

## **OIL ANALYSIS REPORT**

### Area OKLAHOMA 2000 FORD 9293-T213

Diesel Engine

MYSTIK JT-8 SYN SUPER HD 15W40 (5 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.

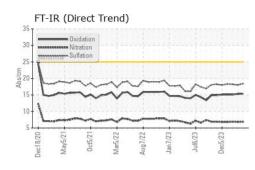
	 NORMAL

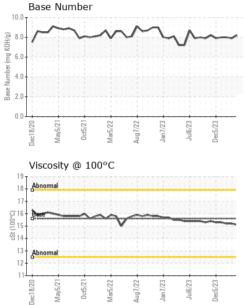
Sample Rating Trend

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0899610	WC0899616	WC0899605
Sample Date		Client Info		09 Apr 2024	06 Mar 2024	05 Feb 2024
Machine Age	mls	Client Info		109566	109410	109342
Oil Age	mls	Client Info		13751	13395	13527
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	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 METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	15	16	14
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	4
Lead	ppm	ASTM D5185m	>40	<1	1	2
Copper	ppm	ASTM D5185m	>330	<1	1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 8	history1 0	history2 <1
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	8	0	<1
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	8 0	0 0	<1 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31	0 0 31	<1 0 25
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1	0 0 31 0	<1 0 25 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1 900	0 0 31 0 889	<1 0 25 <1 822
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1 900 1419	0 0 31 0 889 1462	<1 0 25 <1 822 1338
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	8 0 31 <1 900 1419 1183	0 0 31 0 889 1462 1144	<1 0 25 <1 822 1338 1082
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1 900 1419 1183 1388	0 0 31 0 889 1462 1144 1385	<1 0 25 <1 822 1338 1082 1334
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		8 0 31 <1 900 1419 1183 1388 4065	0 0 31 0 889 1462 1144 1385 4148	<1 0 25 <1 822 1338 1082 1334 3439
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	8 0 31 <1 900 1419 1183 1388 4065 current	0 0 31 0 889 1462 1144 1385 4148 history1	<1 0 25 <1 822 1338 1082 1334 3439 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1 900 1419 1183 1388 4065 current 4	0 0 31 0 889 1462 1144 1385 4148 history1 3	<1 0 25 <1 822 1338 1082 1334 3439 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 0 31 <1 900 1419 1183 1388 4065 <u>current</u> 4 5	0 0 31 0 889 1462 1144 1385 4148 history1 3 5	<1 0 25 <1 822 1338 1082 1334 3439 history2 4 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	8 0 31 <1 900 1419 1183 1388 4065 <u>current</u> 4 5 4	0 0 31 0 889 1462 1144 1385 4148 history1 3 5 4	<1 0 25 <1 822 1338 1082 1334 3439 history2 4 6 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	8 0 31 <1 900 1419 1183 1388 4065 current 4 5 4 2 4	0 0 31 0 889 1462 1144 1385 4148 history1 3 5 4 4 history1	<1 0 25 <1 822 1338 1082 1334 3439 history2 4 6 5 5 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	8 0 31 <1 900 1419 1183 1388 4065 <i>current</i> 4 5 4 <i>current</i> 0.2	0 0 31 0 889 1462 1144 1385 4148 history1 3 5 4 4 <i>history1</i> 0.2	<1 0 25 <1 822 1338 1082 1334 3439 history2 4 6 5 5 history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	8 0 31 <1 900 1419 1183 1388 4065 <i>current</i> 4 5 4 <i>current</i> 0.2 6.9	0 0 31 0 889 1462 1144 1385 4148 history1 3 5 4 4 <b>history1</b> 0.2 6.8	<1 0 25 <1 822 1338 1082 1334 3439 history2 4 6 5 history2 0.2 6.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >20 s3 >20 >30	8 0 31 <1 900 1419 1183 1388 4065 <b>current</b> 4 5 4 5 4 <b>current</b> 0.2 6.9 18.4	0 0 31 0 889 1462 1144 1385 4148 history1 3 5 4 4 <u>history1</u> 0.2 6.8 18.0	<1 0 25   <1   822   1338   1082   1334   3439   history2   4   6   5   history2   0.2   6.9   18.2



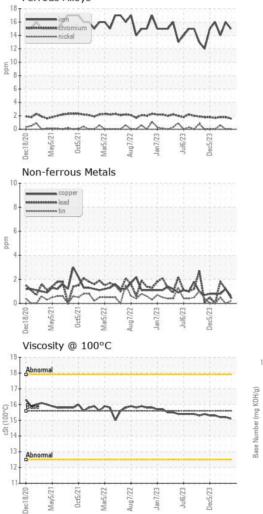
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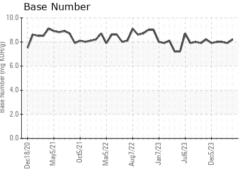




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	15.1	15.2	15.2
GRAPHS						

Ferrous Alloys





Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 LIBERTY DISPOSAL Sample No. : WC0899610 6401 S EASTERN AVE Received : 15 Apr 2024 Lab Number : 06149391 Tested : 16 Apr 2024 OKLAHOMA CITY, OK Unique Number : 10979469 Diagnosed : 16 Apr 2024 - Wes Davis US 73149 Test Package : FLEET Contact: M Rutherford Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. M.Rutherford@ldi89.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Report Id: SEAOKL [WUSCAR] 06149391 (Generated: 04/16/2024 16:05:45) Rev: 1

Submitted By: CHRISTINA HANKS

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