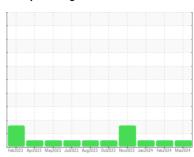


OIL ANALYSIS REPORT

Sample Rating Trend





2203

Machine Id

Natural Gas Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

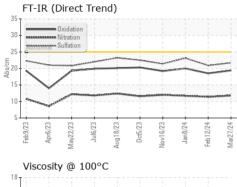
Fluid Condition

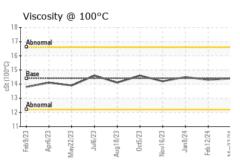
The condition of the oil is acceptable for the time in service.

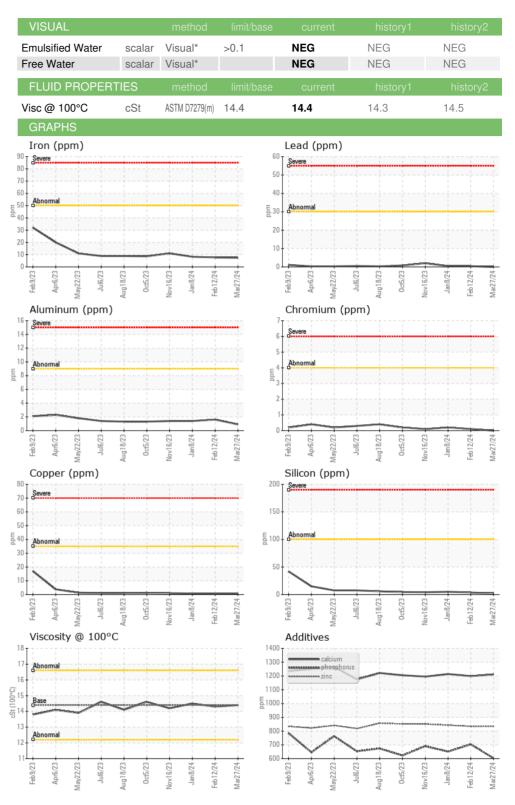
		Feb2023 Apr2	023 May2023 Jul2023 Aug2	023 Oct2023 Nov2023 Jan2024 Feb2	024 Mar2024	
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0917617	WC0890919	WC0891078
Sample Date		Client Info		27 Mar 2024	12 Feb 2024	08 Jan 2024
Machine Age	kms	Client Info		88455	79161	72383
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method				
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	8	8	8
Chromium	ppm	ASTM D5185(m)	>4	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	<1	2	1
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>35	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
			050	13		
Boron	ppm	ASTM D5185(m)	250	13	16	13
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	10	0	16 0	13 0
						0 53
Barium Molybdenum Manganese	ppm	ASTM D5185(m)	100	0 52 0	0 52 0	0
Barium Molybdenum Manganese Magnesium	ppm	ASTM D5185(m) ASTM D5185(m)	10	0 52 0 778	0 52 0 792	0 53 0 774
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	10 100 450 3000	0 52 0 778 1211	0 52 0 792 1199	0 53 0 774 1214
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150	0 52 0 778 1211 603	0 52 0 792 1199 704	0 53 0 774 1214 651
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350	0 52 0 778 1211 603 835	0 52 0 792 1199 704 834	0 53 0 774 1214 651 843
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150	0 52 0 778 1211 603 835 1870	0 52 0 792 1199 704 834 2033	0 53 0 774 1214 651 843 2003
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250	0 52 0 778 1211 603 835	0 52 0 792 1199 704 834 2033	0 53 0 774 1214 651 843 2003 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250	0 52 0 778 1211 603 835 1870 <1	0 52 0 792 1199 704 834 2033 <1	0 53 0 774 1214 651 843 2003 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250	0 52 0 778 1211 603 835 1870 <1	0 52 0 792 1199 704 834 2033 <1 history1	0 53 0 774 1214 651 843 2003 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250	0 52 0 778 1211 603 835 1870 <1 current	0 52 0 792 1199 704 834 2033 <1 history1 4 2	0 53 0 774 1214 651 843 2003 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158 >20	0 52 0 778 1211 603 835 1870 <1	0 52 0 792 1199 704 834 2033 <1 history1 4 2 <1	0 53 0 774 1214 651 843 2003 <1 history2 5 3
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158	0 52 0 778 1211 603 835 1870 <1 current	0 52 0 792 1199 704 834 2033 <1 history1 4 2	0 53 0 774 1214 651 843 2003 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158 >20	0 52 0 778 1211 603 835 1870 <1 current 2 2 <1 current 0	0 52 0 792 1199 704 834 2033 <1 history1 4 2 <1 history1 0	0 53 0 774 1214 651 843 2003 <1 history2 5 3 0 history2 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158 >20	0 52 0 778 1211 603 835 1870 <1 current 2 2 <1 current	0 52 0 792 1199 704 834 2033 <1 history1 4 2 <1 history1	0 53 0 774 1214 651 843 2003 <1 history2 5 3 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158 >20 limit/base	0 52 0 778 1211 603 835 1870 <1 current 2 2 <1 current 0	0 52 0 792 1199 704 834 2033 <1 history1 4 2 <1 history1 0	0 53 0 774 1214 651 843 2003 <1 history2 5 3 0 history2 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m)	10 100 450 3000 1150 1350 4250 limit/base >+100 >158 >20 limit/base	0 52 0 778 1211 603 835 1870 <1 current 2 2 <1 current 0 11.8	0 52 0 792 1199 704 834 2033 <1 history1 4 2 <1 history1 0 11.4	0 53 0 774 1214 651 843 2003 <1 history2 5 3 0 history2 0 11.7



OIL ANALYSIS REPORT









CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0917617 Lab Number : 02626577 Unique Number : 5759709 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received **Tested**

Diagnosed

: 04 Apr 2024 : 04 Apr 2024

: 04 Apr 2024 - Wes Davis

CITY OF HAMILTON 2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM

MOUNT HOPE, ON CA LOR 1W0 Contact: Jeff Parr jeff.parr@hamilton.ca

T: (905)546-2424

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F: (905)679-4502