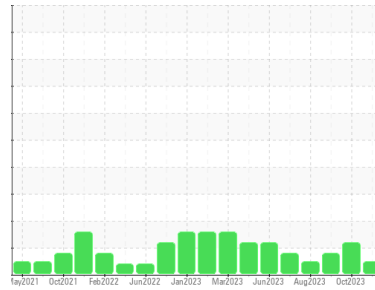




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**COLD MILL/CM-3STD-1S**  
 Machine Id  
**SOUTH 3-STAND PAYOFF OP GB 1526-007-1265**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 320 (100 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness 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		<b>KFS0004936</b>	KFS0003631	KFS0003626
Sample Date	Client Info		<b>31 Oct 2023</b>	09 Oct 2023	30 Aug 2023
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>NORMAL</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	1
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<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 >25	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	3	0
Copper	ppm	ASTM D5185m >200	<b>2</b>	1	2
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 55	<b>41</b>	39	52
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>2</b>	4	4
Calcium	ppm	ASTM D5185m 0	<b>6</b>	0	0
Phosphorus	ppm	ASTM D5185m 240	<b>206</b>	225	220
Zinc	ppm	ASTM D5185m 1	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 13700	<b>6629</b>	7022	7885

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>7</b>	7	8
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	2

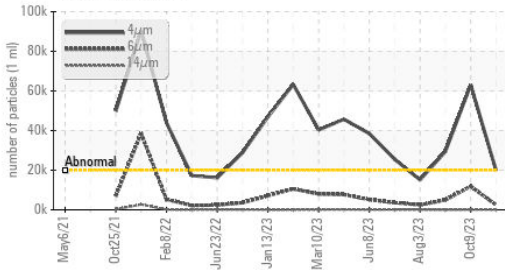
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>19927</b>	▲ 63073	▲ 29439
Particles >6µm	ASTM D7647	>5000	<b>2494</b>	▲ 11857	4991
Particles >14µm	ASTM D7647	>640	<b>62</b>	67	84
Particles >21µm	ASTM D7647	>160	<b>13</b>	8	18
Particles >38µm	ASTM D7647	>40	<b>1</b>	0	2
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>21/18/13</b>	▲ 23/21/13	▲ 22/19/14

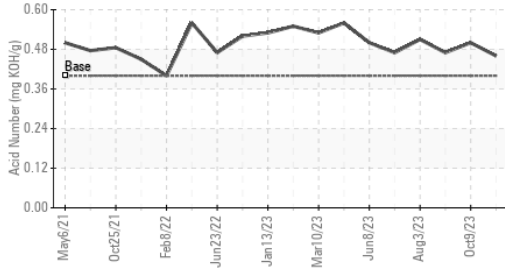
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.46</b>	0.50	0.47

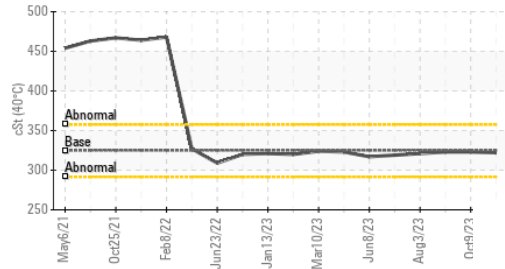
### Particle Trend



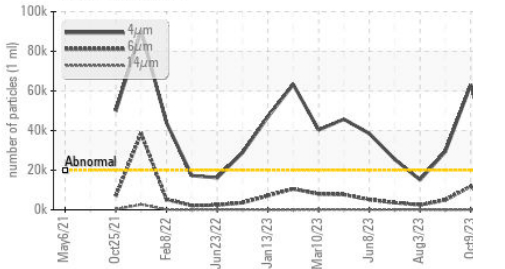
### Acid Number



### Viscosity @ 40°C



### Particle Trend

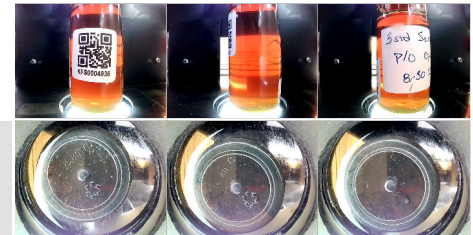


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 325	322	323	323

SAMPLE IMAGES	method	limit/base	current	history1	history2
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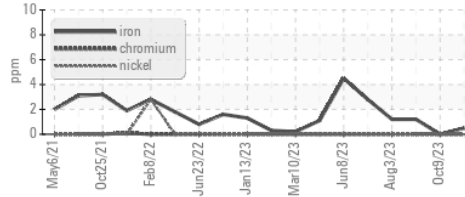
### Color



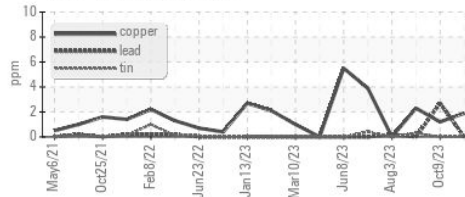
### Bottom

## GRAPHS

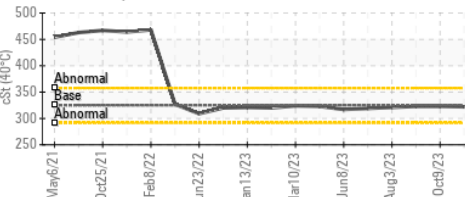
### Ferrous Alloys



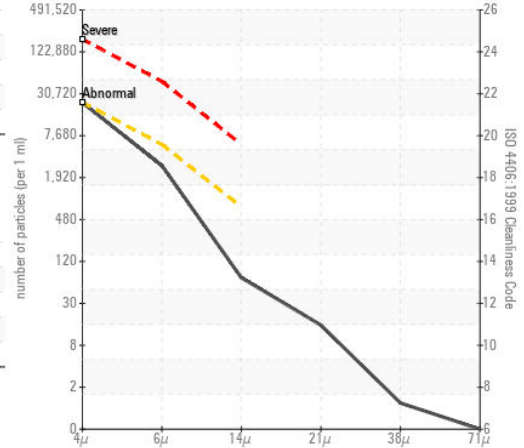
### Non-ferrous Metals



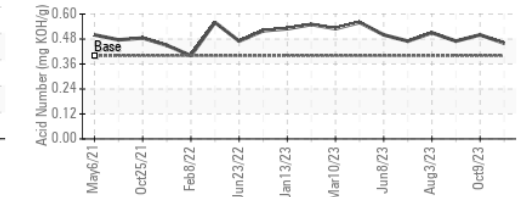
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0004936 **Received** : 01 Nov 2023  
**Lab Number** : 05995531 **Diagnosed** : 02 Nov 2023  
**Unique Number** : 10723891 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

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)

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