

# **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

Machine Id 20-74

Component **Hydraulic System** 

TDH FLUID SAE 75W80 (--- GAL)

## **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 75W80. Please confirm.

### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### **Fluid Condition**

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

		<u>,                                      </u>	Aug2021	Apr2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
		Client Info		WC0750271	WC0601490	
Sample Number Sample Date		Client Info		11 Apr 2024	17 Aug 2021	
Machine Age	hrs	Client Info		6462	0	
Oil Age	hrs	Client Info		0402	0	
Oil Changed	1113	Client Info		Not Changd	N/A	
Sample Status		Client iiilo		ABNORMAL	NORMAL	
		and the set	1''-			
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	4	
Chromium	ppm	ASTM D5185m	>10	<1	<1	
Nickel	ppm	ASTM D5185m	>10	<1	0	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm		>10	2	<1	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m	>75	3	3	
Tin	ppm	ASTM D5185m	>10	<1	0	
Antimony	ppm	ASTM D5185m			3	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium						
Gaumum	ppm	ASTM D5185m		<1	0	
ADDITIVES	ppm	ASTM D5185m method	limit/base	<1 current	0 history1	history2
	ppm		limit/base			
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	10	current 4	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	10 10	current 4 <1	history1 5	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	10 10	current 4 <1 2	history1 5 0	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 10	current 4 <1 2 <1	history1  5 0 0 <1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm	method  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 10	current 4 <1 2 <1 14	history1  5  0  0  <1  6	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium	ppm ppm ppm ppm ppm	method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	10 10 10 10 100 3500	current 4 <1 2 <1 14 2676	history1  5  0  0  <1  6  1630	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	10 10 10 10 100 3500 1150	current 4 <1 2 <1 14 2676 1026	history1  5  0  0  <1  6  1630  663	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	10 10 10 10 100 3500 1150	current 4 <1 2 <1 14 2676 1026 1128	history1  5  0  0  <1  6  1630  663  751	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	10 10 10 100 3500 1150 1150 5000	current  4 <1 2 <1 14 2676 1026 1128 3702	history1  5  0  0  <1  6  1630  663  751  2923	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	10 10 10 100 3500 1150 1150 5000	current  4 <1 2 <1 14 2676 1026 1128 3702 current	history1  5  0  0  <1  6  1630  663  751  2923  history1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	10 10 10 100 3500 1150 1150 5000 limit/base >20	current  4 <1 2 <1 14 2676 1026 1128 3702 current 4	history1  5 0 0 <1 6 1630 663 751 2923 history1 4	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	10 10 10 100 3500 1150 1150 5000 limit/base >20	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0	history1  5 0 0 0 <1 6 1630 663 751 2923 history1 4	history2 history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	10 10 10 100 3500 1150 1150 5000 limit/base >20 >20	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0 2	history1  5  0  0  <1 6 1630 663 751 2923 history1  4 1 6	history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 10 10 3500 1150 1150 5000 limit/base >20	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0 2 current	history1  5  0  0  <1  6  1630  663  751  2923  history1  4  1  6  history1	history2 history2 history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m	10 10 10 10 3500 1150 1150 5000 limit/base >20	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0 2 current  28196	history1  5  0  0  <1  6  1630  663  751  2923  history1  4  1  6  history1  4737	history2 history2 history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm  Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m method ASTM D5185m	10 10 10 10 100 3500 1150 1150 5000 limit/base >20 >20 limit/base >5000 >1300	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0 2 current  △ 28196 △ 4490	history1  5  0  0  <1 6 1630 663 751 2923 history1  4 1 6 history1 4737 737	history2 history2 history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >6µm  Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  Method  ASTM D5185m  ASTM D7647  ASTM D7647	10 10 10 10 100 3500 1150 1150 5000 limit/base >20 >20 limit/base >5000 >1300 >160	current  4 <1 2 <1 14 2676 1026 1128 3702 current  4 0 2 current  △ 28196 △ 4490 ○ 232	history1  5  0  0  <1 6 1630 663 751 2923 history1  4 1 6 history1 4737 737 48	history2 history2 history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  FLUID CLEANLIN  Particles >4µm  Particles >14µm  Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	10 10 10 10 100 3500 1150 1150 5000 limit/base >20 >20 limit/base >5000 >1300 >160 >40	current  4 <1 2 <1 14 2676 1026 1128 3702  current  4 0 2  current  ▲ 28196  ▲ 4490  ② 232  ⑤ 58	history1  5 0 0   1630 663 751 2923 history1 4 1 6 history1 4737 737 48 11	history2 history2 history2



# OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WC0750271 Lab Number : 06148048

Unique Number : 10978126 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Apr 2024 **Tested** : 15 Apr 2024

Diagnosed : 15 Apr 2024 - 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)

MANHATTAN ROAD AND BRIDGE

5601 S 122ND E AVE TULSA, OK US 74146

Contact: BEN CALDWELL kevin.marson@wearcheck.com T: (918)728-5749

Contact/Location: BEN CALDWELL - MANTUL