



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**5 (S/N 1HTEUTANXLH707928)**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC IV HD SYN 5W40 (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05968410	---	---
Sample Date		Client Info		20 Sep 2023	---	---
Machine Age	hrs	Client Info		2585	---	---
Oil Age	hrs	Client Info		580	---	---
Filter Age	hrs	Client Info		580	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				NORMAL	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	37	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	13	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	144	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

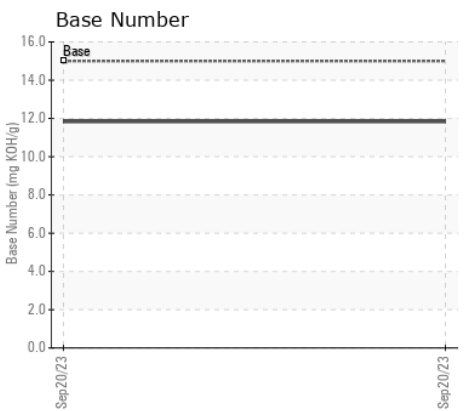
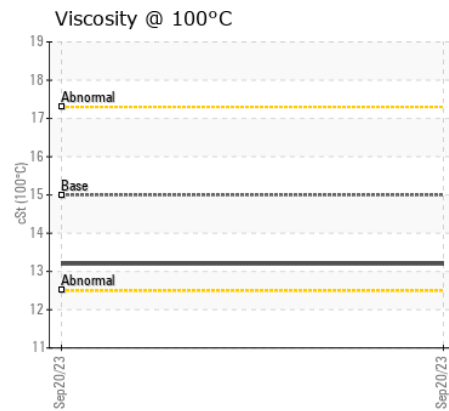
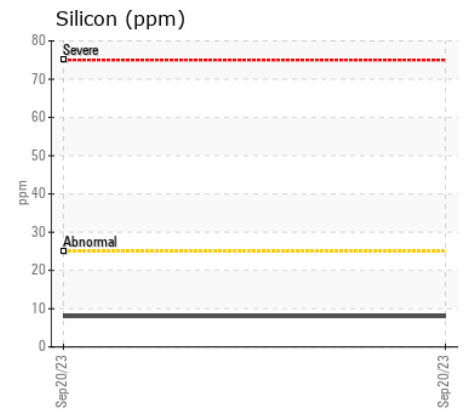
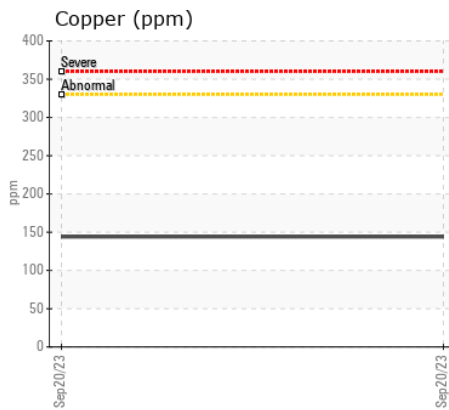
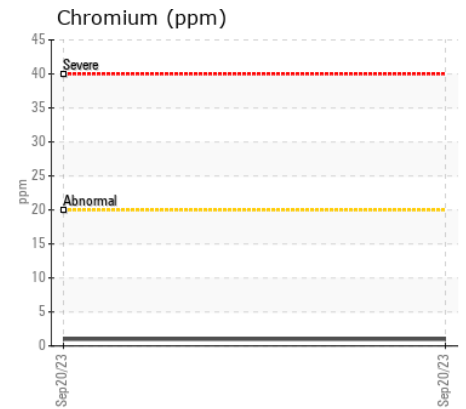
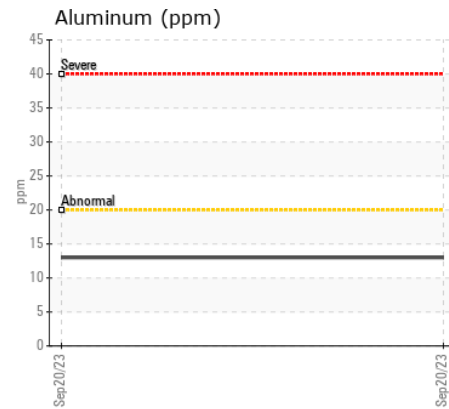
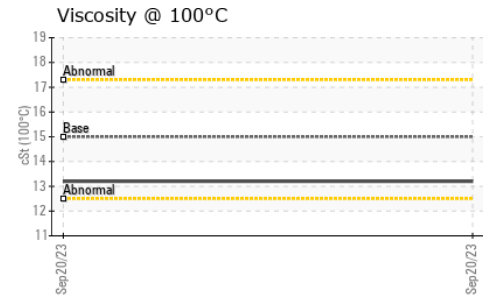
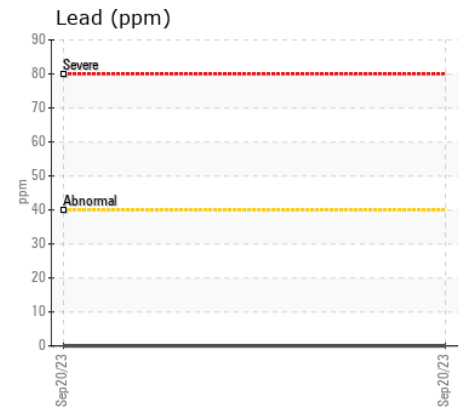
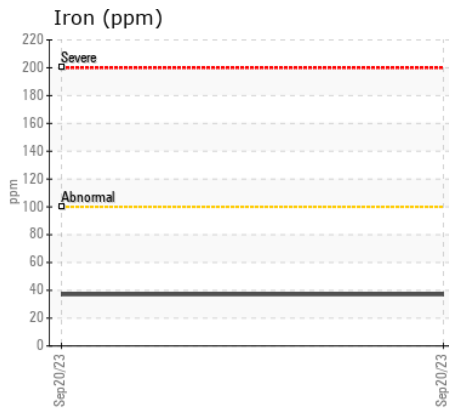
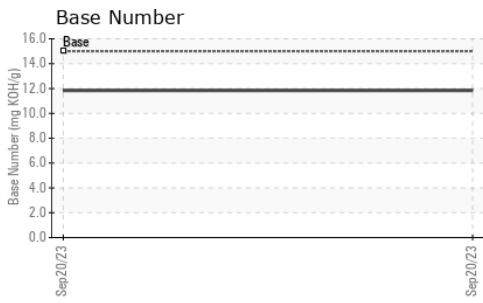
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	---	---
Potassium	ppm	ASTM D5185m	>20	22	---	---
Fuel		WC Method	>2.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

**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.

Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m		12	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		111	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		24	---	---
Calcium	ppm	ASTM D5185m	4500	4164	---	---
Phosphorus	ppm	ASTM D5185m		798	---	---
Zinc	ppm	ASTM D5185m	1200	982	---	---
Sulfur	ppm	ASTM D5185m		4326	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	11.84	---	---
Visc @ 100°C	cSt	ASTM D445	15	13.2	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR05968410  
**Lab Number** : 05968410  
**Unique Number** : 10674961  
**Test Package** : MOB 2  
**Received** : 03 Oct 2023  
**Tested** : 04 Oct 2023  
**Diagnosed** : 04 Oct 2023 - Wes Davis

**HARRIS ENERGY INC**  
 456 WEST MAIN ST  
 LITTLETON, NH  
 US 03561  
 Contact: DON PERCY

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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)

T:  
F: