

OIL ANALYSIS REPORT

GM Seattle Off Raod Shop [GM Seattle Off Raod Shop] 24-844

Diesel Engine

Fluid CASTROL CRB Multi 15W-40 CK-4 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

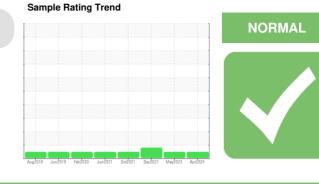
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

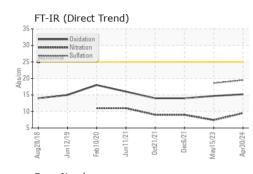
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

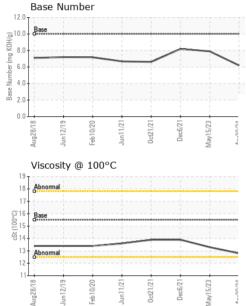


	history2
Sample Number Client Info PE0003124 PE0001401 PE12	2291025
Sample Date Client Info 30 Apr 2024 15 May 2023 06 D	ec 2021
Machine Age hrs Client Info 3895 3515 2828	3
Oil Age hrs Client Info 629 250 416	
Oil Changed Client Info Changed Not Changd Char	nged
Sample Status NORMAL NORMAL ABN	ORMAL
CONTAMINATION method limit/base current history1	history2
Fuel WC Method >5 <1.0	1.0
Water WC Method >0.2 NEG NEG N	EG
Glycol WC Method NEG NEG N	EG
WEAR METALS method limit/base current history1	history2
Iron ppm ASTM D5185m >100 31 12 5	
Chromium ppm ASTM D5185m >20 <1	
Nickel ppm ASTM D5185m >4 0 0 0	
Titanium ppm ASTM D5185m 0 <1	
Silver ppm ASTM D5185m >3 0 0 <7	1
Aluminum ppm ASTM D5185m >20 1 2 5	
Lead ppm ASTM D5185m >40 0 0	
Copper ppm ASTM D5185m >330 1 1 \triangle 31	14
Tin ppm ASTM D5185m >15 0 0 0	
Antimony ppm ASTM D5185m 0	
Vanadium ppm ASTM D5185m <1	
Cadmium ppm ASTM D5185m 0	-
ADDITIVES method limit/base current history1	history2
Boron ppm ASTM D5185m 44 62 22	2
Barium ppm ASTM D5185m 0 0 0	
Molybdenum ppm ASTM D5185m 42 44 5	
Manganese ppm ASTM D5185m <1	-
Magnesium ppm ASTM D5185m 424 477 10)5
	05 275
Calcium ppm ASTM D5185m 1907 1765 22	
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94	275
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444	275 42 103
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Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 1 Silicon ppm ASTM D5185m >25 4 3 4	275 42 103
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 1 Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 21 4	275 42 103
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Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 1 Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 21 4 INFRA-RED method limit/base current history1 1	275 42 103 - history2 history2
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 21 4 Potassium ppm ASTM D5185m >20 1 2 4 INFRA-RED method limit/base current history1 2 Soot % % *ASTM D7844 >3 0.2 0.2 0.2	275 42 103 - history2 history2 2
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 Mathematical stress Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 21 4 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 >3 0.2 0.2 0. Nitration Abs/cm *ASTM D7415 >30 19.5 18.6	275 42 103 - history2 history2 2
Calcium ppm ASTM D5185m 1907 1765 22 Phosphorus ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1030 1034 94 Zinc ppm ASTM D5185m 1251 1271 11 Sulfur ppm ASTM D5185m 4056 4444 CONTAMINANTS method limit/base current history1 Main Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 21 4 Viscon ppm ASTM D5185m >20 1 2 4 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 >3 0.2 0.2 0. Nitration Abs/cm *ASTM D7415 >30 19.5 18.6	275 42 103 - history2 2 2 - history2

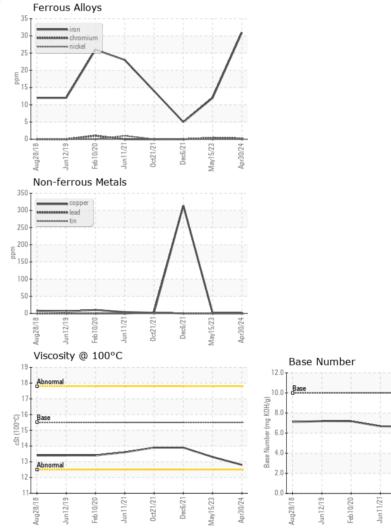
Submitted By: Dump Truck Shop - Zack

OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	12.8	13.3	13.9
GRAPHS						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Gary Merlino Construction - Off Road Shop Sample No. : PE0003124 Received 9125 10TH AVE SOUTH : 14 Jun 2024 Lab Number : 06211069 Tested : 18 Jun 2024 SEATTLE, WA US 98108 Unique Number : 11083933 Diagnosed : 18 Jun 2024 - Angela Borella Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN) Contact: Jesse Patterson Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. oilsamples@gmccinc.com T: 1(866)292-1303 * - 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) F:

Submitted By: Dump Truck Shop - Zack

Dec6/21

May15/23

Apr30/24