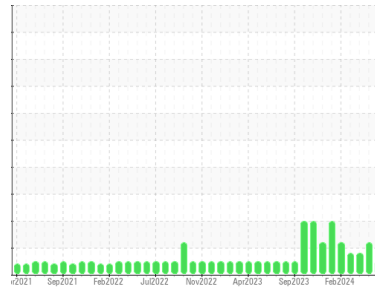




OIL ANALYSIS REPORT

Area
SSC
 Machine Id
NIRO 3 (S/N 005)
 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 oil. The amount and size of particulates present in the system are 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			USP0013289	USP0012831	USP0006331
Sample Date	Client Info			10 Jun 2024	24 May 2024	08 Apr 2024
Machine Age	hrs	Client Info		34543	34289	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	2	1	5
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>7	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
Lead	ppm	ASTM D5185m	>45	16	14	8
Copper	ppm	ASTM D5185m	>225	<1	<1	3
Tin	ppm	ASTM D5185m	>10	3	4	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	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	1	3
Calcium	ppm	ASTM D5185m		91	95	75
Phosphorus	ppm	ASTM D5185m		202	199	190
Zinc	ppm	ASTM D5185m		4	<1	0
Sulfur	ppm	ASTM D5185m		949	945	1411

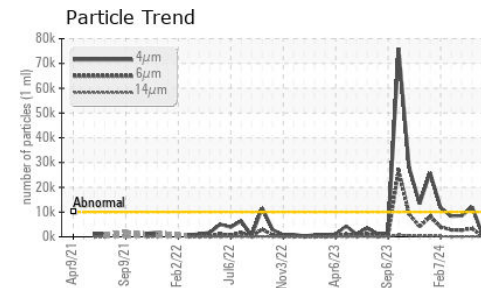
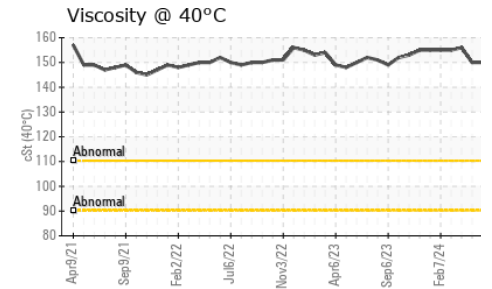
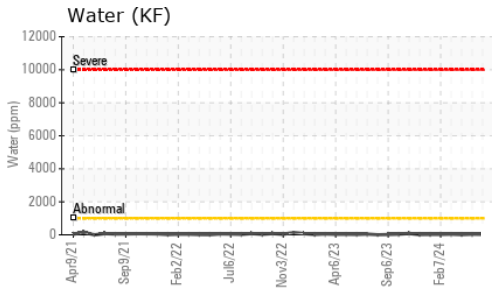
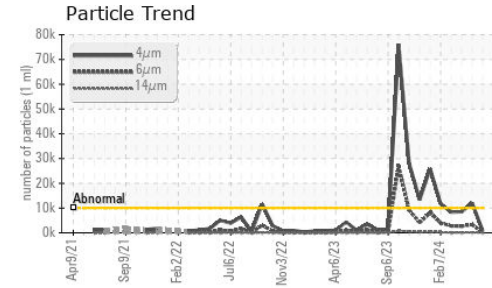
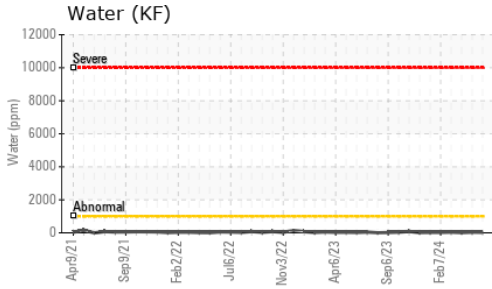
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	1	4	4
Sodium	ppm	ASTM D5185m		1	1	3
Potassium	ppm	ASTM D5185m	>20	<1	1	1
Water	%	ASTM D6304	>0.1	0.002	0.003	0.001
ppm Water	ppm	ASTM D6304	>1000	25	39	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	927	● 12061	8491
Particles >6µm		ASTM D7647	>2500	216	● 3290	● 2695
Particles >14µm		ASTM D7647	>320	4	190	141
Particles >21µm		ASTM D7647	>80	1	35	23
Particles >38µm		ASTM D7647	>20	0	0	1
Particles >71µm		ASTM D7647	>4	0	0	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	17/15/9	● 21/19/15	● 20/19/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.161	0.083	0.07



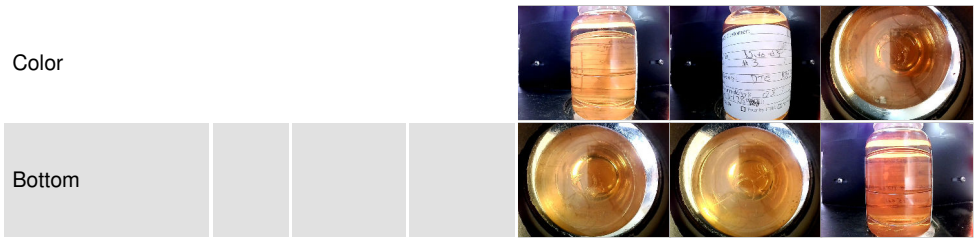
OIL ANALYSIS REPORT



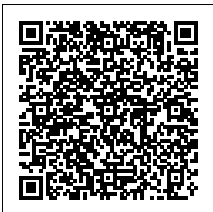
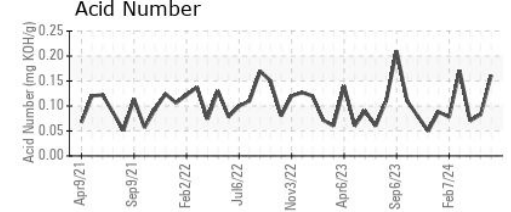
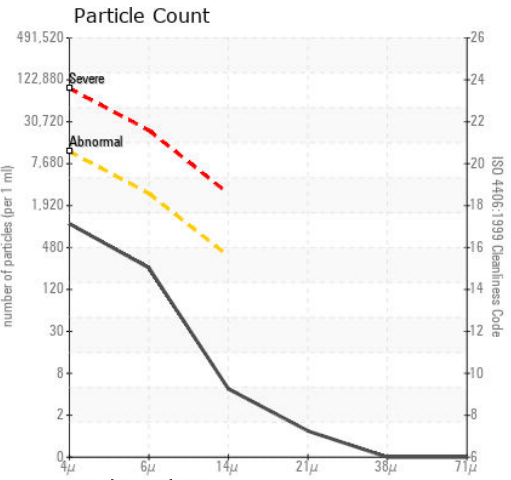
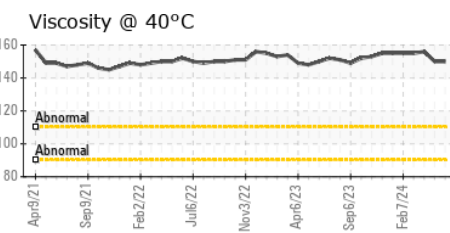
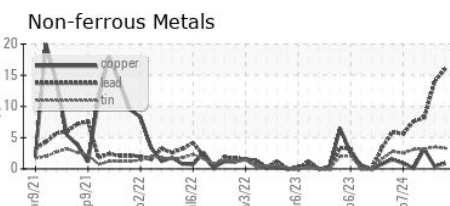
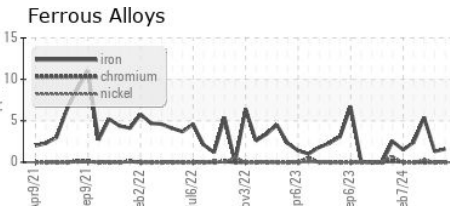
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	150	150	156

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0013289
Lab Number : 06211693
Unique Number : 11084557
Test Package : IND 2
Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 20 Jun 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)