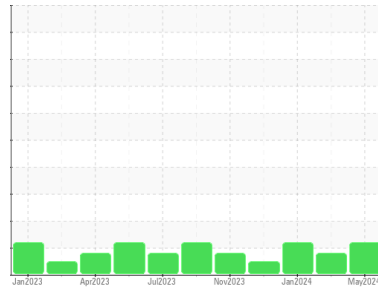




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KD-1 LP NOX PUMP**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DELVAC 1 5W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### 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			<b>USP0012894</b>	USP0007090	USP0007094
Sample Date	Client Info			<b>30 May 2024</b>	25 Jan 2024	25 Jan 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	291	<b>113</b>	104	134
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	8.0	<b>44</b>	37	40
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	624	<b>894</b>	735	818
Calcium	ppm	ASTM D5185m	2158	<b>1046</b>	791	901
Phosphorus	ppm	ASTM D5185m	1132	<b>1096</b>	955	910
Zinc	ppm	ASTM D5185m	1300	<b>1240</b>	1104	1107
Sulfur	ppm	ASTM D5185m	3616	<b>3436</b>	3031	2828

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>3</b>	2	4
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304	>0.05	<b>0.041</b>	0.035	0.027
ppm Water	ppm	ASTM D6304	>500	<b>415</b>	356	275

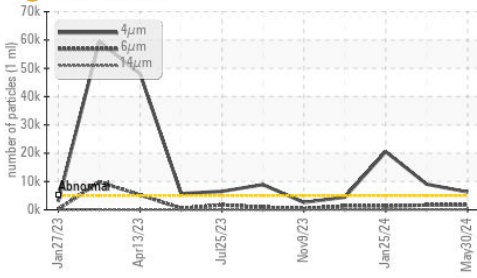
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>6277</b>	20543	9044
Particles >6µm		ASTM D7647	>1300	<b>1682</b>	1271	1672
Particles >14µm		ASTM D7647	>160	<b>94</b>	28	83
Particles >21µm		ASTM D7647	>40	<b>28</b>	8	25
Particles >38µm		ASTM D7647	>10	<b>3</b>	0	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/18/14</b>	22/17/12	20/18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.23</b>	0.83	1.35

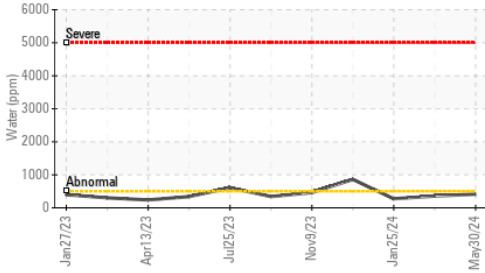


# OIL ANALYSIS REPORT

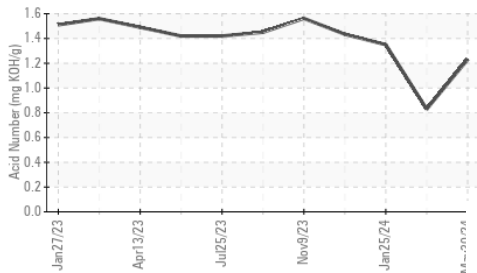
● Particle Trend



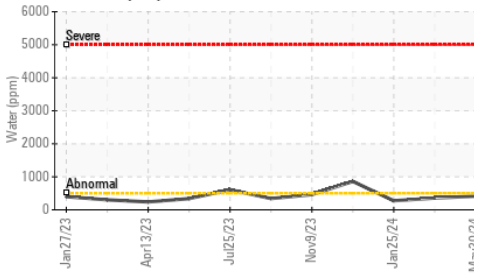
— Water (KF)



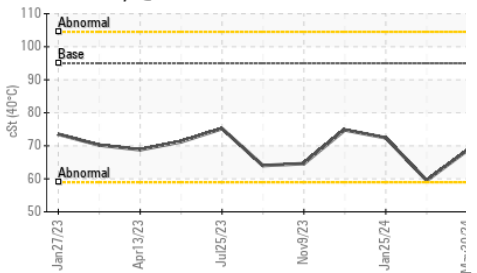
Acid Number



Water (KF)



Viscosity @ 40°C



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	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	95	68.7	59.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

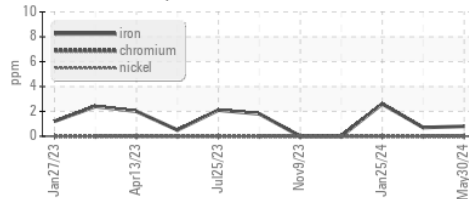


Bottom

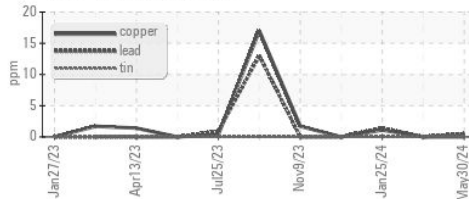


## GRAPHS

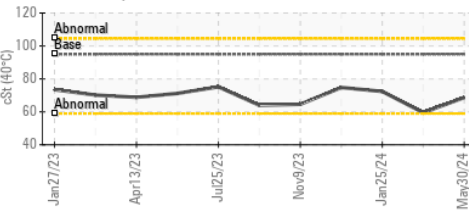
Ferrous Alloys



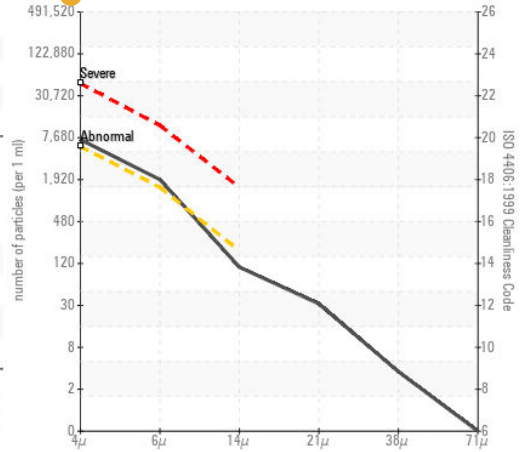
Non-ferrous Metals



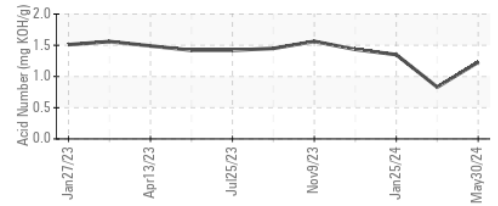
Viscosity @ 40°C



● Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0012894  
 Lab Number : 06196715  
 Unique Number : 11058838  
 Test Package : IND 2

Received : 31 May 2024  
 Tested : 03 Jun 2024  
 Diagnosed : 03 Jun 2024 - Doug Bogart

ENERGY CENTER DOVER LLC - DCODOV  
 1280 W NORTH ST  
 DOVER, DE  
 US 19904  
 Contact: ERNIE JUST  
 ernie.just@clearwayenergy.com  
 T: (302)678-4353  
 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)