

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 472992

Component Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

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.

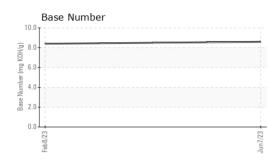
Fluid Condition

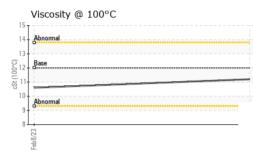
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

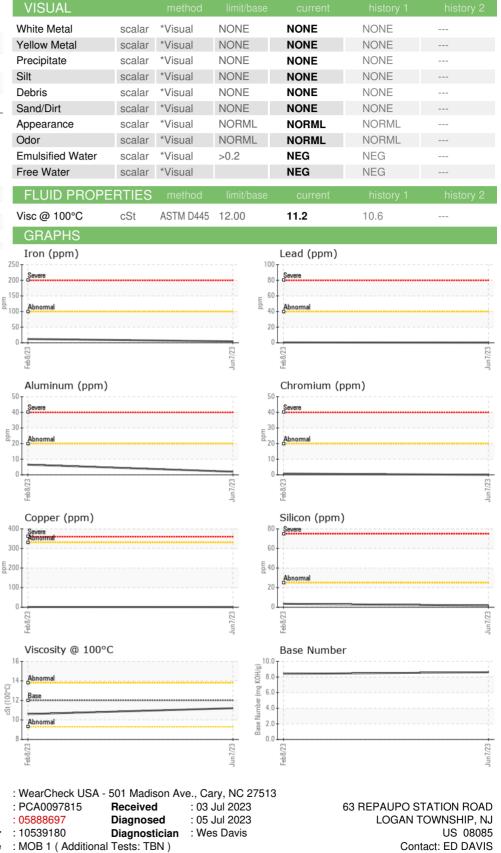
IS)			Feb2023	Jun2023		
SAMPLE INFORI	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0097815	PCA0090000	
Sample Date		Client Info		07 Jun 2023	08 Feb 2023	
Machine Age	mls	Client Info		229390	0	
Oil Age	mls	Client Info		0	2317	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	5	12	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m	~ 7	0	0	
Silver	ppm	ASTM D5185m	>3	۰ <1	0	
Aluminum	ppm	ASTM D5185m	>20	2	6	
Lead	ppm	ASTM D5185m	>40	<1	<1	
Copper	ppm	ASTM D5185m	>330	<1	1	
Tin	ppm	ASTM D5185m	>15	<1	0	
Vanadium	ppm	ASTM D5185m	210	0	0	
Cadmium	ppm	ASTM D5185m	limit/base	0	0	 history 2
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history 1	history 2
Cadmium ADDITIVES Boron	ppm ppm	ASTM D5185m method ASTM D5185m	2	0 current 30	0 history 1 10	history 2
Cadmium ADDITIVES Boron Barium	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2 0	0 current 30 2	0 history 1 10 0	history 2
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 current 30 2 67	0 history 1 10 0 66	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	0 current 30 2 67 <1	0 history 1 10 0 66 <1	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 current 30 2 67 <1 764	0 history 1 10 0 66 <1 874	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	0 current 30 2 67 <1 764 1085	0 history 1 10 0 66 <1 874 1081	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995	0 current 30 2 67 <1 764 1085 943	0 history 1 10 0 66 <1 874 1081 974	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	0 current 30 2 67 <1 764 1085 943 1087	0 history 1 10 0 66 <1 874 1081 974 1194	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method 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 current 30 2 67 <1 764 1085 943 1087 3040	0 history 1 10 0 66 <1 874 1081 974 1194 3203	history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method 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 limit/base	0 current 30 2 67 <1 764 1085 943 1087 3040 current	0 history 1 10 0 66 <1 874 1081 974 1081 974 1194 3203 history 1	history 2 history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180 2600	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4	history 2 history 2 history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method 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 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3	history 2 history 2 history 2
Cadmium ADDITIVES 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 method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2	0 history 1 10 0 66 <1 874 1081 974 1081 974 1194 3203 history 1 4 3 <1	history 2 history 2 history 2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 <1 history 1	history 2 history 2 history 2
Cadmium 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 method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0 2 0 2 current 0.1	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 <1 4 3 <1 history 1 0.2	history 2 history 2 history 2
Cadmium ADDITIVES 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 method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0 2 0 2 current	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 3 <1 4 3 (1 0.2 8.3	history 2 history 2 history 2 history 2 history 2
Cadmium 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 method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0 2 0 2 current 0.1	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 <1 4 3 <1 history 1 0.2	history 2 history 2 history 2 history 2 history 2
Cadmium 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 >25 .20 limit/base >3 >20	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0 2 current 0.1 6.1	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 3 <1 4 3 (1 0.2 8.3	history 2
Cadmium 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 D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >20 imit/base >3 >20	0 current 30 2 67 <1 764 1085 943 1087 3040 current 2 0 2 0 2 current 0.1 6.1 18.3	0 history 1 10 0 66 <1 874 1081 974 1194 3203 history 1 4 3 <1 4 3 <1 0.2 8.3 18.8	history 2 history 2 history 2 history 2 history 2 history 2

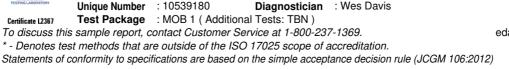


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Laboratory

Sample No.

Lab Number