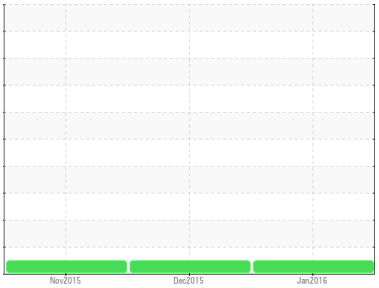
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
Press #1 6660719
Component
Hydraulic System
Fluid
SHELL TELLUS S2 M 46 (222 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		**PTKM2266634**	PTKM2264836	PTKM2262324
Sample Date		Client Info		**12 Jan 2016**	18 Dec 2015	20 Nov 2015
Machine Age	hrs	Client Info		**9357256**	8874076	324
Oil Age	hrs	Client Info		**0**	0	324
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**5**	4	5
Chromium	ppm	ASTM D5185m	>10	**<1**	0	<1
Nickel	ppm	ASTM D5185m		**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**0**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	<1	<1
Copper	ppm	ASTM D5185m	>75	**2**	3	2
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Antimony	ppm	ASTM D5185m		**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

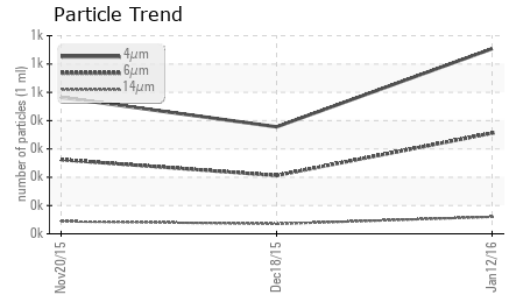
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**8**	6	9
Calcium	ppm	ASTM D5185m		**110**	96	119
Phosphorus	ppm	ASTM D5185m		**216**	216	207
Zinc	ppm	ASTM D5185m		**218**	203	222
Sulfur	ppm	ASTM D5185m		**3376**	3435	3192

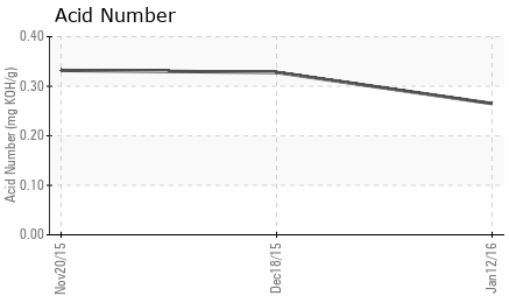
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**4**	3	4
Sodium	ppm	ASTM D5185m		**8**	10	22
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

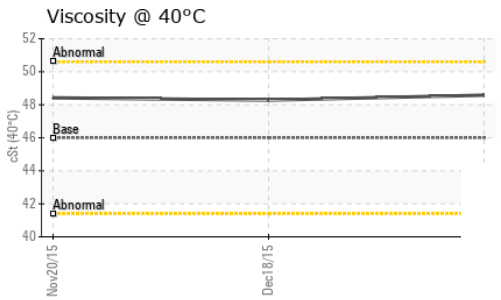
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**654**	378	482
Particles >6µm		ASTM D7647	>2500	**356**	206	262
Particles >14µm		ASTM D7647	>320	**60**	35	44
Particles >21µm		ASTM D7647	>80	**20**	11	15
Particles >38µm		ASTM D7647	>20	**3**	1	2
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15	**17/16/13**	16/15/12	16/15/13

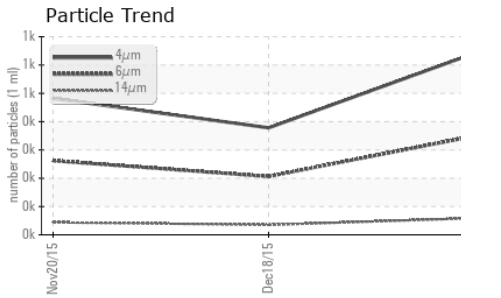
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.265**	0.328	0.332

OIL ANALYSIS REPORT







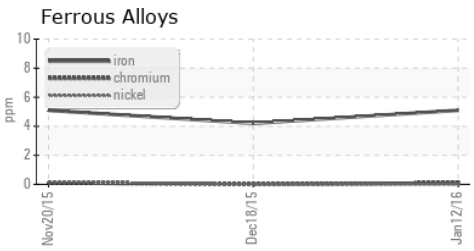


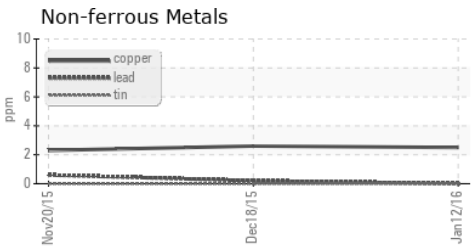
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	VLITE	VLITE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

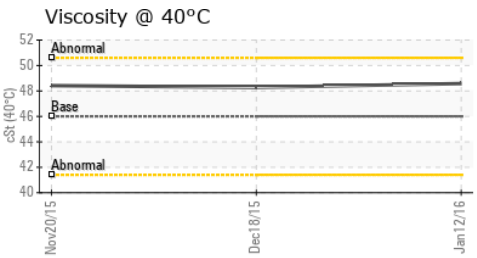
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	**48.58**	48.28	48.42

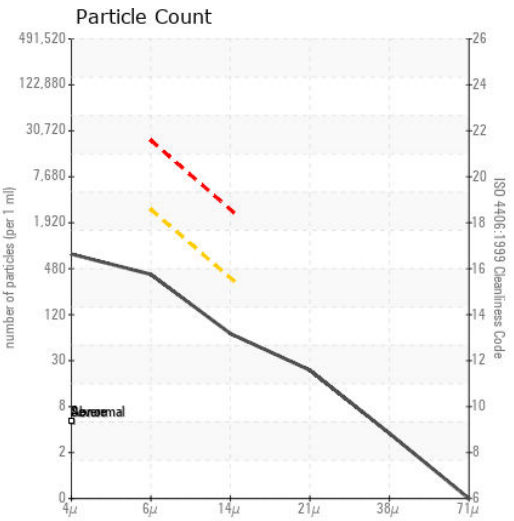
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

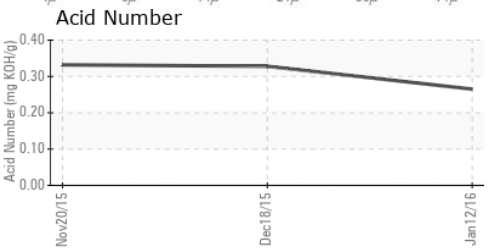
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTKM2266634
Lab Number : 03908628
Unique Number : 7278965
Test Package : MOB 2

Received : 27 Jan 2016
Diagnosed : 28 Jan 2016
Diagnostician : Wes Davis

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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