

GLYCOL



Machine Id
INTERNATIONAL 27
 Component
Diesel Engine
 Fluid
PHILLIPS 66 15W40 (--- Oz)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0102730	PCA0083498	PCA0066191
Sample Date	Client Info			07 Apr 2024	01 Feb 2023	31 Aug 2022
Machine Age	mls	Client Info		0	7343	12039
Oil Age	mls	Client Info		0	7343	12039
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.0		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	46	20	32
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		17	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>40	18	2	4
Copper	ppm	ASTM D5185m	>330	3	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

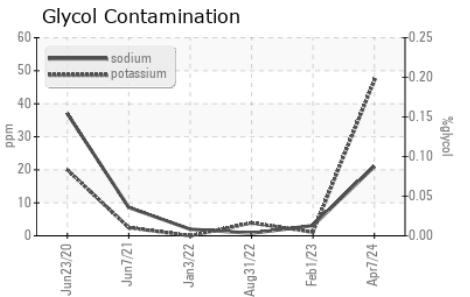
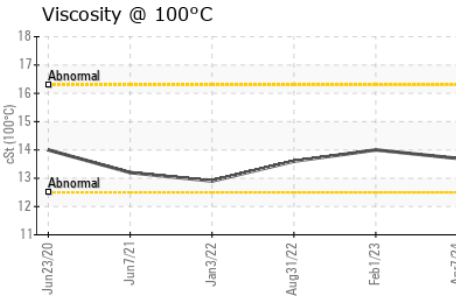
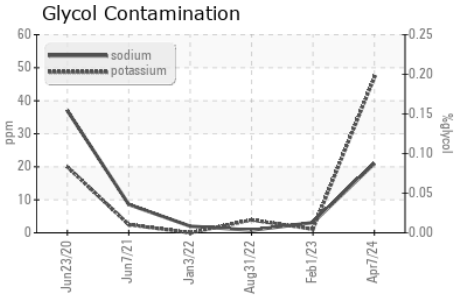
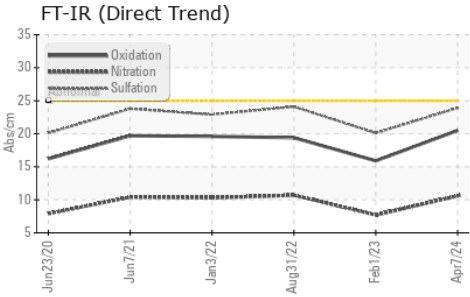
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		18	2	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		52	65	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		887	1001	922
Calcium	ppm	ASTM D5185m		1279	1113	1138
Phosphorus	ppm	ASTM D5185m		977	1056	1032
Zinc	ppm	ASTM D5185m		1252	1328	1255
Sulfur	ppm	ASTM D5185m		3398	3737	3254

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Sodium	ppm	ASTM D5185m		21	3	<1
Potassium	ppm	ASTM D5185m	>20	▲ 47	1	4
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1	0.5	1
Nitration	Abs/cm	*ASTM D7624	>20	10.6	7.7	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	20.1	24.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	15.9	19.4
Base Number (BN)	mg KOH/g	ASTM D2896		6.9	9.0	8.9

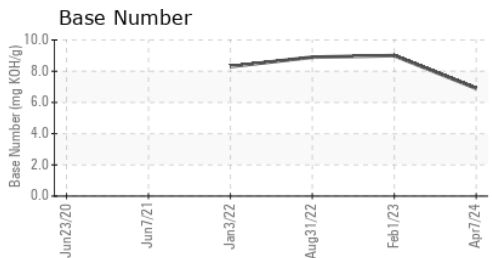
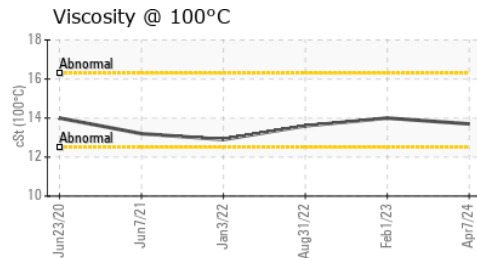
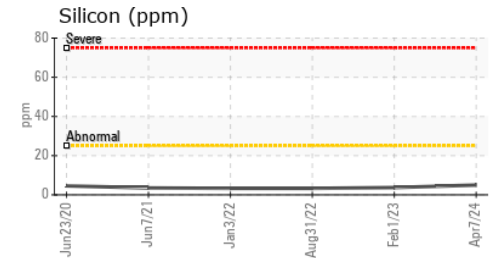
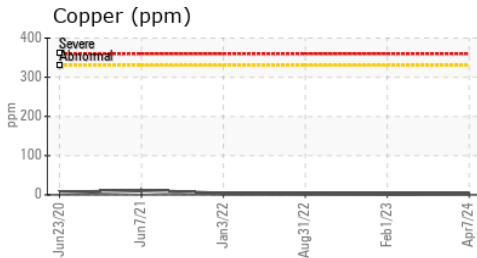
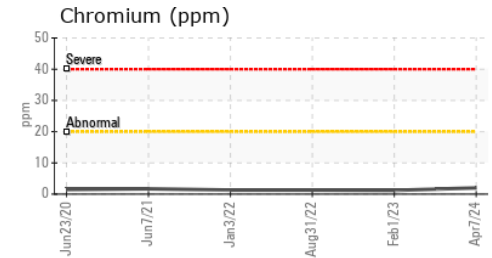
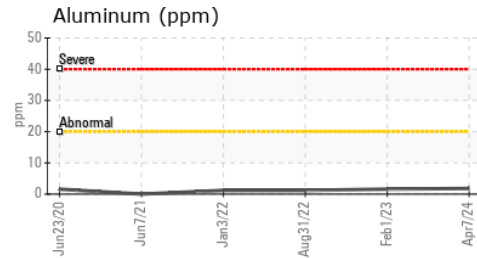
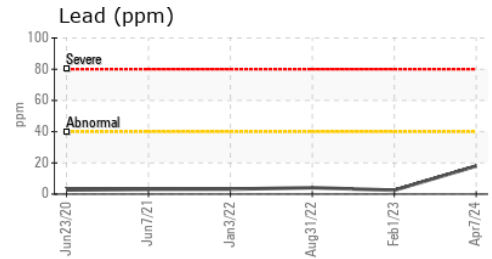
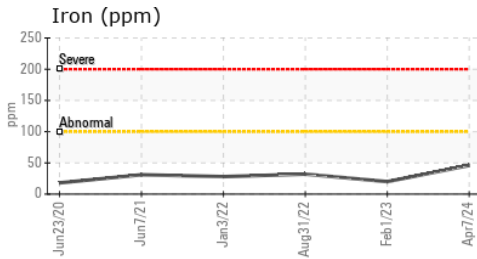
OIL ANALYSIS REPORT



PARAMETER	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

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.7	14.0	13.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102730 **Received** : 16 Apr 2024
Lab Number : 06151013 **Tested** : 19 Apr 2024
Unique Number : 10981091 **Diagnosed** : 19 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

ALBERT HOGOBOOM OILFIELD TRUCKING INC
 767 OIL HILL ROAD
 EL DORADO, KS
 US 67042
 Contact: LOREN JACK
 loren@hogoboom.net

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)

T: F: (316)321-1396