

## **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Machine Id

## **MANDEL13201**

Component New (Unused) Oil Fluid MOBIL DTE ULTRA 24 ISO 32 (--- GAL)

#### DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0906825		
Sample Date		Client Info		17 Apr 2024		
Machine Age	mths	Client Info		2		
Oil Age	mths	Client Info		0		
Oil Changed		Client Info		Filtered		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>5	0		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m	-	0		
Silver	ppm	ASTM D5185m	>5	<1		
Aluminum	ppm	ASTM D5185m	>5	0		
_ead	ppm	ASTM D5185m	>5 >5	0		
Copper	ppm	ASTM D5185m	>5	0		
Tin	ppm	ASTM D5185m	>5	۰ <1		
/anadium	ppm	ASTM D5185m	20	0		
Cadmium		ASTM D5185m		۰ <1		
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Volybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		1		
Calcium	ppm	ASTM D5185m		61		
Phosphorus	ppm	ASTM D5185m		337		
Zinc	ppm	ASTM D5185m		521		
Sulfur	ppm	ASTM D5185m		803		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	694		
Particles >6µm		ASTM D7647	>1300	129		
Particles >14µm		ASTM D7647	>160	17		
Particles >21µm		ASTM D7647	>40	5		
Particles >38µm		ASTM D7647	>10	0		
- Particles >71μm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/11		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.55		
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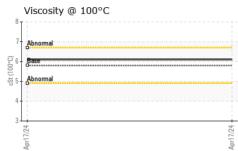
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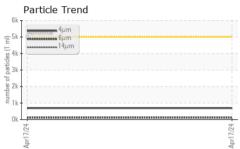
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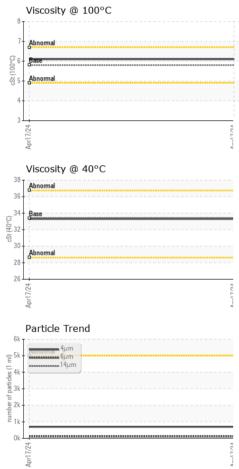


# **OIL ANALYSIS REPORT**

VISUAL







White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water Free Water Visc @ 40°C Visc @ 100°C Viscosity Index (VI)	cSt	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	NONE NONE NONE NONE NORML NORML	NONE NONE NONE NONE NONE NORML NORML NEG NEG		
Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water Free Water Visc @ 40°C Visc @ 100°C	scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	NONE NONE NONE NORML NORML	NONE NONE NONE NORML NORML NEG NEG	 	    
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual <b>method</b>	NONE NONE NORML NORML	NONE NONE NORML NORML NEG NEG	 	   
Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual method	NONE NORML NORML	NONE NORML NORML NEG NEG		  
Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar scalar scalar scalar IES	*Visual *Visual *Visual *Visual *Visual method	NONE NORML NORML	NONE NORML NORML NEG NEG		
Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar scalar scalar IES cSt	*Visual *Visual *Visual *Visual method	NORML NORML	NORML NORML NEG NEG		
Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar scalar IES cSt	*Visual *Visual *Visual method	NORML	NORML NEG NEG		
Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar scalar IES cSt	*Visual *Visual method		NEG NEG		
Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C	scalar IES cSt	*Visual method	limit/base	NEG		
FLUID PROPERT Visc @ 40°C Visc @ 100°C	TES cSt	method	limit/base			
Visc @ 40°C Visc @ 100°C	cSt		limit/base			
Visc @ 100°C						history2
	- 01	ASTM D445	33.4	33.3		
Viscosity Index (VI)	cSt	ASTM D445	5.8	6.1		
	Scale	ASTM D2270	115	132		
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no imago	no imago
DOLLOITI					noimage	no image
CRADUS						
				Particle Count		
<sup>10</sup> T			491,520			T <sup>2</sup>
8 - iron			122,88	0-		-2
4				Severe		
2			30,720			12
				Abnormal		-2
or17/2			1.92			-
			Ar cles (p			+2 +1 +1 +1 +1
	5		-te 48			
8- copper			ja 120			-1
6 - tin			E 31			-1
4						
			-		1	1
17/24			17/24	2-	/	-
Apr			Apr	0 4// 6//	14	38µ 71µ
Viscosity @ 40°C				Acid Number	. це <u>с</u> 1µ	30µ /1µ
			(B)HO.60	]		
			¥ 0.4	8		
20			- U.3 	4		
			N 0.1	2		
25				n 🛶		
Apr17/24			Apr17/24	Apr17/24		
	Bottom GRAPHS Ferrous Alloys	Bottom GRAPHS Ferrous Alloys Non-ferrous Metals Copper Lead Viscosity @ 40°C Copper Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead	Bottom GRAPHS Ferrous Alloys	Bottom GRAPHS Ferrous Alloys	Bottom	Bottom no image

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