

# **PROBLEM SUMMARY**

# [181798-N2STV4W] Machine Id CHATSWORTH

Hydraulic System

**SHELL TELLUS (--- GAL)** 

# Sample Rating Trend VISUAL METAL Judges Jud

# **COMPONENT CONDITION SUMMARY**

No relevant graphs to display

# RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for possible wear. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL			
White Metal	scalar	*Visual	NONE	▲ MODER			
PrtFilter					no image	no image	

Customer Id: EXPHAM Sample No.: PH05903229 Lab Number: 05903229 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS				
Action	Status	Date	Done By	Description
Inspect Wear Source			?	We advise that you inspect for the source(s) of wear.
Change Filter			?	We recommend you service the filters on this component.
Alert			?	We were unable to perform a particle count due to metal particles present in this sample.
				this sample.

# HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**

# [181798-N2STV4W] **CHATSWORTH**

**Hydraulic System** 

**SHELL TELLUS (--- GAL)** 

Sample Rating Trend



# **DIAGNOSIS**

# Recommendation

We recommend you service the filters on this component. We advise that you inspect for possible wear. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

Moderate concentration of visible metal present. All component wear rates are normal.

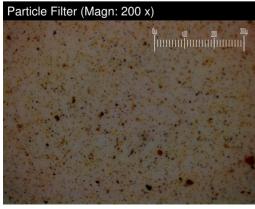
# Contamination

There is no indication of any contamination in the

# **Fluid Condition**

The AN level is acceptable for this fluid.

				Jul2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PH05903229		
Sample Date		Client Info		13 Jul 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	16		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	<1		
Copper	ppm	ASTM D5185m	>20	8		
Tin	ppm	ASTM D5185m	>20	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		2		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0	 	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0 <1 1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0 <1 1 21		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0 <1 1 21 286		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 1 0 <1 1 21 286 285		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 1 0 <1 1 21 286 285 2062		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 1 0 <1 1 21 286 285 2062 current	     history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 1 0 <1 1 21 286 285 2062 current	    history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15	0 1 0 <1 1 21 286 285 2062 current 0	    history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	0 1 0 <1 1 21 286 285 2062 current 0 0	    history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	0 1 0 <1 1 1 21 286 285 2062 current 0 0 <1	history1 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRADA Acid Number (AN)	ppm	ASTM D5185m  method ASTM D5185m	limit/base >15 >20 limit/base	0 1 0 <1 1 1 21 286 285 2062 current 0 0 <1 current	history1 history1	



Report Id: EXPHAM

A PARTY OF THE RESERVE OF THE PARTY OF THE P	Free Water
[WUSCAR] 05903229 (Generated: 07/24/2023 13	3:06:03) Rev: 1

Yellow Metal

Precipitate

Silt

Debris

Sand/Dirt

Appearance

**Emulsified Water** 

scalar \*Visual

scalar \*Visual

scalar \*Visual

scalar

scalar

scalar

scalar

scalar

scalar

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

NONE

NONE

NONE

NONE

NONE

NORML

NORML

>0.05

NONE NONE

NONE

LIGHT

NONE

NORML

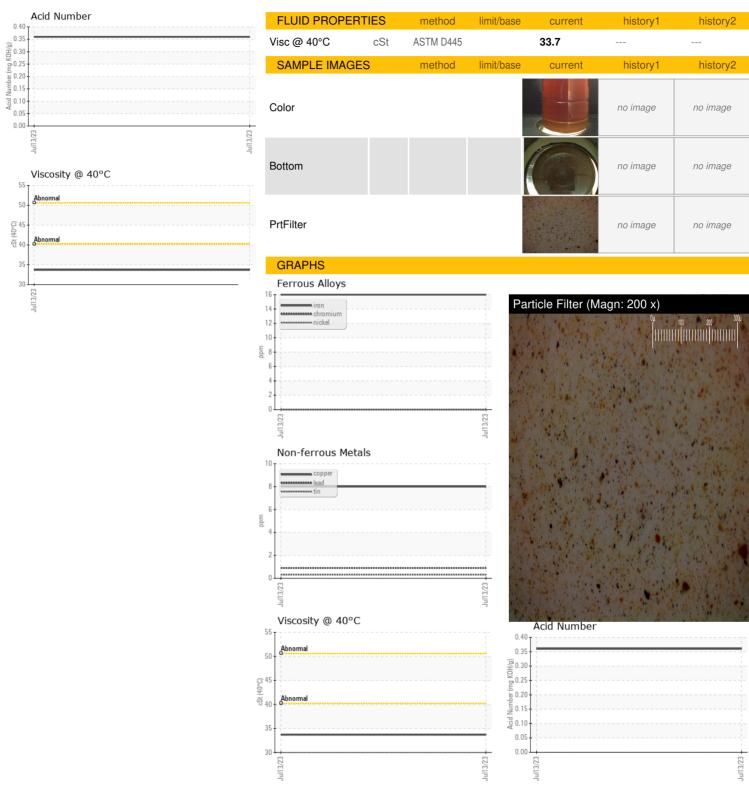
**NORML** 

NEG

NEG



# **OIL ANALYSIS REPORT**







Laboratory Sample No. Lab Number

Unique Number

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

: PH05903229 : 05903229 : 10564585

Received Diagnosed

: 20 Jul 2023 : 24 Jul 2023

Diagnostician : Jonathan Hester Test Package : PLANT ( Additional Tests: PrtFilter, PrtFilterPic )

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) **EXPLORER PIPELINE** 

3721 MICHIGAN ST HAMMOND, IN US 46323

Contact: RANDY KNEPPER rknepper@expl.com

T: (219)619-0180

Contact/Location: RANDY KNEPPER - EXPHAM