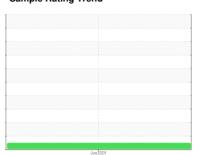


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **T293** Front Differential

SHELL SPIRAX S 75W90 (4 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

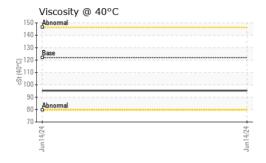
Fluid Condition

The condition of the oil is acceptable for the time in service.

Chromium					Jun 2024		
Sample Number Client Info PCA0127138	SAMPLE INFOR	ΜΔΤΙΩΝ	method	limit/hase	current	history1	history2
Client Info		W// TTTOTA		mmusacc			motory
Machine Age mls Client Info 0 0							
Oil Age mls Client Info Not Changed Sample Status Client Info Not Changed Sample Status NORMAL CONTAMINATION method Imit base Water WC Method .2 WEAR METALS method Imit base Uron ppm ASTM D5185m -500 Chromium ppm ASTM D5185m -10 -1 Chromium ppm ASTM D5185m -10 -1 Silver ppm ASTM D5185m -10 -1 Silver ppm ASTM D5185m -1 Silver ppm ASTM D5185m -5 2 Silver ppm ASTM D5185m >25 2 Silver ppm ASTM D5185m >10 -1 Copper ppm ASTM D5185m >10	•	la					
Contamped Client Info Not Changd Contamped C							
CONTAMINATION	•	mis			· ·		
CONTAMINATION method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >10 <1 <th></th> <th></th> <th>Client Into</th> <th></th> <th></th> <th></th> <th></th>			Client Into				
Water WC Method >.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >500 45 Chromium ppm ASTM D5185m >10 <1	·						
WEAR METALS		ION				history1	history2
					NEG		
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>500	45		
Titanium	Chromium	ppm	ASTM D5185m	>10	<1		
Silver	Nickel	ppm	ASTM D5185m	>10	<1		
Astropage	Titanium	ppm	ASTM D5185m		<1		
Lead	Silver	ppm	ASTM D5185m		0		
Copper ppm ASTM D5185m >100 <1	Aluminum	ppm	ASTM D5185m	>25	2		
Tin	Lead	ppm	ASTM D5185m	>25	<1		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m <1	Copper	ppm	ASTM D5185m	>100	<1		
Cadmium ppm ASTM D5185m <1	Tin	ppm	ASTM D5185m	>10	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 256	Cadmium	ppm	ASTM D5185m		<1		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		256		
Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m -1 Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 1200 Zinc ppm ASTM D5185m 2 Sulfur ppm ASTM D5185m 23336 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 4 Sodium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 1200 Zinc ppm ASTM D5185m 2 Sulfur ppm ASTM D5185m 23336 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 4 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		<1		
Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 1200 Zinc ppm ASTM D5185m 2 Sulfur ppm ASTM D5185m 23336 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 75 4 Sodium ppm ASTM D5185m 20 <1	Manganese	ppm	ASTM D5185m		2		
Phosphorus ppm ASTM D5185m 1200 Zinc ppm ASTM D5185m 2 Sulfur ppm ASTM D5185m 23336 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 75 4 Sodium ppm ASTM D5185m 20 <1 Potassium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE	Magnesium	ppm	ASTM D5185m		<1		
Zinc	Calcium	ppm	ASTM D5185m		0		
Sulfur ppm ASTM D5185m 23336 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 4 Sodium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 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 NORM	Phosphorus	ppm	ASTM D5185m		1200		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 <1 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 NORML NORML Appearance scalar *Visual	Zinc	ppm	ASTM D5185m		2		
Silicon	Sulfur	ppm	ASTM D5185m		23336		
Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 <1 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 NORML NORML Appearance scalar *Visual NORML NORML Codor scalar *Visual NORML NORML Emulsified Water scalar *Visual <th>CONTAMINAN</th> <th>ITS</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1	Silicon	ppm	ASTM D5185m	>75	4		
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 NORML NORML Appearance scalar *Visual NORML NORML Codor scalar *Visual >.2 NEG	Sodium	ppm	ASTM D5185m		1		
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 NORML NORML Appearance scalar *Visual NORML NORML Codor scalar *Visual >.2 NEG	Potassium	ppm	ASTM D5185m	>20	<1		
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 NORML NORML Appearance scalar *Visual NORML NORML Codor scalar *Visual >.2 NEG	VISUAL		method	limit/base	current	history1	history2
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 >.2 NEG	White Metal	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 >.2 NEG	Yellow Metal	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 >.2 NEG	Precipitate	scalar	*Visual	NONE	NONE		
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >.2 NEG	Silt	scalar	*Visual	NONE	NONE		
Appearance scalar *Visual NORML NORML COdor scalar *Visual NORML NORML CEmulsified Water scalar *Visual >.2 NEG	Debris	scalar	*Visual	NONE	NONE		
Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >.2 NEG	Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >.2 NEG	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
Free Water scalar *Visual NEG	Emulsified Water	scalar	*Visual	>.2	NEG		
	Free Water	scalar	*Visual		NEG		

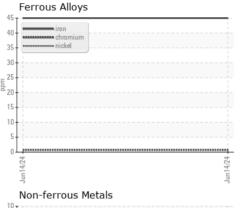


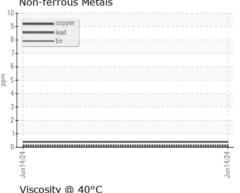
OIL ANALYSIS REPORT

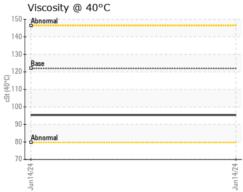


FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	122	95.3		
SAMPLE IMA	GES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS









Certificate 12367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **Sample No.** : PCA0127138 Lab Number : 06212110 Unique Number : 11084974

Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received : 17 Jun 2024 Tested Diagnosed

: 18 Jun 2024 : 18 Jun 2024 - Wes Davis

NW WHITE & CO - GREENWOOD DIVISION 411 QUARRY ROAD GREENWOOD, SC US 29149

Contact: Mitchell Brown greenwoodshop@nwwhite.com T: (864)389-9553

* - 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: NWWGRE [WUSCAR] 06212110 (Generated: 06/22/2024 00:40:56) Rev: 1

Submitted By: James Threatt