3434 history2 4 0 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	<1 0 61 <1 926 1071 1081 1241 3242 current 5 2 6 current 0.7	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 6 history1 0.6	1 0 56 <1 882 991 991 1140 3434 history2 4 0 2 history2 0.5		
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 <b>i</b> mit/base >25 >20 <b>i</b> mit/base >3 >20	<1 0 61 <1 926 1071 1081 1241 3242 <i>current</i> 5 2 6 <i>current</i> 0.7 9.6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 6 history1 0.6 8.7	1 0 56 <1 882 991 991 1140 3434 history2 4 0 2 history2 0.5 7.9		
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 <b>TS</b> ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >25 20 20 <b>imit/base</b> >3 20 30	<1 0 61 <1 926 1071 1081 1241 3242 <i>current</i> 5 2 6 <i>current</i> 0.7 9.6 19.6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 4 6 history1 0.6 8.7 18.7 18.7	1 0 56 <1 882 991 991 1140 3434 history2 4 0 2 history2 0.5 7.9 18.7 history2		
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 D7844 *ASTM D7624 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >25 <b>imit/base</b> >3 >20	<1 0 61 <1 926 1071 1081 1241 3242 <u>current</u> 5 2 6 <u>current</u> 0.7 9.6 19.6	1 0 60 <1 987 1105 1103 1304 3476 history1 4 4 4 6 <u>history1</u> 0.6 8.7 18.7	1 0 56 <1 882 991 991 1140 3434 history2 4 0 2 history2 0.5 7.9 18.7		

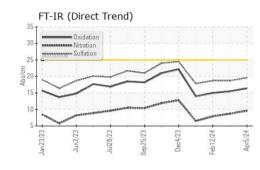


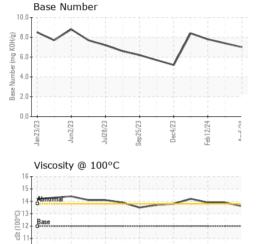
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Jan23/23

# **OIL ANALYSIS REPORT**





ul28/23

ep25/23

Dec4/23

Feb12/24 -

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	13.6	13.9	13.9
GRAPHS						

