

### **PROBLEM SUMMARY**

### Sample Rating Trend



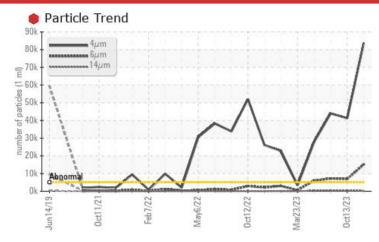
# **Extrusion**

## Press 2 Press Hydraulic Unit (S/N 70227)

**Hydraulic System** 

**AW HYDRAULIC OIL ISO 46 (2500 GAL)** 

### COMPONENT CONDITION SUMMARY



### **RECOMMENDATION**

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST F	RESULTS				
Sample Status			SEVERE	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>5000	83732	<b>▲</b> 41229	<b>4</b> 3960
Particles >6µm	ASTM D7647	>1300	<b>15152</b>	<b>△</b> 6923	<b>▲</b> 7239
Particles >14μm	ASTM D7647	>160	<u> </u>	<u>^</u> 297	<b>296</b>
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>24/21/15</b>	23/20/15	<b>23/20/15</b>

**Customer Id: WESCARTEX Sample No.:** RP0038266 Lab Number: 06026383 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

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

#### **RECOMMENDED ACTIONS** Action **Status** Date Done By Description Change Filter ? We recommend you service the filters on this component. Resample ? Resample in 30-45 days to monitor this situation. ? Information Required Please specify the brand, type, and viscosity of the oil on your next sample. The air breather requires service. If unrated, we recommend that you replace with a **Check Breathers** ? suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather Check Seals Check seals and/or filters for points of contaminant entry.

### HISTORICAL DIAGNOSIS

#### 13 Oct 2023 Diag: Angela Borella

A

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



#### 25 Aug 2023 Diag: Don Baldridge

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 30 Jun 2023 Diag: Wes Davis

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

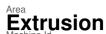




### **OIL ANALYSIS REPORT**

### Sample Rating Trend

### ISO

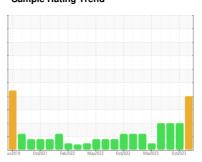


## Press 2 Press Hydraulic Unit (S/N 70227)

Component

**Hydraulic System** 

**AW HYDRAULIC OIL ISO 46 (2500 GAL)** 





### DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

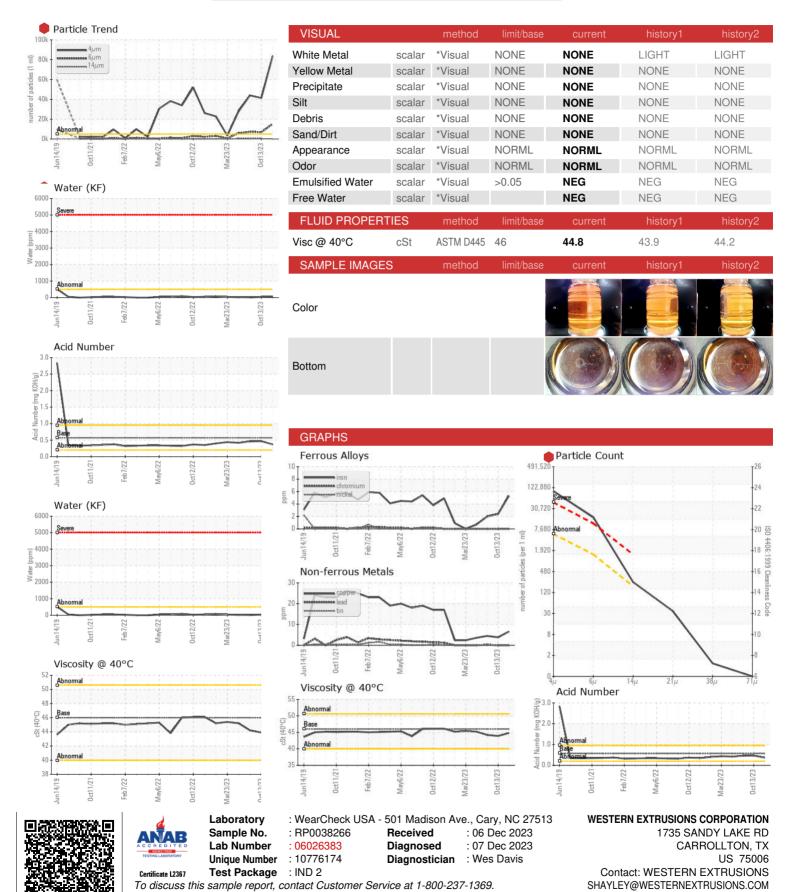
### **Fluid Condition**

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

Sample Number         Client Info         RP0038266         RP0038261         RP0038261         RP0024725           Sample Date         Client Info         01 Dec 2023         13 Oct 2023         25 Aug 2023           Machine Age         hrs         Client Info         0         0         0         0           Oil Age         hrs         Client Info         0         0         0         0           Oil Age         hrs         Client Info         N/A         N/A         N/A         N/A           Sample Status         Client Info         N/A         N/A         N/A         N/A         N/A           WEAR METALS         method         Imit base         current         history1         history1           Iron         ppm         ASTM D5185m         >20         5         2         2         2           Chromium         ppm         ASTM D5185m         >20         0         0         0         0           Iron         ppm         ASTM D5185m         >20         0         0         0         0           Iron         ppm         ASTM D5185m         >20         0         0         <1					ny2022 Oct2022 Mar2023	0et2023	
Sample Date         Client Info         01 Dec 2023         13 Oct 2023         25 Aug 2023           Machine Age         hrs         Client Info         0         0         0         0           Oil Age         hrs         Client Info         0         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         Imitibase         current         history1         history2           Iron         ppm         ASTM D5185m         >20         5         2         2         2           Chromium         ppm         ASTM D5185m         >20         0         0         0         0           Nickel         ppm         ASTM D5185m         >20         0         0         0         0           Aluminum         ppm         ASTM D5185m         20         0         0         0         0           Copper         ppm         ASTM D5185m         >20         0         0         0         1           Tin         ppm         ASTM D5185m	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         0         0         0         0           Oil Age         hrs         Client Info         0         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         SEVERE         ABNORMAL         ABNORMAL         ABNORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         5         2         2         2           Chromium         ppm         ASTM D5185m         >20         0         0         0         0           Nickel         ppm         ASTM D5185m         >20         0         0         0         0           Silver         ppm         ASTM D5185m         >20         0         0         -1         1           Lead         ppm         ASTM D5185m         >20         0         0         -1         1           Copper         ppm         ASTM D5185m         >20         0         0         0         0           Tin         ppm         ASTM	Sample Number		Client Info		RP0038266	RP0038261	RP0024725
Oil Age         hrs         Client Info         N/A         Patriory         Patriory         Patriory         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A         Patriory         Patrior         Patrior         Patrior         Patrior         Patrior         Patrior         Patrior         N/A	Sample Date		Client Info		01 Dec 2023	13 Oct 2023	25 Aug 2023
Oil Changed Sample Status	Machine Age	hrs	Client Info		0	0	0
Sample Status         SEVERE         ABNORMAL         ABNORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         5         2         2           Chromium         ppm         ASTM D5185m         >20         0         0         0           Nickel         ppm         ASTM D5185m         >20         0         0         0           Silver         ppm         ASTM D5185m         0         0         0         0           Aluminum         ppm         ASTM D5185m         >20         0         0         <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS	Oil Changed		Client Info		N/A	N/A	N/A
Irron	Sample Status				SEVERE	ABNORMAL	ABNORMAL
Chromium         ppm         ASTM D5185m         >20         0         0         0           Nickel         ppm         ASTM D5185m         >20         0         0         0           Titanium         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         >20         0         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Iron	ppm	ASTM D5185m	>20	5	2	2
Titanium   ppm   ASTM D5185m   0	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>20	0	0	0
Astropage   Ast	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >20         0         0         <1           Copper         ppm         ASTM D5185m         >20         7         4         4           Tin         ppm         ASTM D5185m         >20         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganesium         ppm         ASTM D5185m         5         8         17         11           Galcium         ppm         ASTM D5185m         25         17         32         17           Galcium         ppm         ASTM D5185m         20         82         129         87           Phosphorus         ppm         ASTM D5185m         370         383         416	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >20         7         4         4           Tin         ppm         ASTM D5185m         >20         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Boron         ppm         ASTM D5185m         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         5         8         17         11           Manganesium         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         20         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         >10         1         2         1	Aluminum	ppm	ASTM D5185m	>20	0	0	<1
Tin ppm ASTM D5185m > 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lead	ppm	ASTM D5185m	>20	0	0	<1
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         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2	Copper	ppm	ASTM D5185m	>20	7	4	4
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current	Tin	ppm	ASTM D5185m	>20	0	0	0
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Vanadium	ppm	ASTM D5185m		0	0	0
Boron         ppm         ASTM D5185m         5         7         13         6           Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         1           Sodium         ppm         ASTM D5185m         >10         1         1         1         1         1         1         1         1         1         2	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         5         0         0         2           Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         1         2         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         5         8         17         11           Manganese         ppm         ASTM D5185m         < 1         0         0           Magnesium         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Boron	ppm	ASTM D5185m	5	7	13	6
Manganese         ppm         ASTM D5185m         <1         0         0           Magnesium         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Barium	ppm	ASTM D5185m	5	0	0	2
Magnesium         ppm         ASTM D5185m         25         17         32         17           Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Molybdenum	ppm	ASTM D5185m	5	8	17	11
Calcium         ppm         ASTM D5185m         200         82         129         87           Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Manganese	ppm	ASTM D5185m		<1	0	0
Phosphorus         ppm         ASTM D5185m         300         323         349         329           Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >1         2         <1	Magnesium	ppm	ASTM D5185m	25	17	32	17
Zinc         ppm         ASTM D5185m         370         383         416         423           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Calcium	ppm	ASTM D5185m	200	82	129	87
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >15         1         2         <1	Phosphorus	ppm	ASTM D5185m	300	323	349	329
Silicon         ppm         ASTM D5185m         >15         1         2         <1           Sodium         ppm         ASTM D5185m         1         <1         0           Potassium         ppm         ASTM D5185m         >20         0         <1         2           Water         %         ASTM D6304         >0.05         0.006         0.003         0.001           ppm Water         ppm         ASTM D6304         >500         63         37.4         14.7           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000         83732         Δ 41229         Δ 43960           Particles >6μm         ASTM D7647         >1300         15152         Δ 6923         Δ 7239           Particles >14μm         ASTM D7647         >160         Δ 211         Δ 297         Δ 296           Particles >21μm         ASTM D7647         >40         31         Δ 78         Δ 66           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         Δ 23/20/	Zinc	ppm	ASTM D5185m	370	383	416	423
Sodium         ppm         ASTM D5185m         1         <1         0           Potassium         ppm         ASTM D5185m         >20         0         <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         0         <1         2           Water         %         ASTM D6304         >0.05         0.006         0.003         0.001           ppm Water         ppm         ASTM D6304         >500         63         37.4         14.7           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000         83732         41229         43960           Particles >6μm         ASTM D7647         >1300         15152         6923         7239           Particles >14μm         ASTM D7647         >160         211         297         296           Particles >21μm         ASTM D7647         >40         31         78         66           Particles >38μm         ASTM D7647         >3         0         0         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         23/20/15         23/20/15	Silicon	ppm	ASTM D5185m	>15	1	2	<1
Water         %         ASTM D6304         >0.05         0.006         0.003         0.001           ppm Water         ppm         ASTM D6304         >500         63         37.4         14.7           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000         83732         Δ 41229         Δ 43960           Particles >6μm         ASTM D7647         >1300         15152         Δ 6923         Δ 7239           Particles >14μm         ASTM D7647         >160         Δ 211         Δ 297         Δ 296           Particles >21μm         ASTM D7647         >40         31         Δ 78         Δ 66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         Δ 23/20/15         Δ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Sodium	ppm	ASTM D5185m		1	<1	0
ppm Water         ppm         ASTM D6304         >500         63         37.4         14.7           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000         83732         Δ 41229         Δ 43960           Particles >6μm         ASTM D7647         >1300         15152         Δ 6923         Δ 7239           Particles >14μm         ASTM D7647         >160         Δ 211         Δ 297         Δ 296           Particles >21μm         ASTM D7647         >40         31         Δ 78         Δ 66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         Δ 23/20/15         Δ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Potassium	ppm	ASTM D5185m	>20	0	<1	2
FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000         83732         41229         43960           Particles >6μm         ASTM D7647         >1300         15152         6923         7239           Particles >14μm         ASTM D7647         >160         211         297         296           Particles >21μm         ASTM D7647         >40         31         78         66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         23/20/15         23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Water	%	ASTM D6304	>0.05	0.006	0.003	0.001
Particles >4μm       ASTM D7647       >5000       83732       Δ 41229       Δ 43960         Particles >6μm       ASTM D7647       >1300       15152       Δ 6923       Δ 7239         Particles >14μm       ASTM D7647       >160       Δ 211       Δ 297       Δ 296         Particles >21μm       ASTM D7647       >40       31       Δ 78       Δ 66         Particles >38μm       ASTM D7647       >10       1       5       1         Particles >71μm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >19/17/14       24/21/15       Δ 23/20/15       Δ 23/20/15         FLUID DEGRADATION       method       limit/base       current       history1       history2	ppm Water	ppm	ASTM D6304	>500	63	37.4	14.7
Particles >6μm         ASTM D7647         >1300         15152         6923         7239           Particles >14μm         ASTM D7647         >160         211         297         296           Particles >21μm         ASTM D7647         >40         31         78         66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         23/20/15         23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14μm         ASTM D7647         >160         ▲ 211         ▲ 297         ▲ 296           Particles >21μm         ASTM D7647         >40         31         ▲ 78         ▲ 66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         ▲ 23/20/15         ▲ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >4µm		ASTM D7647	>5000	<b>83732</b>	<b>▲</b> 41229	<b>▲</b> 43960
Particles >21μm         ASTM D7647         >40         31         ▲ 78         ▲ 66           Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         ▲ 23/20/15         ▲ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >6µm		ASTM D7647	>1300	<b>15152</b>	<b>△</b> 6923	<u>▲</u> 7239
Particles >38μm         ASTM D7647         >10         1         5         1           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         Δ 23/20/15         Δ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >14μm		ASTM D7647	>160	<u>^</u> 211	<b>297</b>	<b>△</b> 296
Particles >71µm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         24/21/15         ▲ 23/20/15         ▲ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >21µm		ASTM D7647	>40	31	<u>▲</u> 78	<b>△</b> 66
Oil Cleanliness         ISO 4406 (c)         >19/17/14         ■ 24/21/15         ■ 23/20/15         ■ 23/20/15           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >38μm		ASTM D7647	>10	1	5	1
FLUID DEGRADATION method limit/base current history1 history2	Particles >71μm		ASTM D7647	>3	0	0	0
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>2</b> 4/21/15	<b>△</b> 23/20/15	<b>2</b> 3/20/15
Acid Number (AN)         mg KOH/g         ASTM D8045         0.57         0.37         0.47         0.46	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.37	0.47	0.46



### **OIL ANALYSIS REPORT**



\* - 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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