



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
BLUEBIRD 44E
 Component
Front Diesel Engine
 Fluid
TRC PRO-SPEC IV XP SYN BLEND SAE 10W30 (16 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06193045	TR05306472	TR05230028
Sample Date		Client Info		08 May 2024	29 Jun 2021	18 Mar 2021
Machine Age	mls	Client Info		109476	69470	63854
Oil Age	mls	Client Info		0	10500	5000
Filter Age	mls	Client Info		0	10500	5000
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	125	▲ 396	48
Chromium	ppm	ASTM D5185m	>10	2	6	<1
Nickel	ppm	ASTM D5185m	>4	1	2	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>20	15	37	1
Lead	ppm	ASTM D5185m	>20	<1	<1	1
Copper	ppm	ASTM D5185m	>125	4	68	10
Tin	ppm	ASTM D5185m	>4	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

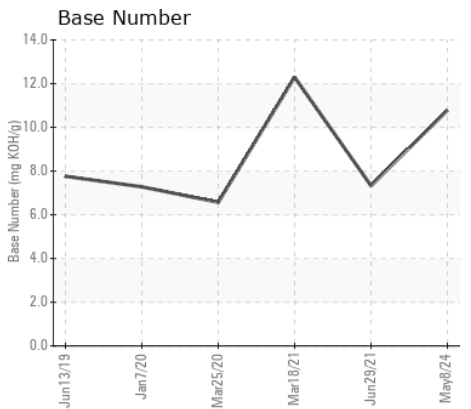
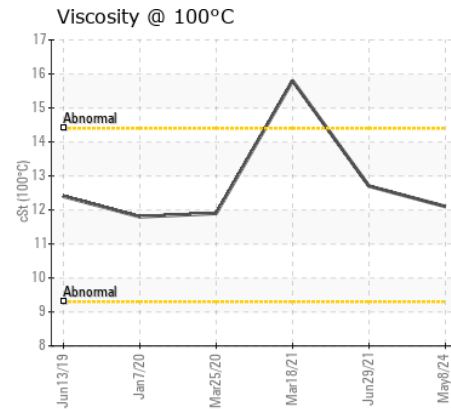
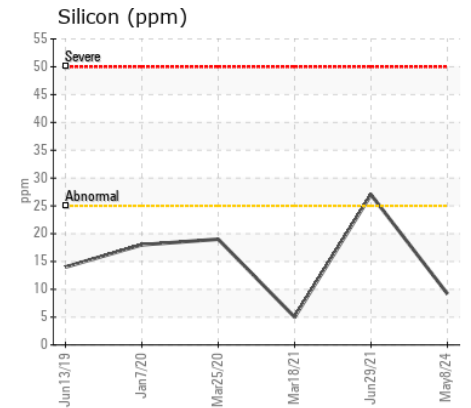
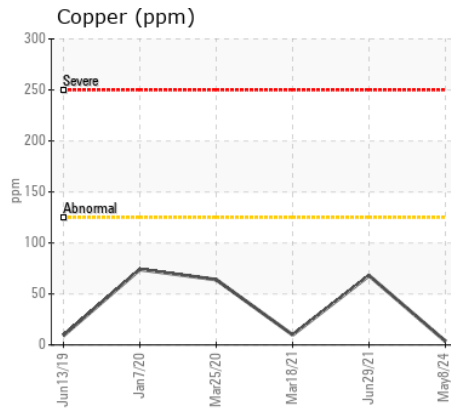
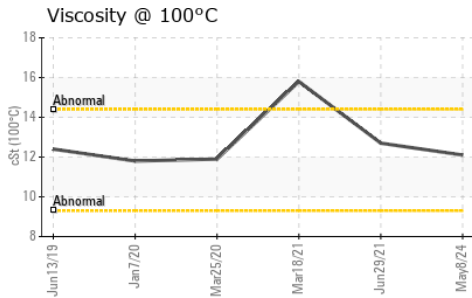
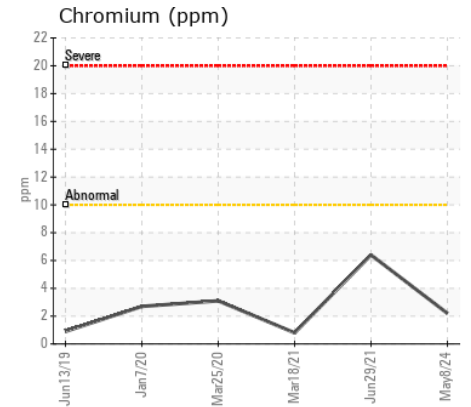
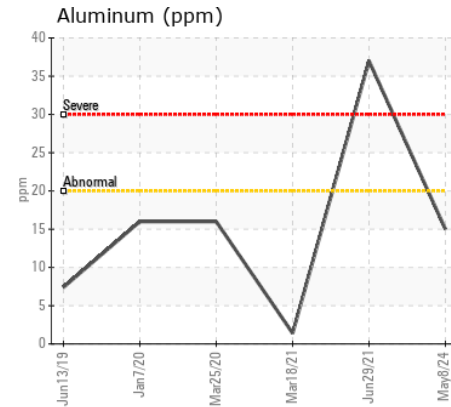
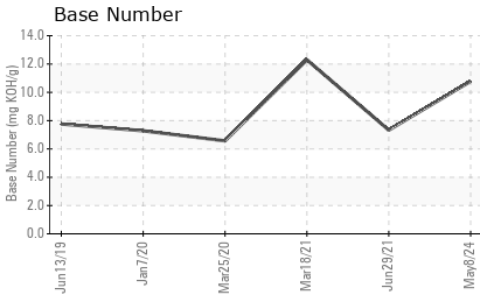
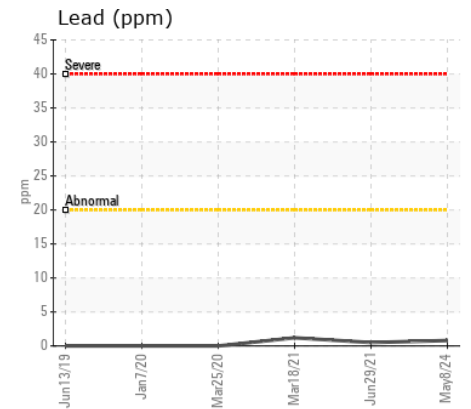
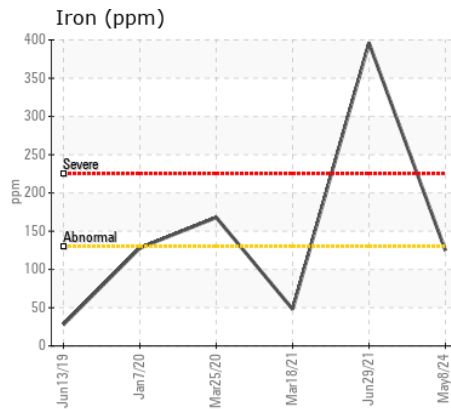
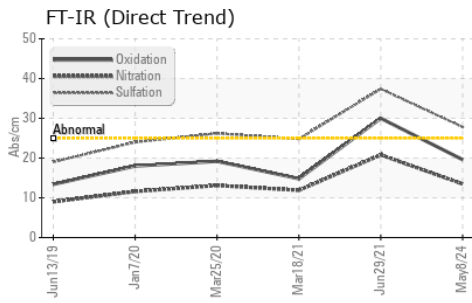
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	27	5
Potassium	ppm	ASTM D5185m	>20	14	▲ 50	22
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	1.5	4.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	13.5	20.8	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.8	37.4	24.8
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

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	13	22
Boron	ppm	ASTM D5185m		0	15	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	4	141
Manganese	ppm	ASTM D5185m		2	4	<1
Magnesium	ppm	ASTM D5185m		19	498	18
Calcium	ppm	ASTM D5185m		3890	2236	4490
Phosphorus	ppm	ASTM D5185m		820	742	900
Zinc	ppm	ASTM D5185m		988	884	1034
Sulfur	ppm	ASTM D5185m		3810	2329	3649
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	30	14.8
Base Number (BN)	mg KOH/g	ASTM D2896		10.78	7.33	12.3
Visc @ 100°C	cSt	ASTM D445		12.1	12.7	● 15.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06193045
Lab Number : 06193045
Unique Number : 11049797
Test Package : MOB 2
Received : 28 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Wes Davis

WELD COUNTY SCHOOL DISTRICT
 110 N 8TH ST
 WINDSOR, CO
 US 80550
 Contact: JAMES WEST
 james@sellsoil.com
 T: (720)425-9923
 F: x:

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)