

Area OKLAHOMA

## **OIL ANALYSIS REPORT**

Sample Rating Trend



7269 Diesel Engine

## Fluid

MYSTIK JT-8 SYN SUPER HD 15W40 (--- GAL)

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### A Wear

Valve wear is indicated.

#### Contamination

There is no indication of any contamination in the oil.

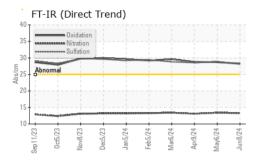
## Fluid Condition

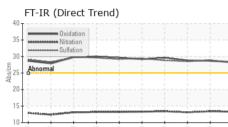
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

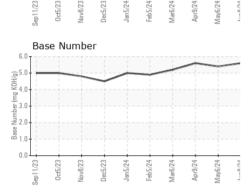
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0935470	WC0929923	WC0929931
Sample Date		Client Info		08 Jun 2024	06 May 2024	09 Apr 2024
Machine Age	hrs	Client Info		5888	5675	5533
Oil Age	hrs	Client Info		5588	5375	5233
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
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	76	78	75
Chromium	ppm	ASTM D5185m	>20	3	3	2
Nickel	ppm	ASTM D5185m	>4	▲ 11	▲ 12	_ ▲ 10
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	4	4	4
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	9	12	10
Tin	ppm	ASTM D5185m	>15	2	3	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 7	history1 <1	history2 3
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	7	<1	3
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	7 0	<1 0	3 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 50	<1 0 48	3 0 45
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 50 2	<1 0 48 2	3 0 45 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 50 2 968	<1 0 48 2 906	3 0 45 2 1008
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 50 2 968 1385	<1 0 48 2 906 1310	3 0 45 2 1008 1418
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	7 0 50 2 968 1385 1131	<1 0 48 2 906 1310 1127	3 0 45 2 1008 1418 1249
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 50 2 968 1385 1131 1392	<1 0 48 2 906 1310 1127 1365	3 0 45 2 1008 1418 1249 1507
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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	7 0 50 2 968 1385 1131 1392 2911	<1 0 48 2 906 1310 1127 1365 2897	3 0 45 2 1008 1418 1249 1507 3128
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 ASTM D5185m	limit/base	7 0 50 2 968 1385 1131 1392 2911 current	<1 0 48 2 906 1310 1127 1365 2897 history1	3 0 45 2 1008 1418 1249 1507 3128 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >25	7 0 50 2 968 1385 1131 1392 2911 current 9	<1 0 48 2 906 1310 1127 1365 2897 history1 10	3 0 45 2 1008 1418 1249 1507 3128 history2 9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >25	7 0 50 2 968 1385 1131 1392 2911 current 9 26	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6 current	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10 history1	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6 current 1.2	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10 10 history1 1.2	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6 history2 1.2
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	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6 current 1.2 13.3	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10 26 10 10 history1 1.2 1.2	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6 kistory2 1.2 1.2 13.1
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 D7844 *ASTM D7624 *ASTM D7415	limit/base >25 >20 limit/base >3 >20 >3 >20	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6 current 1.2 13.3 28.1	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10 26 10 history1 1.2 1.2 13.4 28.9	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6 history2 1.2 1.2 1.2 13.1 28.5
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 D7844 *ASTM D7624 *ASTM D7614	limit/base >25 >20 limit/base >3 >20 >30 >30	7 0 50 2 968 1385 1131 1392 2911 current 9 26 6 current 1.2 13.3 28.1 current	<1 0 48 2 906 1310 1127 1365 2897 history1 10 26 10 history1 1.2 13.4 28.9 history1	3 0 45 2 1008 1418 1249 1507 3128 history2 9 25 6 history2 1.2 1.2 1.2 1.3.1 28.5 history2

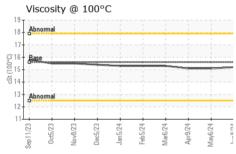


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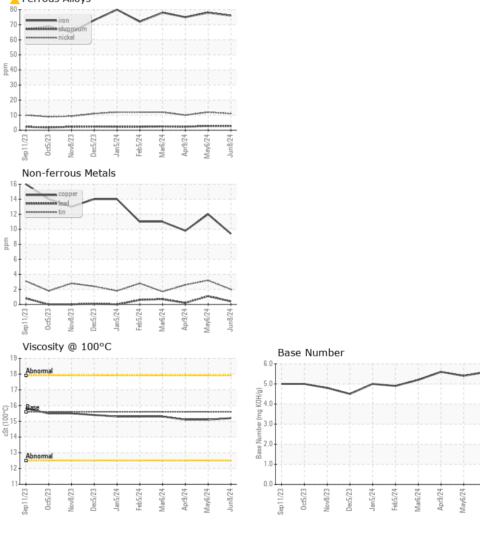




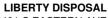


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	15.2	15.1	15.1
GRAPHS						

Ferrous Alloys



: 14 Jun 2024



6401 S EASTERN AVE OKLAHOMA CITY, OK US 73149 Contact: M Rutherford M.Rutherford@ldi89.com T: 2) F:



 Lab Number
 : 06211160
 Tested
 : 19 Jun 2024
 O

 Unique Number
 : 11084024
 Diagnosed
 : 19 Jun 2024 - Sean Felton

 Certificate 12367
 Test Package
 : FLEET

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

 \* - 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)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Report Id: SEAOKL [WUSCAR] 06211160 (Generated: 06/19/2024 18:03:56) Rev: 1

Laboratory

Sample No.

: WC0935470

Contact/Location: M Rutherford - SEAOKL

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