

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



NWW GREENWOOD

DT793

Front Differential

SHELL SPIRAX S6 AXME 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

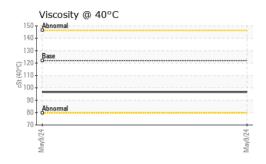
Fluid Condition

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

SAMPLE INFORMATION					May2024		
Sample Date Client Info 09 May 2024	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 162238 Machine Age mils Client Info 0 Oil Age mils Client Info 0 Oil Changed Client Info Changed Sample Status	Sample Number		Client Info		PCA0102304		
Machine Age mls Client Info 162238 Oil Age mis Client Info Changed Oil Changed Client Info Changed Sample Status method limit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >50.0 129 Chromium ppm ASTM 05185m >10 0 Nickel ppm ASTM 05185m >10 0 Silver ppm ASTM 05185m >25 <1			Client Info		09 May 2024		
Oil Changed Sample Status Client Info NoRMAL Changed NORMAL	Machine Age	mls	Client Info		_		
Sample Status	Oil Age	mls	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >500 129 Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >25 0 Aluminum ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 277 <td>Oil Changed</td> <td></td> <td>Client Info</td> <td></td> <td>Changed</td> <td></td> <td></td>	Oil Changed		Client Info		Changed		
Water WC Method >.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >500 129 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m >25 <1 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m 10 0 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Barium ppm AST	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM DS185m >500 129 Chromium ppm ASTM DS185m >10 <1 Nickel ppm ASTM DS185m >10 0 Titanium ppm ASTM DS185m 0 Aluminum ppm ASTM DS185m >25 <1 Lead ppm ASTM DS185m >25 0 Lead ppm ASTM DS185m >10 0 Lead ppm ASTM DS185m 0 0 Lead ppm ASTM DS185m 0 0 Vanadium ppm ASTM DS185m 0 Cadmium ppm ASTM DS185m 0	CONTAMINAT	ION	method	limit/base	current	history1	history2
Iron	Water		WC Method	>.2	NEG		
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>500	129		
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >25 <1	Chromium	ppm	ASTM D5185m	>10	<1		
Silver	Nickel	ppm	ASTM D5185m	>10	0		
Aluminum ppm ASTM D5185m >25 <1 Lead ppm ASTM D5185m >25 0 Copper ppm ASTM D5185m >100 12 Tin ppm ASTM D5185m 10 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Boron ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 7 Manganese ppm ASTM D5185m 7 Manganesium ppm ASTM D5185m 7 Visual ppm ASTM D5185m	Titanium	ppm	ASTM D5185m		0		
Lead	Silver	ppm	ASTM D5185m		0		
Copper ppm ASTM D5185m >100 12 Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 7 Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 7 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 CONTAMINANTS method limit/base current hist	Aluminum	ppm	ASTM D5185m	>25	<1		
Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 7 Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 34 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 27452 Sulfur ppm ASTM D5185m 75 44 Sulfucon ppm ASTM D5185m >75	Lead	ppm	ASTM D5185m	>25	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 277 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 7 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 Sulfur ppm ASTM D5185m 275 44 Sodium ppm ASTM D5185m 3	Copper	ppm	ASTM D5185m	>100	12		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2777 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 34 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 Velfur ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20	Tin	ppm	ASTM D5185m	>10	0		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 34 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 26 Zinc ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 Sulfur ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m 3 Sodium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal scalar	Boron	ppm	ASTM D5185m		277		
Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 1474 Zinc ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 Sulfur ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silt scalar *Visual <t< td=""><td>Barium</td><td>ppm</td><td>ASTM D5185m</td><td></td><td>0</td><td></td><td></td></t<>	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 7 Calcium ppm ASTM D5185m 34 Phosphorus ppm ASTM D5185m 26 Zinc ppm ASTM D5185m 27452 Sulfur ppm ASTM D5185m 275 44 Silicon ppm ASTM D5185m 3 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 2 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	Molybdenum	ppm	ASTM D5185m		0		
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Phosphorus ppm ASTM D5185m 1474 Zinc ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 VISUAL method limit/base current history1 history2 VISUAL NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE <	Magnesium	ppm	ASTM D5185m		7		
Zinc ppm ASTM D5185m 26 Sulfur ppm ASTM D5185m 27452 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 2 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	Calcium	ppm	ASTM D5185m		34		
Sulfur ppm ASTM D5185m 27452 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 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	Phosphorus	ppm	ASTM D5185m		1474		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 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 *Vis	Zinc	ppm	ASTM D5185m		26		
Silicon ppm ASTM D5185m >75 44 Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 2 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 Godor scalar *Visual <td< th=""><th>Sulfur</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>27452</th><th></th><th></th></td<>	Sulfur	ppm	ASTM D5185m		27452		
Sodium ppm ASTM D5185m 3 Potassium ppm ASTM D5185m >20 2 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 2 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 NORML Appearance scalar *Visual NORML NORML Odor scalar *Visual >.2 NEG Emulsified Water scalar *Visual >.2 NEG	Silicon	ppm	ASTM D5185m	>75	44		
White Metal scalar *Visual NONE NONE Yellow 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 Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual >.2 NEG	Sodium	ppm	ASTM D5185m		3		
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 NORML Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >.2 NEG	Potassium	ppm	ASTM D5185m	>20	2		
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 >.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 Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE COdor scalar *Visual NORML NORML COdor scalar *Visual NORML NORML COdor Scalar *Visual NORML NORML COdor Scalar *Visual Scalar *Visu	Yellow Metal	scalar	*Visual	NONE	NONE		
Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML Codor scalar *Visual NORML NORML NORML Scalar *Visual NORML NORML Scalar *Visual >.2 NEG	Precipitate	scalar	*Visual	NONE	NONE		
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>.2NEG	Silt	scalar	*Visual	NONE	NONE		
Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>.2NEG	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		

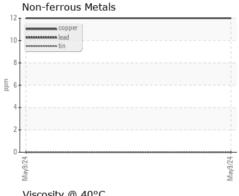


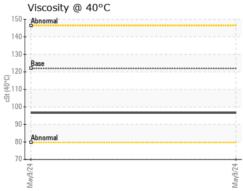
OIL ANALYSIS REPORT



FLUID PROP	ERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	122	96.6		
SAMPLE IMA	GES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						

Ferrous Alloys 140 100







Sample No. : PCA0102304 Lab Number : 06175974 Unique Number : 11022027

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Tested

: 10 May 2024 : 12 May 2024 Diagnosed

: 12 May 2024 - Wes Davis

411 QUARRY ROAD GREENWOOD, SC US 29149

NW WHITE & CO - GREENWOOD DIVISION

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

Test Package : FLEET Certificate 12367 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)