

# **OIL ANALYSIS REPORT**

# LSGS PLANT 2 **G5 BEARING** Component

**Hydraulic System** 

PETRO CANADA ENDURATEX EP 68 (200 LTR)

## 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 Rating Trend

LTR)				May2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0801013		
Sample Date		Client Info		18 May 2023		
Machine Age	yrs	Client Info		8		
Oil Age	yrs	Client Info		2		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
_ead	ppm	ASTM D5185(m)	>20	<1		
Copper	ppm	ASTM D5185(m)	>20	2		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	69	38		
Barium	ppm	ASTM D5185(m)	1	0		
Molybdenum	ppm	ASTM D5185(m)	1	0		
Vanganese	ppm	ASTM D5185(m)	1	0		
Magnesium	ppm	ASTM D5185(m)	1	0		
Calcium	ppm	ASTM D5185(m)	1	2		
Phosphorus	ppm	ASTM D5185(m)	246	298		
Zinc	ppm	ASTM D5185(m)	1	28		
Sulfur	ppm	ASTM D5185(m)	3670	3564		
Lithium	ppm	ASTM D5185(m)		<1		

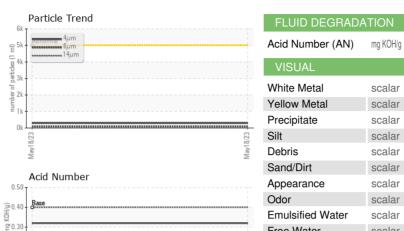
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<1		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	<1		

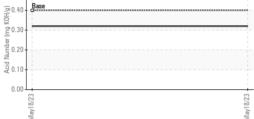
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	296		
Particles >6µm	ASTM D7647	>1300	93		
Particles >14µm	ASTM D7647	>160	10		
Particles >21µm	ASTM D7647	>40	3		
Particles >38µm	ASTM D7647	>10	0		
Particles >71µm	ASTM D7647	>3	0		
Oil Cleanliness	ISO 4406 (c)	>19/17/14	15/14/10		

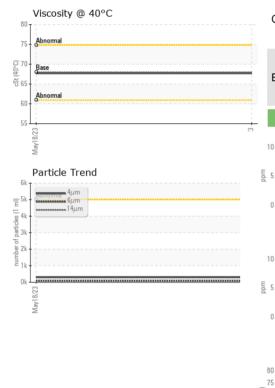
Contact/Location: Nelson Ross - PET412PET



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Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	0.32		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
)dor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*	>0.05	NEG		
FLUID PROPERT		method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)		67.7		
		. ,			In the second	la la tarra d
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
Bottom GRAPHS					no image	no image
				Particle Count	no image	no image
GRAPHS Ferrous Alloys			491,520	Particle Count	no image	
GRAPHS Ferrous Alloys			491.520-	Particle Count	no image	T <sup>2</sup>
GRAPHS Ferrous Alloys				Particle Count	no image	no image
GRAPHS Ferrous Alloys			122,880 30,720	Severe	no image	2 -2 -2
GRAPHS Ferrous Alloys			122,880 30,720	Particle Count Severe Abnormal	no image	-2 -2 -2
GRAPHS Ferrous Alloys			122,880 30,720	Severe	no image	-2 -2 -2
GRAPHS Ferrous Alloys	S		122,880 30,720	Severe	no image	2 -2 -2
GRAPHS Ferrous Alloys	5		122,880 30,720	Severe	no image	-2 -2 -2 -2 -11 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 (m 7,680 208 km 1,920 km 480 10 120 120	Severe	no image	2 2 -2 -2 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 TE 7.680 E 38 E 480 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Severe	no image	-2 -2 -11 -11 -12 -11 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 Te 7,680 1,920 Te 1,920 Te 480 1,920 Te 1,920 Te 1,	Severe	no image	-2 -2 -2 -2 -11 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 Te 7,680 1,920 Te 1,920 Te 480 1,920 Te 1,920 Te 1,	Severe	no image	-2 -2 -11 -11 -12 -11 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 C [ 7,680 1 ad 1,920 200 1 ad 1,920	Severe		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
GRAPHS Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Severe	по image	22 -22 -11 -11 -11 -11 -11 -11 -11
GRAPHS Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Abnormal		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
GRAPHS Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Severe Abnormal		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
GRAPHS Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Abnormal		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
GRAPHS Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Abnormal		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
GRAPHS Ferrous Alloys	5		122,880 30,720 (m 7,680) (m 1,20) (m 1,	Severe Abnomal Acid Number		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1
Ferrous Alloys	5		122,880 30,720 Free 7,680 Free 7,800 Free 7,	Abnormal		2 2 2 11 11 11 11 11 11 11 11 11 11 11 1

 Accredited Laboratory
 Unique Number
 : 5581199
 Diagnostician
 : Kevin Marson

 Test Package
 : IND 2

 To discuss this sample report, contact Customer Service at 1-800-268-2131.

 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

 Validity of results and interpretation are based on the sample and information as supplied.

 1867 ASHBURNHAM DRIVE PETERBOROUGH, ON CA K9L 1P8 Contact: Nelson Ross nross@pui.ca T: (705)760-6119 F: (705)748-3138

CALA

ISO 17025:2017

Laboratory

Sample No. Lab Number