

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

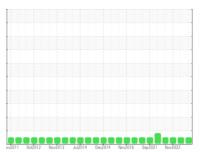




# WMR-West Salt Lake VOLVO L90F 68767

Component **Diesel Engine** 

**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (6 GAL)** 





### 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

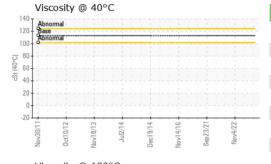
### **Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number   Client Info   OJJ0015297   DJJ0017375   VCP357497	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         14235         13940         13627           Oil Age         hrs         Client Info         260         300         500           Oil Changed         Client Info         Changed	Sample Number		Client Info		DJJ0015297	DJJ0017375	VCP357497
Oil Age         hrs         Client Info         260         300         500           Oil Changed         Client Info         Changed         Changed         Changed         Changed           Sample Status         Client Info         Changed         NoRMAL         NORMAL         NORMAL         NORMAL           CONTAMINATION         method         limit/base         current         history1         history2           Fuel         WC Method         Sec. 4.1.0         <1.0	Sample Date		Client Info		08 Nov 2023	25 Apr 2023	04 Nov 2022
Changed Sample Status	Machine Age	hrs	Client Info		14235	13940	13627
NORMAL   NORMAL   NORMAL   NORMAL	Oil Age	hrs	Client Info		260	300	500
CONTAMINATION         method         limit/base         current         history1         history2           Fuel         WC Method         >6.0         <1.0         <1.0         <1.0         <1.0           Water         WC Method         >0.1         NEG         NEG         NEG           Glycol         WC Method         Imit Masse         Current         history1         history2           Iron         ppm         ASTM D5185m         >10.0         <1         4         4           Chromitim         ppm         ASTM D5185m         >10.0         0         0         0           Nickel         ppm         ASTM D5185m         >10.0         0         0         -1           Silver         ppm         ASTM D5185m         >10.0         0         0         -1           Silver         ppm         ASTM D5185m         >20.0         0         0         0           Silver         ppm         ASTM D5185m         >10.0         1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol         WC Method Glycol         NEG NEG         NEG NEG         NEG NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >100         <1         4         4           Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         >10         0         0         <1           Silver         ppm         ASTM D5185m         >10         0         0         <1           Silver         ppm         ASTM D5185m         >10         1         <1         <1           Silver         ppm         ASTM D5185m         >20         0         0         <1           Lead         ppm         ASTM D5185m         >20         0         0         <1           Copper         ppm         ASTM D5185m         >10         <1         0         <1           Vanadium         ppm         ASTM D5185m         >10         <1         0         <1           Vanadium         ppm         ASTM D5185m         0         0         0	CONTAMINATION	٧	method	limit/base	current	history1	history2
Second   WC Method   NEG   NEG   NEG	Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.1	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         >10         0         0         0           Titanium         ppm         ASTM D5185m         >2         0         0         <1           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >10         1         <1         <1           Lead         ppm         ASTM D5185m         >20         0         0         0           Copper         ppm         ASTM D5185m         >10         <1         0         <1           Tin         ppm         ASTM D5185m         >10         <1         0         <1           Vanadium         ppm         ASTM D5185m         >10         <1         0         <1           Vanadium         ppm         ASTM D5185m         >10         14         32           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0.0         0         0         0	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	<1	4	4
Titanium         ppm         ASTM D5185m         0         0         <1           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >10         1         <1	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>10	0	0	0
Aluminum	Titanium	ppm	ASTM D5185m		0	0	<1
Lead	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper         ppm         ASTM D5185m         >15         0         0         <1	Aluminum	ppm	ASTM D5185m	>10	1	<1	<1
Tin         ppm         ASTM D5185m         >10         <1	Lead	ppm	ASTM D5185m	>20	0	0	0
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         2.5         10         14         32           Barium         ppm         ASTM D5185m         0.0         0         0         0           Molybdenum         ppm         ASTM D5185m         0.0         41         41         41           Magnesium         ppm         ASTM D5185m         0.0         <1	Copper	ppm	ASTM D5185m	>15	0	0	<1
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         2.5         10         14         32           Barium         ppm         ASTM D5185m         0.0         0         0         0           Molybdenum         ppm         ASTM D5185m         0.7         61         65         50           Manganese         ppm         ASTM D5185m         0.0         <1         <1         <1           Magnesium         ppm         ASTM D5185m         256         960         1046         675           Calcium         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         3	Tin	ppm	ASTM D5185m	>10	<1	0	<1
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         2.5         10         14         32           Barium         ppm         ASTM D5185m         0.0         0         0         0           Molybdenum         ppm         ASTM D5185m         0.0         <1         <1         <1           Magnese         ppm         ASTM D5185m         0.0         <1         <1         <1           Magnesium         ppm         ASTM D5185m         256         960         1046         675           Calcium         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m	Vanadium	ppm	ASTM D5185m		0	0	0
Boron         ppm         ASTM D5185m         2.5         10         14         32           Barium         ppm         ASTM D5185m         0.0         0         0         0           Molybdenum         ppm         ASTM D5185m         0.7         61         65         50           Manganese         ppm         ASTM D5185m         0.0         <1	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         0.0         0         0         0           Molybdenum         ppm         ASTM D5185m         0.7         61         65         50           Manganese         ppm         ASTM D5185m         0.0         <1         <1         <1           Magnesium         ppm         ASTM D5185m         0.0         <1         <1         <1           Magnesium         ppm         ASTM D5185m         256         960         1046         675           Calcium         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0.7         61         65         50           Manganese         ppm         ASTM D5185m         0.0         <1	Boron	nnm	ACTM DE195m	2.5	10	4.4	20
Manganese         ppm         ASTM D5185m         0.0         <1		ppiii	ASTIVI DSTOSIII			14	32
Magnesium         ppm         ASTM D5185m         256         960         1046         675           Calcium         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         0         <1	Barium	• •					
Calcium         ppm         ASTM D5185m         2057         1120         1285         1442           Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         2           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3         0.3         0.3           Nitration         Abs/cm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method<		ppm	ASTM D5185m	0.0	0	0	0
Phosphorus         ppm         ASTM D5185m         935         1061         1071         924           Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         2           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         <	Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0.0	0 61	0 65	0 50
Zinc         ppm         ASTM D5185m         1223         1299         1385         1114           Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         2           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >3         0.3         0.3         0.3           Nitration         Abs/.1mm         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm </th <th>Molybdenum Manganese</th> <th>ppm ppm</th> <th>ASTM D5185m ASTM D5185m ASTM D5185m</th> <th>0.0 0.7 0.0</th> <th>0 61 &lt;1</th> <th>0 65 &lt;1</th> <th>0 50 &lt;1</th>	Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0	0 61 <1	0 65 <1	0 50 <1
Sulfur         ppm         ASTM D5185m         4079         3178         3746         3303           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         2           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3         0.3         0.3           Nitration         Abs/.mm         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0 256	0 61 <1 960	0 65 <1 1046	0 50 <1 675
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         2           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3         0.3         0.3           Nitration         Abs/cm         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0 256 2057	0 61 <1 960 1120	0 65 <1 1046 1285	0 50 <1 675 1442
Silicon         ppm         ASTM D5185m         >20         3         3         2           Sodium         ppm         ASTM D5185m         0         <1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0 256 2057 935	0 61 <1 960 1120 1061	0 65 <1 1046 1285 1071	0 50 <1 675 1442 924
Sodium         ppm         ASTM D5185m         0         <1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223	0 61 <1 960 1120 1061 1299	0 65 <1 1046 1285 1071 1385	0 50 <1 675 1442 924 1114
Potassium         ppm         ASTM D5185m         >20         0         <1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	0.0 0.7 0.0 256 2057 935 1223 4079	0 61 <1 960 1120 1061 1299 3178	0 65 <1 1046 1285 1071 1385 3746	0 50 <1 675 1442 924 1114 3303
INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3         0.3         0.3           Nitration         Abs/cm         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079	0 61 <1 960 1120 1061 1299 3178	0 65 <1 1046 1285 1071 1385 3746 history1	0 50 <1 675 1442 924 1114 3303 history2
Soot %         %         *ASTM D7844 >3         0.3         0.3         0.3           Nitration         Abs/cm         *ASTM D7624 >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415 >30         19.3         17.9         22.7           FLUID DEGRADATION method limit/base current history1         history2           Oxidation         Abs/.1mm         *ASTM D7414 >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079	0 61 <1 960 1120 1061 1299 3178 current	0 65 <1 1046 1285 1071 1385 3746 history1	0 50 <1 675 1442 924 1114 3303 history2
Nitration         Abs/cm         *ASTM D7624         >20         6.7         6.7         7.7           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.3         17.9         22.7           FLUID DEGRADATION method limit/base current history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20	0 61 <1 960 1120 1061 1299 3178 current 3	0 65 <1 1046 1285 1071 1385 3746 history1	0 50 <1 675 1442 924 1114 3303 history2
Sulfation         Abs/.1mm         *ASTM D7415 >30         19.3         17.9         22.7           FLUID DEGRADATION method limit/base current history1 history2           Oxidation         Abs/.1mm         *ASTM D7414 >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20 >20	0 61 <1 960 1120 1061 1299 3178 current 3 0	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1	0 50 <1 675 1442 924 1114 3303 history2 2
FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2515.014.819.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20 >20	0 61 <1 960 1120 1061 1299 3178 current 3 0	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1 <1	0 50 <1 675 1442 924 1114 3303 history2 2 1 2
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.0         14.8         19.9	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20	0 61 <1 960 1120 1061 1299 3178 current 3 0 0	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1 <1	0 50 <1 675 1442 924 1114 3303 history2 2 1 2 history2 0.3
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20 >20 limit/base >3 >20	0 61 <1 960 1120 1061 1299 3178 current 3 0 0	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1 <1 history1 0.3 6.7	0 50 <1 675 1442 924 1114 3303 history2 2 1 2 history2 0.3 7.7
Base Number (BN)         mg KOH/g         ASTM D2896         10         8.1         8.3         11.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D5185m  ASTM D5185m ASTM D7624  *ASTM D7624  *ASTM D76145	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20 >20 limit/base >3 >20 >30	0 61 <1 960 1120 1061 1299 3178 current 3 0 0 current 0.3 6.7 19.3	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1 <1 history1 0.3 6.7 17.9	0 50 <1 675 1442 924 1114 3303 history2 2 1 2 history2 0.3 7.7 22.7
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  ASTM D5185m  Method  *ASTM D5185m  *ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  *ASTM D5185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D7415  Method	0.0 0.7 0.0 256 2057 935 1223 4079 limit/base >20 >20 limit/base >3 >20 >3 limit/base	0 61 <1 960 1120 1061 1299 3178 current 3 0 0 current 0.3 6.7 19.3	0 65 <1 1046 1285 1071 1385 3746 history1 3 <1 <1 <1 history1 0.3 6.7 17.9 history1	0 50 <1 675 1442 924 1114 3303 history2 2 1 2 history2 0.3 7.7 22.7 history2



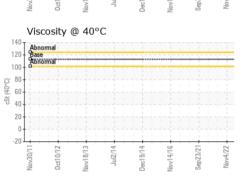
# **OIL ANALYSIS REPORT**

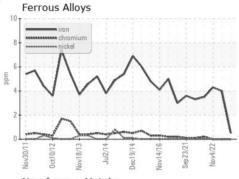


VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

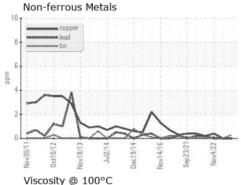
		7.7.7	100		
~~	~		$\overline{}$		
		-			
Nov18/13 -	Jul2/14 -	Dec19/14 -	Nov14/16 -	Sep23/21-	Nov4/22
	13	13	13	41 41 49 49 49 49 49 49 49 49 49 49 49 49 49	13 + 14 + 15   15   15   15   15   15   15   15

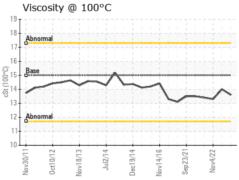
FLUID PROPE	RTIES	method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	15.0	13.6	14.0	13.3

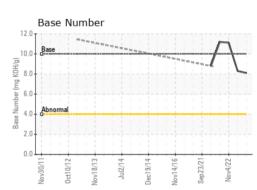




**GRAPHS** 











Laboratory Sample No. Lab Number Unique Number

: 06010638 : 10749782

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : DJJ0015297

: 17 Nov 2023 Diagnosed : 21 Nov 2023

Diagnostician : Jonathan Hester

Test Package : CONST ( Additional Tests: KV40, TBN ) 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)

WESTERN METALS RECYCLING - SALT LAKE CITY 4221 WEST 700 SOUTH

SALT LAKE CITY, UT US 84104

Contact: TIMOTHY SHEFFIELD timothy.sheffield@wmrecycling.com

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