

OIL ANALYSIS REPORT

Area **CONSTRUCTORS, INC** 040605

Gasoline Engine Fluid MOBIL CLEAN 5W30 5000 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

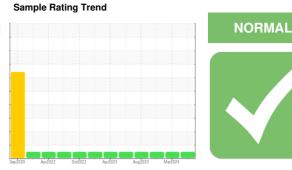
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

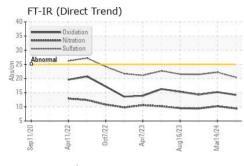
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

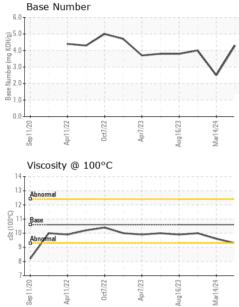


Sample Date Cli Machine Age hrs Cli Oil Age hrs Cli Oil Changed Cli Sample Status Cli Sample Status CONTAMINATION m Fuel WC Water WC Glycol WC WEAR METALS m Iron ppm AST Chromium ppm AST Nickel ppm AST Silver ppm AST Aluminum ppm AST Copper ppm AST Tin ppm AST Cadmium ppm AST ADDITIVES m AST	C Method >- C Method >1 C Method TM D5185m >2 TM D5185m >2	10 38 21: Ch NC limit/base 4.0 0.2 limit/base 150 20 5 2 40 50 155 10	Jun 2024 14 27 34 3 34 nanged C	4 Mar 2024 (0 614 2 40 2 changed (0	SBP0004950 09 Nov 2023 3274 290 Changed NORMAL 1.0 NEG NEG 10 0 0 0 0 0 0 0 0 0 0 0 0 0
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Oil Changed Cliana Sample Status Cliana CONTAMINATION m Fuel WC Water WC Glycol WC WEAR METALS m Iron ppm AST Chromium ppm AST Nickel ppm AST Silver ppm AST Aluminum ppm AST Lead ppm AST Tin ppm AST Vanadium ppm AST ADDITIVES m	ient Info C Method C Method C Method C Method C Method C Method M D5185m M D51	Christic Christian (Christian (Ch	nanged C nanged C DRMAL N current I <1.0 I I I I I I I I I I I I I I I I I I I I <th>hanged (IORMAL 1 <1.0 NEG 1 NEG 1 history1 6 0 0 <1 0 2 0 2 0 3</th> <th>Changed NORMAL history2 <1.0 NEG NEG history2 <1 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0</th>	hanged (IORMAL 1 <1.0 NEG 1 NEG 1 history1 6 0 0 <1 0 2 0 2 0 3	Changed NORMAL history2 <1.0 NEG NEG history2 <1 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0
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IronppmASTChromiumppmASTNickelppmASTTitaniumppmASTSilverppmASTAluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m > TM D5185m >2 TM D5185m >	150 20 5 2 2 40 50 155 10	<1 0 <1 0 0 <1 0 <1 0 <1	6 0 2 2 3	<1 0 0 0 0 2 0 0 0
ChromiumppmASTNickelppmASTTitaniumppmASTSilverppmASTAluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m >2 TM D5185m >1 TM D5185m >1 TM D5185m >2 TM D5185m >2 TM D5185m >2 TM D5185m >1	20 20 5 5 2 40 50 155 10	0 <10<10<1	0 0 <1 0 2 0 3	0 0 0 2 0 0
NickelppmASTTitaniumppmASTSilverppmASTAluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m >5 TM D5185m 7 TM D5185m >2 TM D5185m >4	5 2 40 50 155 10	<1 0 0 <1 0 <1	0 <1 0 2 0 3	0 0 0 2 0 0
TitaniumppmASTSilverppmASTAluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m >2 TM D5185m >2 TM D5185m >4 TM D5185m >5	2 40 50 155 10	0 0 <1 0 <1	<1 0 2 0 3	0 0 2 0 0
SilverppmASTAluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m >2 TM D5185m >4 TM D5185m >5 TM D5185m >	2 40 50 155 10	0 <1 0 <1	0 2 0 3	0 2 0 0
AluminumppmASTLeadppmASTCopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m >4 TM D5185m >5 TM D5185m > TM D5185m > TM D5185m > TM D5185m >	40 50 155 10	<1 0 <1	2 0 3	2 0 0
Lead ppm AST Copper ppm AST Tin ppm AST Vanadium ppm AST Cadmium ppm AST ADDITIVES m	TM D5185m >	50 155 10	0 <1	0 3	0 0
CopperppmASTTinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m > TM D5185m > TM D5185m	155 10	<1	3	0
TinppmASTVanadiumppmASTCadmiumppmASTADDITIVESm	TM D5185m > TM D5185m	10			
Vanadium ppm AST Cadmium ppm AST ADDITIVES m	TM D5185m		0	~1	0
Cadmium ppm AST ADDITIVES m				< I	0
ADDITIVES m			0	0	0
_	TM D5185m		2	0	0
Deven Aut	nethod	limit/base	current	history1	history2
Boron ppm AST	TM D5185m		85	50	45
Barium ppm AST	TM D5185m		0	0	0
Molybdenum ppm AST	TM D5185m		66	68	66
Manganese ppm AST	TM D5185m		1	<1	<1
Magnesium ppm AST	TM D5185m		511	511	508
Calcium ppm AST	TM D5185m		1248	1184	1165
Phosphorus ppm AST	TM D5185m		661	674	679
Zinc ppm AST	TM D5185m		766	783	786
Sulfur ppm AST	TM D5185m		3048	3098	2631
CONTAMINANTS m	nethod	limit/base	current	history1	history2
		30	8	11	10
Sodium ppm AST	TM D5185m >4	400	3	3	0
Potassium ppm AST	TM D5185m >2	20	3	<1	0
INFRA-RED m	nethod	limit/base	current	history1	history2
Soot % % *AS	STM D7844		0	0	0
Nitration Abs/cm *AS	STM D7624 >2	20	9.4	10.2	9.4
Sulfation Abs/.1mm *AS	STM D7415 >3	30	20.4	22.2	21.4
FLUID DEGRADATION m	nethod	limit/base			
Oxidation Abs/.1mm *AS		IIIIII/Dase	current	history1	history2
Base Number (BN) mg KOH/g AST			current 14.2	history1 15.2	history2 14.3
INFRA-RED m Soot % *AS	nethod STM D7844	limit/base	current 0	history1 0	history2 0



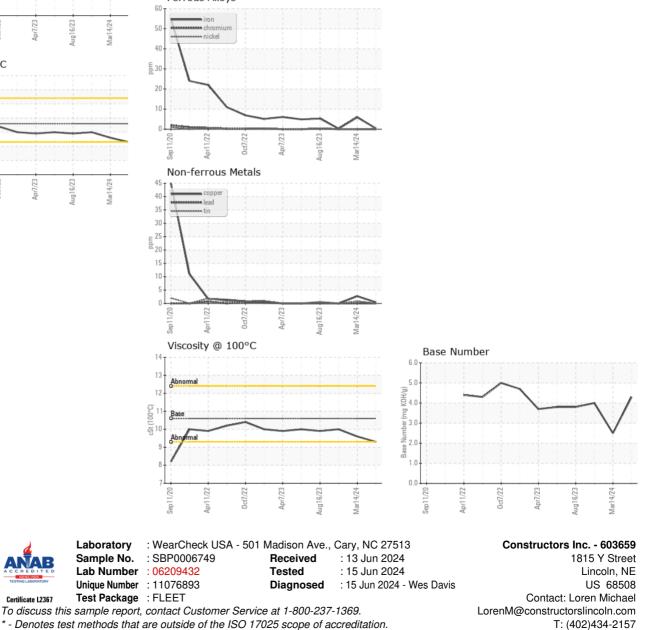
OIL ANALYSIS REPORT





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 PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.6	9.3	9.6	10.0
CRADUS						

Ferrous Alloys



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate 12367

Submitted By: Loren Michael

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