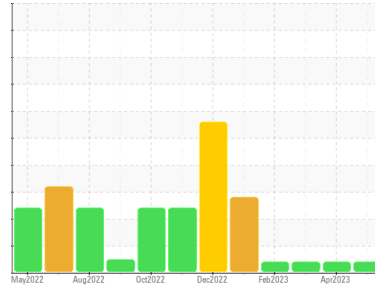


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
BASIN DRILLING 103
 Component
Top Drive
 Fluid
BAD ASS 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0096204	PCA0096221	PCA0093197
Sample Date	Client Info			25 May 2023	26 Apr 2023	27 Mar 2023
Machine Age	mls Client Info			0	0	0
Oil Age	mls Client Info			0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

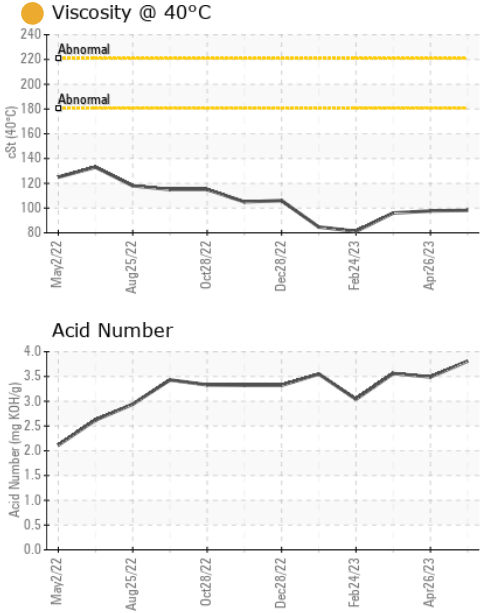
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	88	62	44
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	13	2	6
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>25	4	2	12
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		330	377	355
Barium	ppm	ASTM D5185m		218	94	103
Molybdenum	ppm	ASTM D5185m		<1	<1	3
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		4	3	12
Calcium	ppm	ASTM D5185m		170	130	141
Phosphorus	ppm	ASTM D5185m		1646	1541	1599
Zinc	ppm	ASTM D5185m		8	14	19
Sulfur	ppm	ASTM D5185m		29899	24432	28395

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	41	18	18
Sodium	ppm	ASTM D5185m		4	1	2
Potassium	ppm	ASTM D5185m	>20	5	2	2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		3.81	3.49	3.56

OIL ANALYSIS REPORT

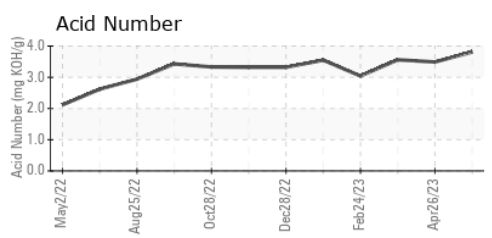
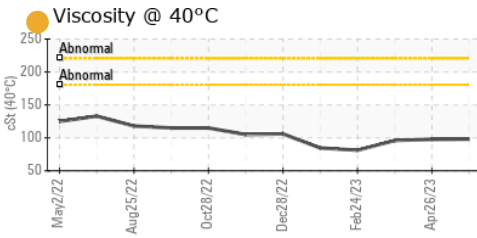
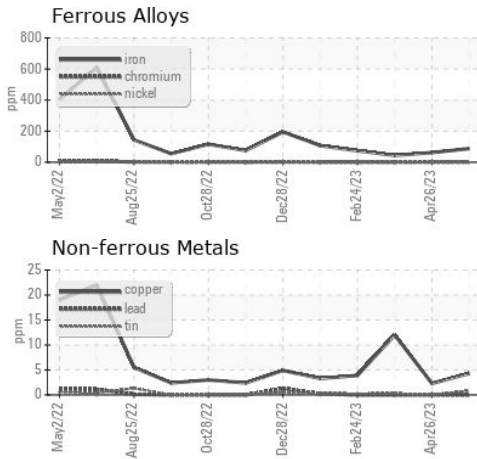


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 @ 40°C	cSt	ASTM D445	98.1	97.7	96.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0096204 **Received** : 05 Jun 2023
Lab Number : 05864463 **Tested** : 06 Jun 2023
Unique Number : 10498928 **Diagnosed** : 06 Jun 2023 - Doug Bogart
Test Package : IND 2

DELTA FUEL COMPANY
 1000 WELLS ISLAND RD
 SHREVEPORT, LA
 US 71107
 Contact: BRAD GORDON
 bgordon@deltafuel.com
 T: (318)780-3921
 F:

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)