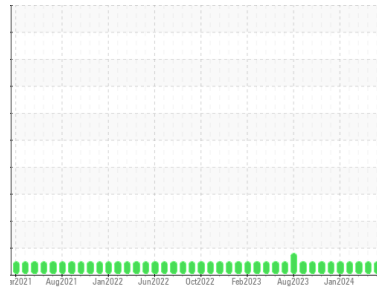




OIL ANALYSIS REPORT

Area
SSC
 Machine Id
NIRO 4 (S/N 006)
 Component
Transmission (Manual)
 Fluid
DTE 10/150 (15 GAL)

Sample Rating Trend



NORMAL



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 component. The amount and size of particulates present in the system is acceptable.

Fluid Condition
 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		USP0012829	USP0006780	USP0005835
Sample Date	Client Info		24 May 2024	08 Apr 2024	07 Mar 2024
Machine Age	hrs	Client Info	56084	0	54737
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<1	2	8
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m >5	0	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >7	<1	0	0
Aluminum	ppm	ASTM D5185m >25	<1	<1	0
Lead	ppm	ASTM D5185m >45	4	2	2
Copper	ppm	ASTM D5185m >225	1	12	0
Tin	ppm	ASTM D5185m >10	2	1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	1	<1
Magnesium	ppm	ASTM D5185m	<1	3	0
Calcium	ppm	ASTM D5185m	91	76	46
Phosphorus	ppm	ASTM D5185m	155	477	132
Zinc	ppm	ASTM D5185m	<1	0	0
Sulfur	ppm	ASTM D5185m	1119	1888	1107

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >125	1	<1	<1
Sodium	ppm	ASTM D5185m	<1	2	<1
Potassium	ppm	ASTM D5185m >20	1	2	0
Water	%	ASTM D6304 >0.1	0.002	0.002	0.005
ppm Water	ppm	ASTM D6304 >1000	24	18	51

FLUID CLEANLINESS

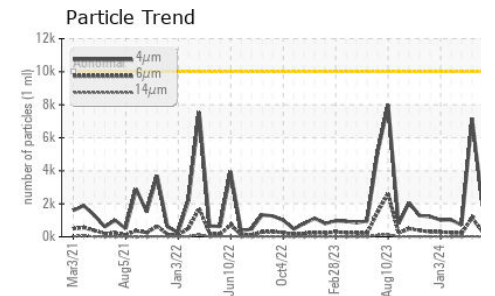
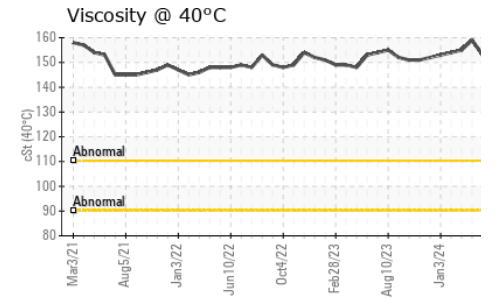
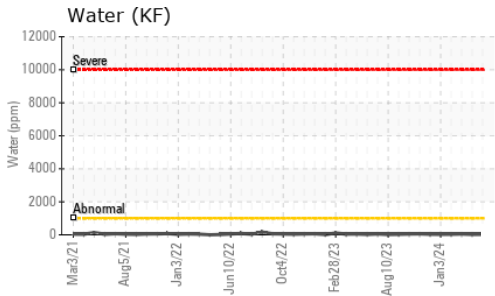
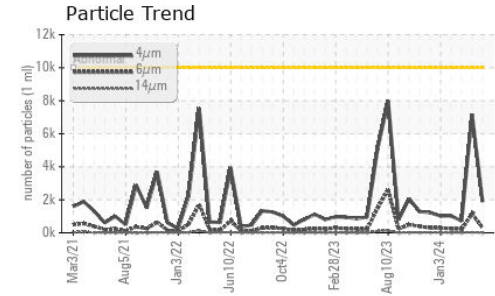
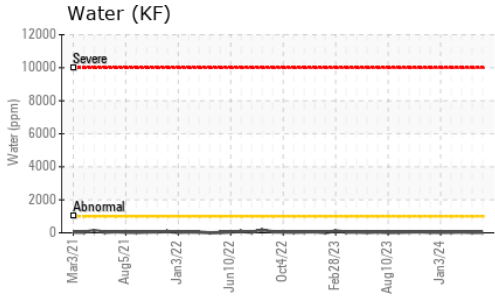
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	1883	7172	711
Particles >6µm	ASTM D7647	>2500	290	1149	214
Particles >14µm	ASTM D7647	>320	12	33	20
Particles >21µm	ASTM D7647	>80	2	7	5
Particles >38µm	ASTM D7647	>20	0	0	0
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	18/15/11	20/17/12	17/15/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.086	0.06	0.172



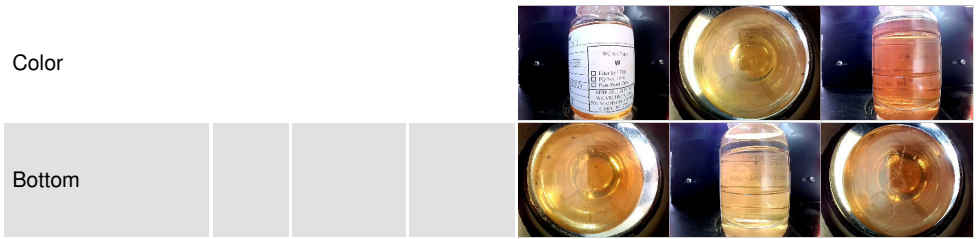
OIL ANALYSIS REPORT



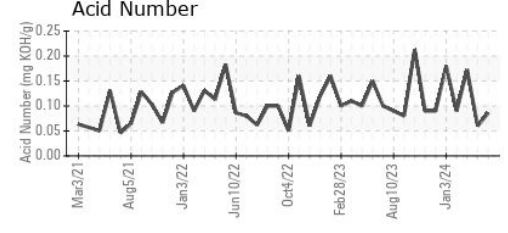
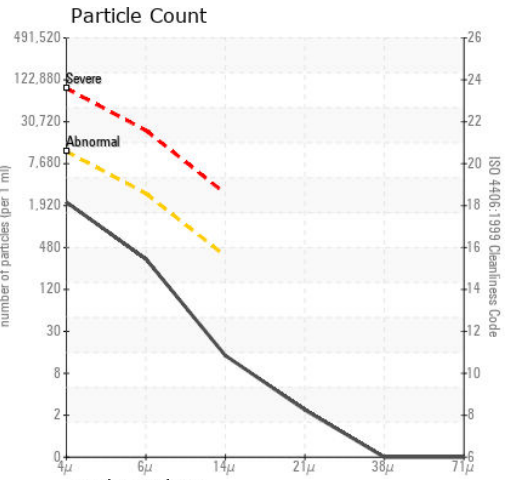
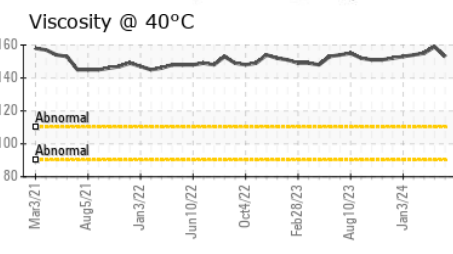
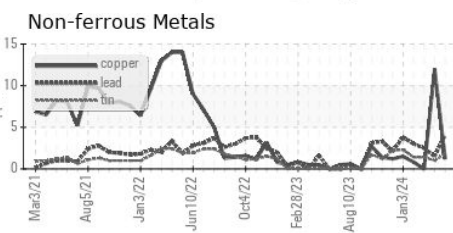
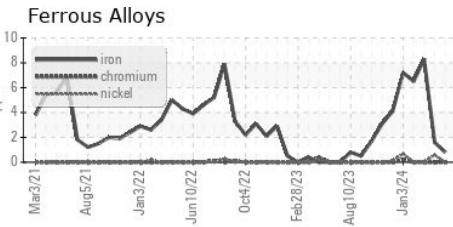
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	153	159	155

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012829
Lab Number : 06193999
Unique Number : 11056122
Test Package : IND 2
Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 31 May 2024 - Doug Bogart

EMPIRICAL FOODS INC. - BPISOUPRO - EMPSOUPRO
 S. SIOUX CITY, NE
 US
 Contact:

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)