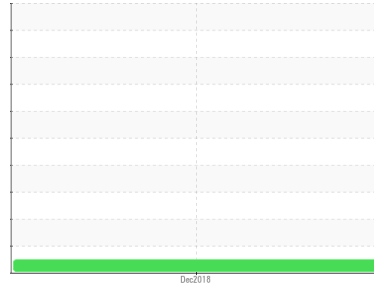




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
HPP [10019234791]
 Machine Id
HYBRID BULK SYSTEM
 Component
Hydraulic System
 Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system 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	WCI2319857	---	---
Sample Date	Client Info	26 Dec 2018	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>20	0	---	---
Chromium ppm ASTM D5185m	>20	0	---	---
Nickel ppm ASTM D5185m	>20	0	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m		0	---	---
Aluminum ppm ASTM D5185m	>20	0	---	---
Lead ppm ASTM D5185m	>20	0	---	---
Copper ppm ASTM D5185m	>20	0	---	---
Tin ppm ASTM D5185m	>20	0	---	---
Antimony ppm ASTM D5185m		0	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		<1	---	---
Barium ppm ASTM D5185m		0	---	---
Molybdenum ppm ASTM D5185m		0	---	---
Manganese ppm ASTM D5185m		0	---	---
Magnesium ppm ASTM D5185m		0	---	---
Calcium ppm ASTM D5185m		0	---	---
Phosphorus ppm ASTM D5185m		490	---	---
Zinc ppm ASTM D5185m		0	---	---
Sulfur ppm ASTM D5185m		505	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	2	---	---
Sodium ppm ASTM D5185m		0	---	---
Potassium ppm ASTM D5185m	>20	0	---	---
Water % ASTM D6304	>0.05	0.001	---	---
ppm Water ppm ASTM D6304	>500	10	---	---

FLUID CLEANLINESS

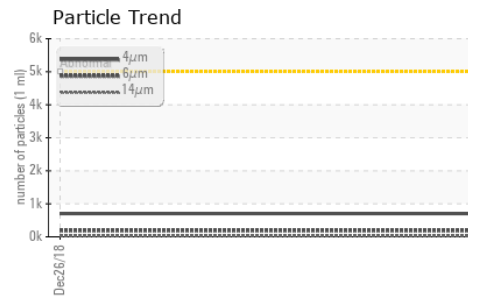
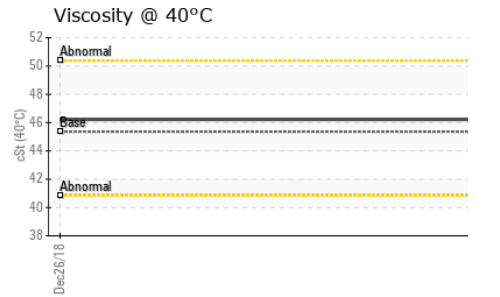
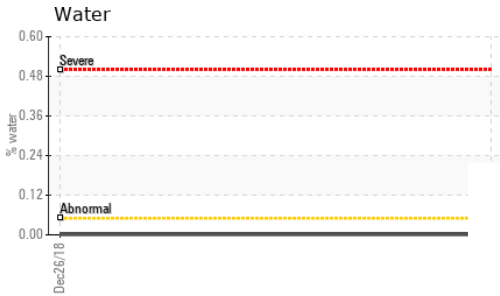
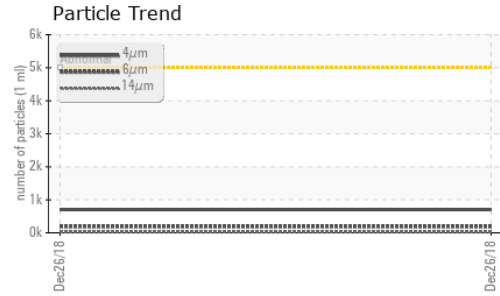
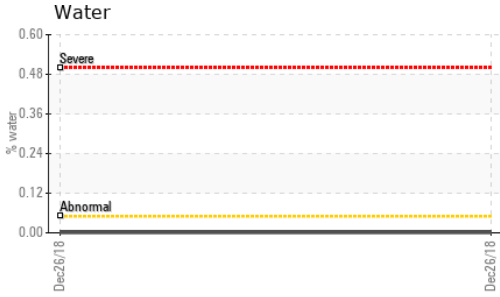
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	704	---	---
Particles >6µm ASTM D7647	>1300	191	---	---
Particles >14µm ASTM D7647	>160	20	---	---
Particles >21µm ASTM D7647	>40	4	---	---
Particles >38µm ASTM D7647	>10	0	---	---
Particles >71µm ASTM D7647	>3	0	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	17/15/11	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	0.26	0.309	---	---



OIL ANALYSIS REPORT



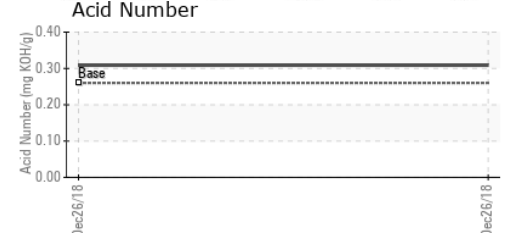
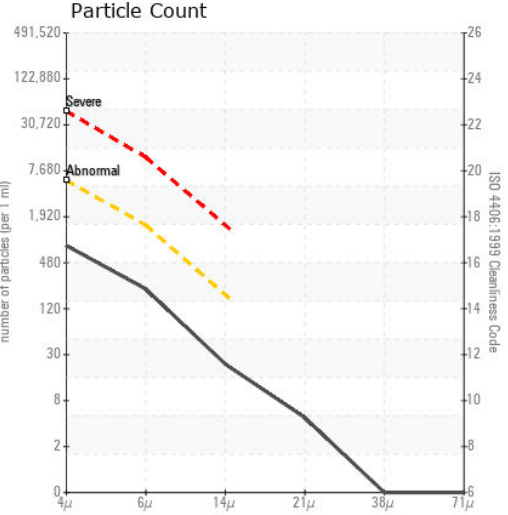
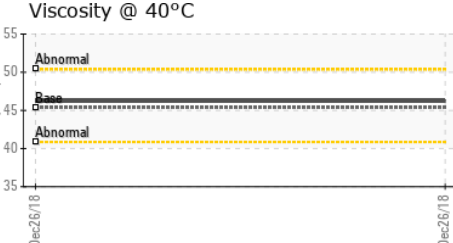
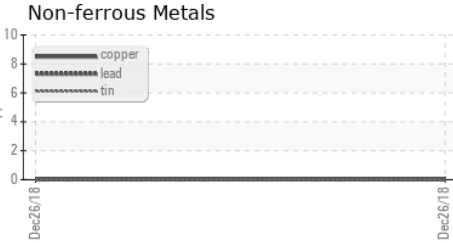
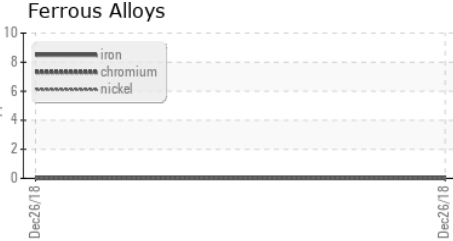
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	46.22	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC12319857 **Received** : 07 Jan 2019
Lab Number : 04624294 **Diagnosed** : 08 Jan 2019
Unique Number : 8450674 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

OSCEOLA FOODS (HORMEL)
 1027 WARREN AVE
 OSCEOLA, IA
 US 50213
 Contact: Chad Soukup
 crsoukup@hormel.com
 T:
 F: (641)342-8097

Certificate L2367
 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)