

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

MOBIL DTE 10 EXCEL TM 32

New (Unused) Oil

{not provided} (--- GAL)

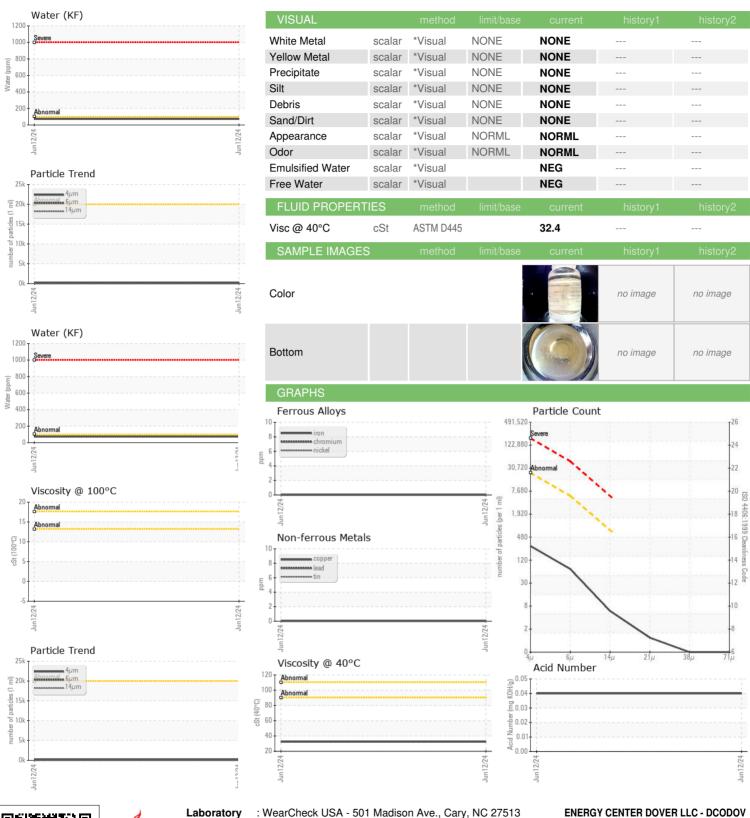
Recommendation

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

Chromium ppm ASTM D5185m >5 0					Jun2024		
Sample Date Client Info 12 Jun 2024	AMPLE INFORM <i>A</i>	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 .	nple Number		Client Info		USP0013345		
Oil Changed hrs Client Info N/A	nple Date		Client Info		12 Jun 2024		
Cilichanged Cilient Info N/A NORMAL Sample Status Sample Statu	chine Age	hrs	Client Info		0		
WEAR METALS	Age	hrs	Client Info		0		
WEAR METALS	Changed		Client Info		N/A		
STR DETECTION Chromium Ch	nple Status				NORMAL		
Chromium	EAR METALS		method	limit/base	current	history1	history2
Nickel	ı "	ppm	ASTM D5185m	>5	0		
Titanium	romium	ppm	ASTM D5185m	>5	0		
Silver	kel p	ppm	ASTM D5185m	>5	0		
ASTM D5185m S5 O Copper O O O O O O O O O	inium p	ppm	ASTM D5185m		0		
Lead	er p	ppm	ASTM D5185m	>5	0		
Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 120 Calcium ppm ASTM D5185m 120 Phosphorus ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 3 <td>minum p</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>5</td> <td>0</td> <td></td> <td></td>	minum p	ppm	ASTM D5185m	>5	0		
Tin	ıd r	ppm	ASTM D5185m	>5	0		
Vanadium ppm ASTM D5185m 0	oper p	ppm	ASTM D5185m	>5	0		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Calcium ppm ASTM D5185m 120 Phosphorus ppm ASTM D5185m 152 Phosphorus ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 1682 Solicon ppm ASTM D5185m 15 0 <td>k</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>5</td> <td>0</td> <td></td> <td></td>	k	ppm	ASTM D5185m	>5	0		
ADDITIVES method limit/base current history1	nadium p	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 0	dmium p	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Calcium ppm ASTM D5185m 120 Phosphorus ppm ASTM D5185m 452 Zinc ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 1682 Sulfur ppm ASTM D5185m 15 0 Sodium ppm ASTM D5185m 2 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m 2 0 Water % ASTM D5185m <td< td=""><td>DDITIVES</td><td></td><td>method</td><td>limit/base</td><td>current</td><td>history1</td><td>history2</td></td<>	DDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Calcium ppm ASTM D5185m 120 Phosphorus ppm ASTM D5185m 452 Zinc ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 1682 Sulfur ppm ASTM D5185m 15 0 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m 20 0 Potassium ppm ASTM D5185m 20 0 Water % ASTM D6304 0.0007 -	on p	ppm	ASTM D5185m		0		
Manganese ppm ASTM D5185m 0 Calcium ppm ASTM D5185m 120 Phosphorus ppm ASTM D5185m 452 Zinc ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 1682 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 0 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m 20 0 Water % ASTM D6304 0.007 Particles >4μm ASTM D6304 72 Particles >6μm ASTM D7647 >20000 248 Particles >14μm ASTM D7647	ium p	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 0	ybdenum	ppm	ASTM D5185m		0		
Calcium ppm ASTM D5185m 120	nganese p	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 452	gnesium p	ppm	ASTM D5185m				
Zinc ppm ASTM D5185m 3 Sulfur ppm ASTM D5185m 1682 Sulfur ppm ASTM D5185m 1682 Sulfur ppm ASTM D5185m >15 0 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 Potassium ppm ASTM D6304 0.007 Ppm Water % ASTM D6304 0.007 Ppm Water ppm ASTM D6304 72 Ppm Water ppm ASTM D6304 72 Particles >4μm ASTM D7647 >20000 248 Particles >6μm ASTM D7647 >5000 62 Particles >21μm ASTM D7647 >640 5 Particles >38μm ASTM D7647 >160 1 Particles >71μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >10 0	cium p	ppm	ASTM D5185m		120		
Sulfur ppm ASTM D5185m 1682	osphorus p	ppm	ASTM D5185m		452		
CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >15 0 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 0 Water % ASTM D6304 0.0007 ppm Water ppm ASTM D6304 72 FLUID CLEANLINESS method limit/base current history1 Particles >4µm ASTM D7647 >20000 248 Particles >6µm ASTM D7647 >5000 62 Particles >14µm ASTM D7647 >640 5 Particles >21µm ASTM D7647 >160 1 Particles >71µm ASTM D7647 >10 0 Oil Cleanline	C F	ppm	ASTM D5185m		3		
Silicon ppm ASTM D5185m >15 0 Sodium ppm ASTM D5185m 2	fur p	ppm	ASTM D5185m		1682		
Sodium ppm ASTM D5185m 2	ONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0	con p	ppm	ASTM D5185m	>15	0		
Water % ASTM D6304 0.007 ppm Water ppm ASTM D6304 72 FLUID CLEANLINESS method limit/base current history1 Particles >4μm ASTM D7647 >20000 248 Particles >6μm ASTM D7647 >5000 62 Particles >14μm ASTM D7647 >640 5 Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	dium p	ppm	ASTM D5185m		2		
ppm Water ppm ASTM D6304 72	assium p	ppm	ASTM D5185m	>20	0		
FLUID CLEANLINESS method limit/base current history1 Particles >4μm ASTM D7647 >20000 248 Particles >6μm ASTM D7647 >5000 62 Particles >14μm ASTM D7647 >640 5 Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	ter	%	ASTM D6304		0.007		
Particles >4μm ASTM D7647 >20000 248 Particles >6μm ASTM D7647 >5000 62 Particles >14μm ASTM D7647 >640 5 Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	n Water p	ppm	ASTM D6304		72		
Particles >6μm ASTM D7647 >5000 62 Particles >14μm ASTM D7647 >640 5 Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	LUID CLEANLINE	SS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >640 5 Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	ticles >4µm		ASTM D7647	>20000			
Particles >21μm ASTM D7647 >160 1 Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	ticles >6µm		ASTM D7647	>5000	62		
Particles >38μm ASTM D7647 >40 0 Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	ticles >14μm		ASTM D7647	>640	5		
Particles >71μm ASTM D7647 >10 0 Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	ticles >21µm		ASTM D7647	>160	1		
Oil Cleanliness ISO 4406 (c) >21/19/16 15/13/10 FLUID DEGRADATION method limit/base current history1	·						
FLUID DEGRADATION method limit/base current history1	ticles >71µm		ASTM D7647	>10	0		
·	Cleanliness		ISO 4406 (c)	>21/19/16	15/13/10		
Acid Number (AN) mg KOH/g ASTM D8045 0.04	LUID DEGRADAT	ION	method	limit/base	current	history1	history2
	d Number (AN)	mg KOH/g	ASTM D8045		0.04		



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: USP0013345 Lab Number : 06208729 Unique Number : 11076190

Received **Tested** Diagnosed

: 13 Jun 2024 : 16 Jun 2024

: 16 Jun 2024 - Doug Bogart Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, VI)

US 19904 Contact: ERNIE JUST ernie.just@clearwayenergy.com T: (302)678-4353

1280 W NORTH ST

DOVER, DE

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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)