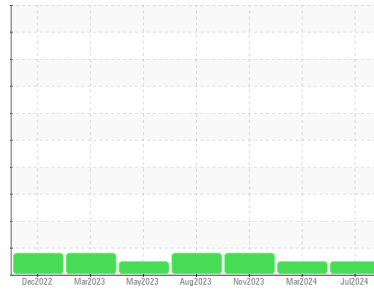




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

MEK
Machine Id

[MEK] TOTE 13 - A-F PREM AW 46

Component

New (Unused) Oil

Fluid

AW HYDRAULIC OIL ISO 46 (330 GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			RP0042841	RP0042871	RP0038954
Sample Date	Client Info			12 Jul 2024	08 Mar 2024	28 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	0	0	<1
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>5	0	0	2
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>5	0	0	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

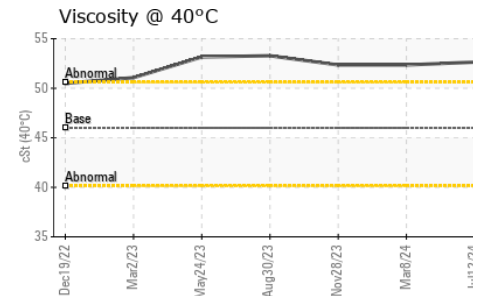
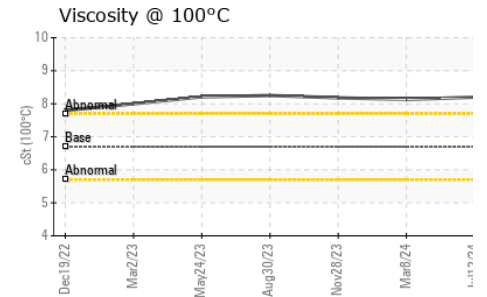
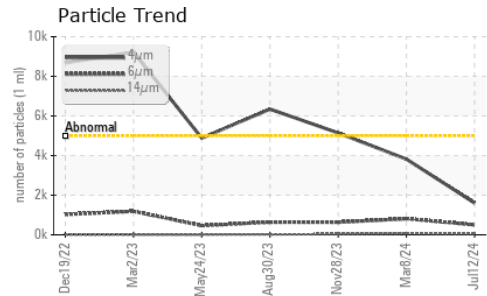
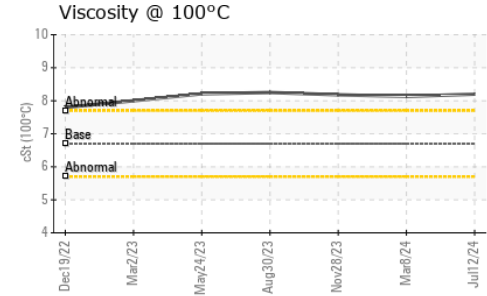
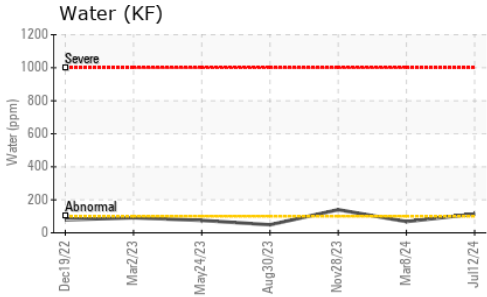
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	7	4	6
Barium	ppm	ASTM D5185m	5	0	0	2
Molybdenum	ppm	ASTM D5185m	5	4	3	4
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	31	9	27
Calcium	ppm	ASTM D5185m	200	133	98	110
Phosphorus	ppm	ASTM D5185m	300	329	273	293
Zinc	ppm	ASTM D5185m	370	434	341	361

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	0
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304		0.011	0.006	0.013
ppm Water	ppm	ASTM D6304		114	68	140

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1606	3821	5141
Particles >6µm		ASTM D7647	>1300	501	814	635
Particles >14µm		ASTM D7647	>160	49	64	35
Particles >21µm		ASTM D7647	>40	11	12	10
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/13	19/17/13	20/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.33	0.33	0.28

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	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	52.64	52.35
Visc @ 100°C	cSt	ASTM D445	6.7	8.2	8.13
Viscosity Index (VI)	Scale	ASTM D2270	97	127	125

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS	
<p>Ferrous Alloys</p>	<p>Particle Count</p>
<p>Non-ferrous Metals</p>	<p>Acid Number</p>
<p>Viscosity @ 40°C</p>	



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0042841 **Received** : 16 Jul 2024
Lab Number : 06238307 **Tested** : 19 Jul 2024
Unique Number : 11127141 **Diagnosed** : 19 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

CALUMET
 3333 MIDWAY AVENUE
 SHREVEPORT, LA
 US 71109
 Contact: NICHOLAS LESAGE
 nicholas.lesage@clmt.com

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)