

OIL ANALYSIS REPORT

(WXQ193) **ISUZU 10880**

Component **Diesel Engine**

PETRO CANADA DURON SHP 15W40 (4 GAL)

Sample Rating Trend



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

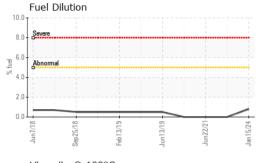
Fluid Condition

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		Client Info		GFL0109113	GFL0109105	GFL0086205
Sample Date		Client Info		25 Jan 2024	15 Jan 2024	26 Sep 2023
Machine Age	hrs	Client Info		16343	16263	15758
Oil Age	hrs	Client Info		6708	16263	15758
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
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	14	8	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	77	<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead		ASTM D5185m	>40	ง <1	0	<1
	ppm	ASTM D5185m	>330	<1	1	1
Copper Tin	ppm		>15	0	<1	<1
Vanadium	ppm	ASTM D5185m ASTM D5185m	>15	0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ppm	AS IIVI DO 100III		<u> </u>	U	0
ADDITIVEC			limit/base		history1	history2
ADDITIVES		method	IIIIII/Dase	current	HISTOLAL	HIStoryZ
Boron	ppm	ASTM D5185m	0	15	27	12
Boron Barium	ppm			15 0	•	
Boron		ASTM D5185m	0	15	27	12
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	15 0	27 0 67 <1	12
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	15 0 66	27 0 67	12 2 64
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	15 0 66 <1	27 0 67 <1	12 2 64 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	15 0 66 <1 745	27 0 67 <1 769	12 2 64 <1 810
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	15 0 66 <1 745 1197	27 0 67 <1 769 1129	12 2 64 <1 810 1040 929 1120
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	15 0 66 <1 745 1197 1015	27 0 67 <1 769 1129 952	12 2 64 <1 810 1040 929
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 ASTM D5185m	0 0 60 0 1010 1070 1150	15 0 66 <1 745 1197 1015	27 0 67 <1 769 1129 952 1173	12 2 64 <1 810 1040 929 1120
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	0 0 60 0 1010 1070 1150 1270 2060	15 0 66 <1 745 1197 1015 1140 2866	27 0 67 <1 769 1129 952 1173 2995	12 2 64 <1 810 1040 929 1120 2821
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	15 0 66 <1 745 1197 1015 1140 2866	27 0 67 <1 769 1129 952 1173 2995 history1	12 2 64 <1 810 1040 929 1120 2821 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	15 0 66 <1 745 1197 1015 1140 2866 current	27 0 67 <1 769 1129 952 1173 2995 history1	12 2 64 <1 810 1040 929 1120 2821 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	15 0 66 <1 745 1197 1015 1140 2866 current 4	27 0 67 <1 769 1129 952 1173 2995 history1 4	12 2 64 <1 810 1040 929 1120 2821 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	15 0 66 <1 745 1197 1015 1140 2866 current 4 3	27 0 67 <1 769 1129 952 1173 2995 history1 4 3	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 >5	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 >5	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20 >5	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0 current 1.8	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8 history1	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0 history2 1.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7844 *ASTM D7844	0 0 0 0 1010 1150 1270 2060 limit/base >25 >20 >5	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0 current 1.8 8.8	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8 history1 0.4 7.8	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0 history2 1.8 9.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D78185m ASTM D7624 *ASTM D7624 *ASTM D76185m Method	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0 current 1.8 8.8 20.4 current	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8 history1 0.4 7.8 18.0 history1	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0 history2 1.8 9.2 21.2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 >5 limit/base >3 >20 >30	15 0 66 <1 745 1197 1015 1140 2866 current 4 3 0 <1.0 current 1.8 8.8 20.4	27 0 67 <1 769 1129 952 1173 2995 history1 4 3 2 0.8 history1 0.4 7.8 18.0	12 2 64 <1 810 1040 929 1120 2821 history2 4 3 <1 <1.0 history2 1.8 9.2 21.2



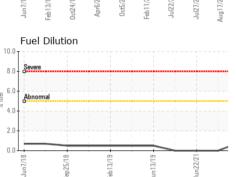
OIL ANALYSIS REPORT



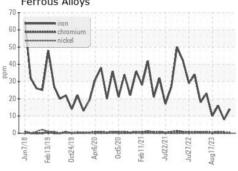
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

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Abn	Feb13/19	Oct24/19	Apr6/20	0ct5/20	Feb11/21	Jul22/21	Jul27/22	Aug17/23

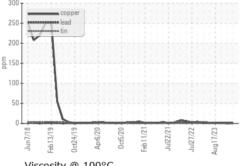


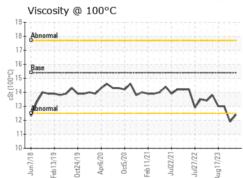


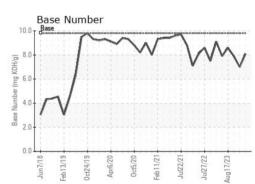
GRAPHS Ferrous Alloys















Laboratory Sample No. Lab Number Unique Number : 10849166

: GFL0109113 : 06072489

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 29 Jan 2024

Diagnosed : 30 Jan 2024 Diagnostician : Sean Felton

Test Package : FLEET (Additional Tests: FuelDilution) 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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