

# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



INKS\_U1 INKS\_U1\_P1

Non-Drive End Pump

**ROYAL PURPLE SYNFILM GT 32 (--- GAL)** 

#### DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

## Contamination

The water content is negligible. There is no indication of any contamination 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			ер2019 Ја	un2020 Mar2021 De	oc2021 Sep2022 Jun2023	Feb 2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date	Sample Number		Client Info		RP0029068	RP0025907	RP0034170
Machine Age   hrs   Client Info   0			Client Info		10 May 2024	20 Feb 2024	15 Nov 2023
Oil Ange		hrs	Client Info		-	0	0
NORMAL   NORMAL   NORMAL   NORMAL		hrs	Client Info		0	0	0
NORMAL   NORMAL   NORMAL   WEAR METALS   method   limit/base   current   history1   history2	Oil Changed		Client Info		N/A	N/A	N/A
Iron	•				NORMAL	NORMAL	NORMAL
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>90	1	0	0
Titanium	Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Silver	Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Aluminum	Titanium	ppm	ASTM D5185m	>3	<1	0	0
Lead	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper	Aluminum	ppm	ASTM D5185m	>7	2	0	0
Tin         ppm         ASTM D5185m         >9         <1	Lead	ppm	ASTM D5185m	>12	<1	0	0
Vanadium         ppm         ASTM D5185m         <1	Copper	ppm	ASTM D5185m	>30	5	5	1
Cadmium         ppm         ASTM D5185m         <1	Tin	ppm	ASTM D5185m	>9	<1	0	0
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         <1	Boron	ppm	ASTM D5185m		0	0	0
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         4         0         1           Calcium         ppm         ASTM D5185m         5         0         2           Phosphorus         ppm         ASTM D5185m         4         0         4           Zinc         ppm         ASTM D5185m         8         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         >20         2         0         <1           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D5185m         >20         2         0         <1           Water         ppm         ASTM D5185m<	Barium	ppm	ASTM D5185m		0	0	0
Magnesium         ppm         ASTM D5185m         4         0         1           Calcium         ppm         ASTM D5185m         5         0         2           Phosphorus         ppm         ASTM D5185m         4         0         4           Zinc         ppm         ASTM D5185m         8         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         >20         2         0         <1           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D8045         0.039         0.102         0.186           VISUAL<	Molybdenum	ppm	ASTM D5185m		<1	0	0
Calcium         ppm         ASTM D5185m         5         0         2           Phosphorus         ppm         ASTM D5185m         4         0         4           Zinc         ppm         ASTM D5185m         8         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         0         0         1         0           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1000         21         56         49           FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg KOH/g         ASTM D8045         0.039         0.102         0.1	Manganese	ppm	ASTM D5185m		0	0	0
Phosphorus         ppm         ASTM D5185m         4         0         4           Zinc         ppm         ASTM D5185m         8         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         0         0         1           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1000         21         56         49           FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg K0Hg         ASTM D8045         0.039         0.102         0.186           VISUAL         method         limit/base         current         history	Magnesium	ppm	ASTM D5185m		4	0	1
Zinc         ppm         ASTM D5185m         8         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         >0         0         1           Potassium         ppm         ASTM D6304         >1         0.002         0.005         0.004           Water         %         ASTM D6304         >1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >1000         21         56         49           FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg KOHlg         ASTM D8045         0.039         0.102         0.186           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE	Calcium	ppm	ASTM D5185m		5	0	2
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         <1         0         0           Sodium         ppm         ASTM D5185m         0         0         1           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >.1000         21         56         49           FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg KOH/g         ASTM D8045         0.039         0.102         0.186           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE           Vellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual	Phosphorus	ppm	ASTM D5185m		4	0	4
Silicon         ppm         ASTM D5185m         >60         <1	Zinc	ppm	ASTM D5185m		8	0	0
Sodium         ppm         ASTM D5185m         0         0         1           Potassium         ppm         ASTM D5185m         >20         2         0         <1           Water         %         ASTM D6304         >.1         0.002         0.005         0.004           ppm Water         ppm         ASTM D6304         >1000         21         56         49           FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg KOH/g         ASTM D8045         0.039         0.102         0.186           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         s	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 0 <1  Water % ASTM D6304 >.1 0.002 0.005 0.004 ppm Water ppm ASTM D6304 >1000 21 56 49  FLUID DEGRADATION method limit/base current history1 history2  Acid Number (AN) mg KOH/g ASTM D8045 0.039 0.102 0.186  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Scalar *Visual NONE NONE NONE NONE NONE Scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML	Silicon	ppm	ASTM D5185m	>60	<1	0	0
Water	Sodium	ppm	ASTM D5185m		0	0	1
ppm Water ppm ASTM D6304 >1000 21 56 49  FLUID DEGRADATION method limit/base current history1 history2  Acid Number (AN) mg KOH/g ASTM D8045 0.039 0.102 0.186  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE  Yellow Metal scalar *Visual NONE NONE NONE NONE NONE  Precipitate scalar *Visual NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE  Appearance scalar *Visual NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Codor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >.1 NEG NEG	Potassium	ppm	ASTM D5185m	>20	2	0	<1
FLUID DEGRADATION method limit/base current history1 history2  Acid Number (AN) mg KOH/g ASTM D8045 0.039 0.102 0.186  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE  Yellow Metal scalar *Visual NONE NONE NONE NONE NONE  Precipitate scalar *Visual NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE NONE  Sand/Dirt scalar *Visual NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Odor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >.1 NEG NEG	Water	%	ASTM D6304	>.1	0.002	0.005	0.004
Acid Number (AN) mg KOH/g ASTM D8045 0.039 0.102 0.186  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG	ppm Water	ppm	ASTM D6304	>1000	21	56	49
VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1  NEG NEG	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1  NONE NORM NORML	Acid Number (AN)	mg KOH/g	ASTM D8045		0.039	0.102	0.186
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1  NONE NONE NORML NORML NORML NORML NORML NORML NORML NORML	White Metal	scalar	*Visual	NONE		NONE	NONE
Silt scalar *Visual NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE  Sand/Dirt scalar *Visual NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Odor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >.1 NEG NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE		NONE
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG	Debris	scalar	*Visual	NONE	_	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>.1	NEG		

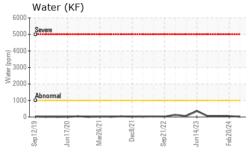
Ibmitted By: NATHAN HOLMES

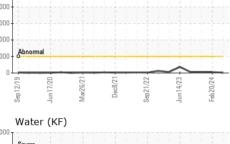
NEG

scalar \*Visual

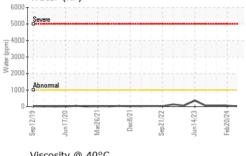


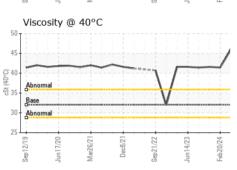
# **OIL ANALYSIS REPORT**

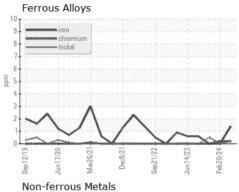


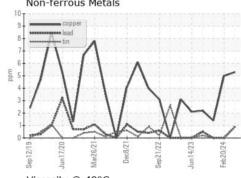


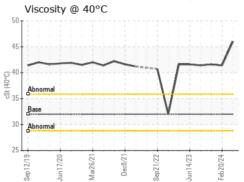
FLUID PROPERTIES		method				history2
Visc @ 40°C	cSt	ASTM D445	32	46.0	41.4	41.6
SAMPLE IMAGES	3	method				history2
Color						
Bottom						

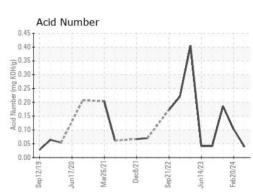
















Certificate 12367

Laboratory Sample No.

Lab Number : 06177790 Unique Number : 11029116

Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RP0029068 Received : 13 May 2024

**Tested** : 17 May 2024 Diagnosed : 17 May 2024 - Jonathan Hester

7155 INKSTER ROAD TAYOR, MI US 48180

Contact: NATHAN HOLMES nathan.holmes@energytransfer.com

**ENERGY TRANSFER - INKSTER** 

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)

Report Id: ENETAY [WUSCAR] 06177790 (Generated: 05/17/2024 10:58:33) Rev: 1

Submitted By: NATHAN HOLMES

T:

F: