

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

DODGE 01

Diesel Engine Fluid AMSOIL ASM 0W20 (--- QTS)

DIAGNOSIS

A Recommendation

Oil and filter change at the time of sampling has been noted. 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.

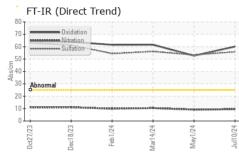
Fluid Condition

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

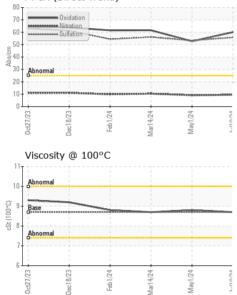
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0071105	PCA0071104	PCA0071103
Sample Date		Client Info		10 Jul 2024	01 May 2024	14 Mar 2024
Machine Age	mls	Client Info		5000	4500	54900
Oil Age	mls	Client Info		5000	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL
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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	10	8	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	34	26	27
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 140	history1 215	history2 215
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	140	215	215
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	140 0	215 2	215 <1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	140 0 195	215 2 192	215 <1 196
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	140 0 195 <1	215 2 192 <1	215 <1 196 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	140 0 195 <1 816	215 2 192 <1 744	215 <1 196 <1 796 1152 679
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	140 0 195 <1 816 1144	215 2 192 <1 744 1124	215 <1 196 <1 796 1152
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	limit/base	140 0 195 <1 816 1144 671	215 2 192 <1 744 1124 696	215 <1 196 <1 796 1152 679
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	limit/base	140 0 195 <1 816 1144 671 764	215 2 192 <1 744 1124 696 742	215 <1 196 <1 796 1152 679 759
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	limit/base	140 0 195 <1 816 1144 671 764 2775	215 2 192 <1 744 1124 696 742 3035	215 <1 196 <1 796 1152 679 759 3045
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	limit/base	140 0 195 <1 816 1144 671 764 2775 current	215 2 192 <1 744 1124 696 742 3035 history1	215 <1 196 <1 796 1152 679 759 3045 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25	140 0 195 <1 816 1144 671 764 2775 current 6	215 2 192 <1 744 1124 696 742 3035 history1 6	215 <1 196 <1 796 1152 679 759 3045 history2 10
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25	140 0 195 <1 816 1144 671 764 2775 current 6 6	215 2 192 <1 744 1124 696 742 3035 history1 6 2	215 <1 196 <1 796 1152 679 759 3045 history2 10 3
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	limit/base >25 >20	140 0 195 <1 816 1144 671 764 2775 current 6 6 2	215 2 192 <1 744 1124 696 742 3035 history1 6 2 2	215 <1 196 <1 796 1152 679 759 3045 history2 10 3 3 3
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 TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	140 0 195 <1 816 1144 671 764 2775 current 6 6 2 2	215 2 192 <1 744 1124 696 742 3035 history1 6 2 2 2 history1	215 <1 196 <1 796 1152 679 759 3045 history2 10 3 3 3
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 ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	140 0 195 <1 816 1144 671 764 2775 current 6 6 6 2 2 current	215 2 192 <1 744 1124 696 742 3035 history1 6 2 2 2 history1 0.1	215 <1 196 <1 796 1152 679 759 3045 history2 10 3 3 3 history2 0.1
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 TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	140 0 195 <1 816 1144 671 764 2775 current 6 6 2 current 0.1 9.5	215 2 192 <1 744 1124 696 742 3035 history1 6 2 2 2 history1 0.1 9.2	215 <1 196 <1 796 1152 679 759 3045 history2 10 3 3 3 history2 0.1 10.4
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 TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20 >3 >20	140 0 195 <1 816 1144 671 764 2775 current 6 6 2 current 0.1 9.5 55.8	215 2 192 <1 744 1124 696 742 3035 history1 6 2 2 2 history1 0.1 9.2 53.3	215 <1 196 <1 796 1152 679 759 3045 history2 10 3 3 history2 0.1 10.4 56.1



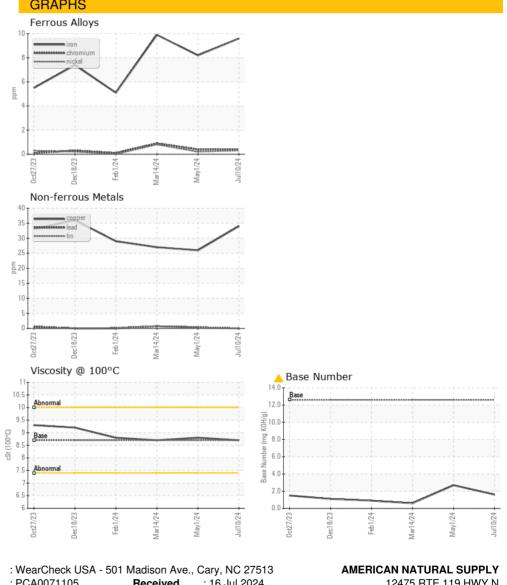
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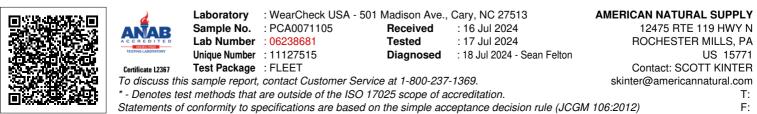


FT-IR (Direct Trend)



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	8.7	8.7	8.8	8.7
GRAPHS						





Contact/Location: SCOTT KINTER - AMEROCPA