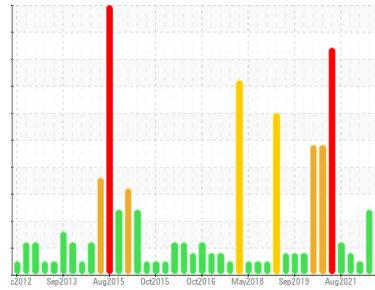




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**STEIGER 2**

Component  
**Diesel Engine**

Fluid  
**ALPHA MEGA MOLY PREMIUM 15W40 (9 GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Cylinder, crank, or cam shaft wear is indicated.

### Contamination

Fuel content negligible. 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0617397</b>	WC0617396	WC0617458
Sample Date	Client Info		<b>12 Jul 2023</b>	11 Mar 2023	29 Dec 2022
Machine Age	hrs	Client Info	<b>1774</b>	11257	11224
Oil Age	hrs	Client Info	<b>467</b>	33	436
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >86	<b>▲ 105</b>	6	76
Chromium	ppm	ASTM D5185m >3	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >15	<b>6</b>	2	1
Lead	ppm	ASTM D5185m >16	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m >250	<b>18</b>	6	81
Tin	ppm	ASTM D5185m >2	<b>2</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>186</b>	95	7
Manganese	ppm	ASTM D5185m	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>13</b>	8	15
Calcium	ppm	ASTM D5185m	<b>5073</b>	3385	4243
Phosphorus	ppm	ASTM D5185m	<b>1244</b>	866	896
Zinc	ppm	ASTM D5185m	<b>1382</b>	916	1073
Sulfur	ppm	ASTM D5185m	<b>5283</b>	3615	4300

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>21</b>	14	6
Sodium	ppm	ASTM D5185m	<b>5</b>	0	4
Potassium	ppm	ASTM D5185m >20	<b>9</b>	3	1
Fuel	%	ASTM D3524 >5	<b>1.3</b>	29.8	<1.0

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>2.1</b>	0.1	1.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.6</b>	7.1	12.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>45.4</b>	28.1	41.7

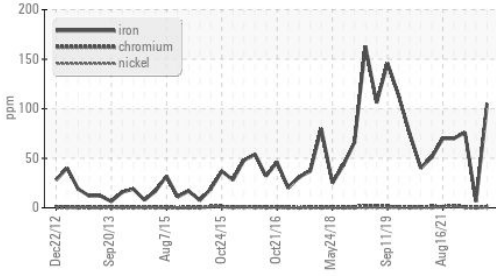
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>44.8</b>	28.4	43.3
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>3.071</b>	1.00	1.31
Base Number (BN)	mg KOH/g	ASTM D2896	<b>13.16</b>	11.11	10.69

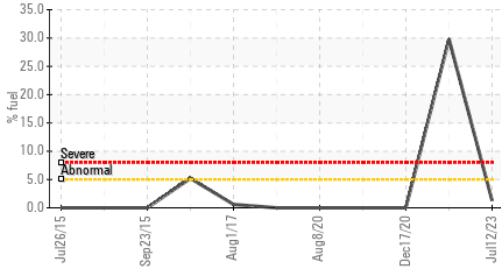


# OIL ANALYSIS REPORT

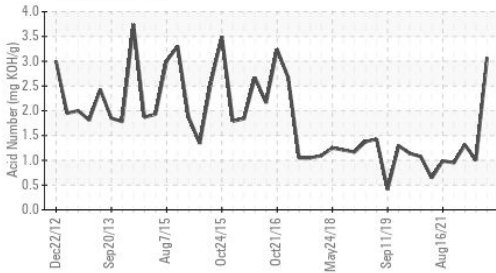
## ▲ Ferrous Alloys



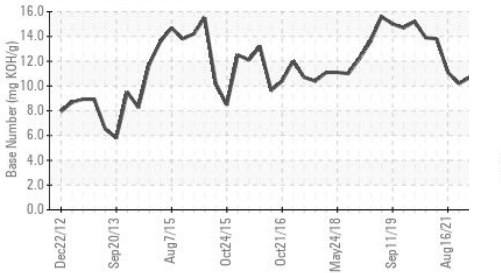
## Fuel Dilution



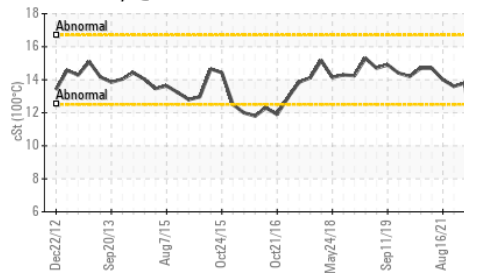
## Acid Number



## Base Number



## Viscosity @ 100°C

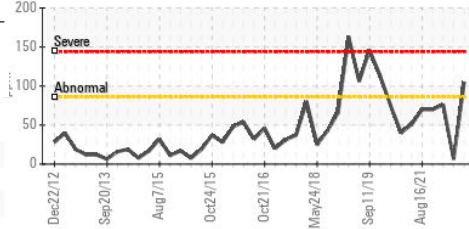


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

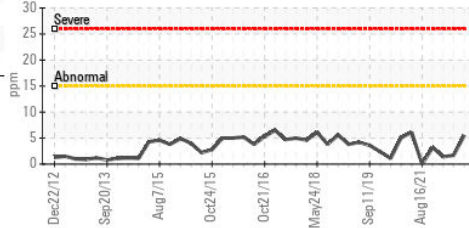
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	▲ 7.6	13.8

## GRAPHS

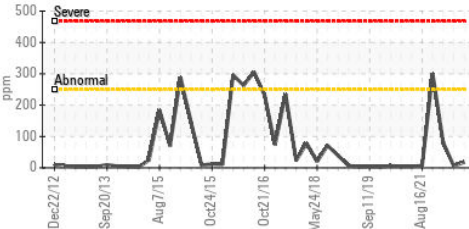
### ▲ Iron (ppm)



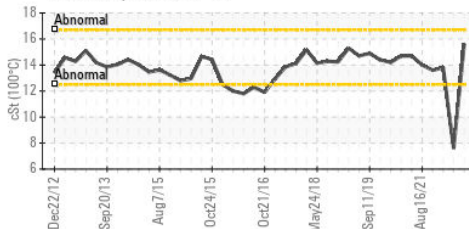
### Aluminum (ppm)



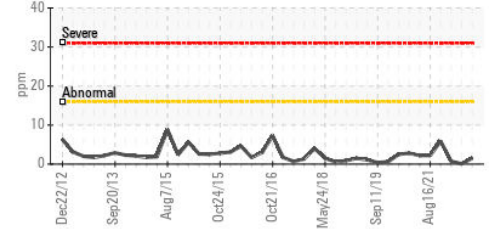
### Copper (ppm)



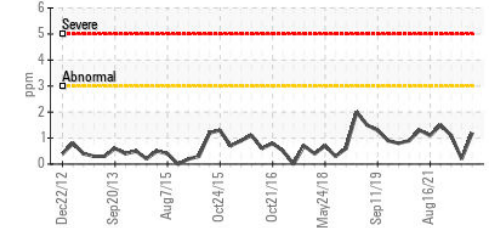
### Viscosity @ 100°C



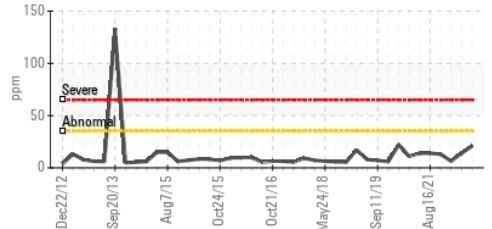
### Lead (ppm)



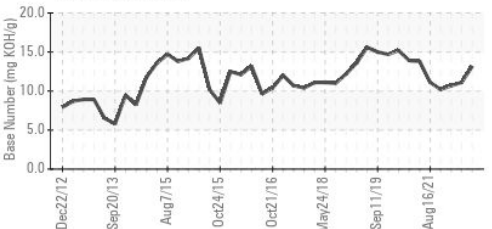
### Chromium (ppm)



### Silicon (ppm)



### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0617397 **Received** : 18 Jul 2023  
**Lab Number** : 05901956 **Diagnosed** : 25 Jul 2023  
**Unique Number** : 10563312 **Diagnostician** : Doug Bogart  
**Test Package** : MOB 2 ( Additional Tests: PercentFuel )

**PRECISION LAND GRADING**  
 1031 PARKER RD  
 SANDHEIMER, LA  
 US 71276  
 Contact: RANDY TEMPLE  
 ktemple19@gmail.com  
 T: (318)372-8431  
 F: (318)552-8876

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

\* - 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)