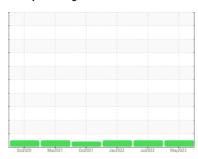


# **OIL ANALYSIS REPORT**

# BAE SYSTEM **B2556 MAIN**

Component **Hydraulic System** 

MOBIL DTE 25 (--- GAL)



Sample Rating Trend



### Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION   method   limit/base   current   history 1   history 2			Oct2020	Mar2021 Oct2021	Jan 2022 Jul 2022	May2023	
Sample Date   Client Info   26 May 2023   08 Jul 2022   20 Jan 2022	SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Machine Age   hrs   Client Info   0   0   0   0   0   0   0   0   0	Sample Number		Client Info		WC0802165	WC0709558	WC0666138
Oil Changed   Nrs   Client Info   Not Changed   Not Changed   Not Changed   Not Changed   North   Not Changed   North   Not Changed   North   North	Sample Date		Client Info		26 May 2023	08 Jul 2022	20 Jan 2022
Oil Changed Sample Status         Client Info         Not Changd NORMAL	Machine Age	hrs	Client Info		0	0	0
Sample Status         NORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history 1         history 2           Iron         ppm         ASTM D5185m         >20         <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS         method         limit/base         current         history 1         history 2           Iron         ppm         ASTM D5185m         >20         <1	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Iron	Sample Status				NORMAL	NORMAL	NORMAL
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           Lead         ppm         ASTM D5185m         >20         0         0         0           Copper         ppm         ASTM D5185m         >20         0         0         0           Tin         ppm         ASTM D5185m         >20         0         0         0           Antimony         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         2         <1         0           Barium         ppm         ASTM D5185m         0         0         0         0 <th>WEAR METALS</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history 1</th> <th>history 2</th>	WEAR METALS		method	limit/base	current	history 1	history 2
Nickel         ppm         ASTM D5185m         >20         0         0         0           Titanium         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         0         0         0         0           Aluminum         ppm         ASTM D5185m         >20         0         0         0           Aluminum         ppm         ASTM D5185m         >20         0         0         0           Lead         ppm         ASTM D5185m         >20         0         0         0           Copper         ppm         ASTM D5185m         >20         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history 1         history 2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0	Iron	ppm	ASTM D5185m	>20	<1	2	1
Titanium   ppm   ASTM D5185m   0   0   0   0   0   0   0   0   0	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver         ppm         ASTM D5185m         0         0         0           Aluminum         ppm         ASTM D5185m         >20         0         0         <1           Lead         ppm         ASTM D5185m         >20         0         0         0           Copper         ppm         ASTM D5185m         >20         0         0         0           Tin         ppm         ASTM D5185m         20         0         0         0           Antimony         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Manganesium         ppm         ASTM D5185m         0         0         0         0           Manganesium         ppm         ASTM D5185m         0         0         0         0	Nickel	ppm	ASTM D5185m	>20	0	0	0
Aluminum	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >20         0         0         0           Copper         ppm         ASTM D5185m         >20         7         <1         <1           Tin         ppm         ASTM D5185m         >20         0         0         0           Antimony         ppm         ASTM D5185m           0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114         14           Phosphorus         ppm         ASTM D5185m         405         457         427	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >20         7         <1         <1           Tin         ppm         ASTM D5185m         >20         0         0         0           Antimony         ppm         ASTM D5185m         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Mangaesium         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         522         602         595           <	Aluminum	ppm	ASTM D5185m	>20	0	0	<1
Copper         ppm         ASTM D5185m         >20         7         <1         <1           Tin         ppm         ASTM D5185m         >20         0         0         0           Antimony         ppm         ASTM D5185m         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganesium         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         522         602         595	Lead		ASTM D5185m	>20	0	0	0
Tin ppm ASTM D5185m >20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Copper			>20	7	<1	<1
Antimony         ppm         ASTM D5185m           0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history 1         history 2           Boron         ppm         ASTM D5185m         0         2         <1           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0           Manganesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         >15         <1         <1         1			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         history 1         history 2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         105         112         114         114           Phosphorus         ppm         ASTM D5185m         405         457         427         25         602         595         595         50         501         482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482         4482 <t< td=""><td>Antimony</td><td></td><td>ASTM D5185m</td><td></td><th></th><td></td><td>0</td></t<>	Antimony		ASTM D5185m				0
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history 1         history 2           Boron         ppm         ASTM D5185m         0         2         <1			ASTM D5185m		0	0	0
Boron							
Boron   ppm   ASTM D5185m   O   O   O   O	ADDITIVES		method	limit/base	current	history 1	history 2
Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         <1         0         0           Magnesium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         0         0           FLUID CLEANLINESS         method         limit/base         current         history 1         history 2           Particles >4μm         ASTM D7647         >5000         481         641         571           Particles >21μm         ASTM D7647	Boron	mag	ASTM D5185m		0		<1
Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         <1         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1         <1         1         0           Potassium         ppm         ASTM D5185m         >20         <1         0         0           FLUID CLEANLINESS         method         limit/base         current         history 1         history 2           Particles > 4μm         ASTM D7647         >5000         481         641         571           Particles > 21μm <t< td=""><td>Barium</td><td></td><td>ASTM D5185m</td><td></td><th>0</th><td>0</td><td>0</td></t<>	Barium		ASTM D5185m		0	0	0
Manganese         ppm         ASTM D5185m         <1         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1	Molvbdenum		ASTM D5185m		0		0
Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1	•		ASTM D5185m		<1	0	0
Calcium         ppm         ASTM D5185m         105         112         114           Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1	-		ASTM D5185m		0		
Phosphorus         ppm         ASTM D5185m         405         457         427           Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >1         <1			ASTM D5185m		105	112	114
Zinc         ppm         ASTM D5185m         522         602         595           Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1							
Sulfur         ppm         ASTM D5185m         5354         6182         4482           CONTAMINANTS         method         limit/base         current         history 1         history 2           Silicon         ppm         ASTM D5185m         >15         <1	•						
Silicon         ppm         ASTM D5185m         >15         <1         <1         1           Sodium         ppm         ASTM D5185m         1         1         0         0           Potassium         ppm         ASTM D5185m         >20         <1         0         0           FLUID CLEANLINESS         method         limit/base         current         history 1         history 2           Particles >4μm         ASTM D7647         >5000         481         641         571           Particles >6μm         ASTM D7647         >1300         178         124         85           Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2 <td></td> <td></td> <td></td> <td></td> <th>_</th> <td></td> <td></td>					_		
Sodium         ppm         ASTM D5185m         1         1         0           Potassium         ppm         ASTM D5185m         >20         <1	CONTAMINANTS	;	method	limit/base	current	history 1	history 2
Sodium         ppm         ASTM D5185m         1         1         0           Potassium         ppm         ASTM D5185m         >20         <1         0         0           FLUID CLEANLINESS         method         limit/base         current         history 1         history 2           Particles >4μm         ASTM D7647         >5000         481         641         571           Particles >6μm         ASTM D7647         >1300         178         124         85           Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >3         0         0         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Silicon	ppm	ASTM D5185m	>15	<1	<1	1
Potassium         ppm         ASTM D5185m         >20         <1         0         0           FLUID CLEANLINESS         method         limit/base         current         history 1         history 2           Particles >4μm         ASTM D7647         >5000         481         641         571           Particles >6μm         ASTM D7647         >1300         178         124         85           Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Sodium		ASTM D5185m		1	1	0
Particles >4μm       ASTM D7647       >5000       481       641       571         Particles >6μm       ASTM D7647       >1300       178       124       85         Particles >14μm       ASTM D7647       >160       26       16       11         Particles >21μm       ASTM D7647       >40       8       7       2         Particles >38μm       ASTM D7647       >10       1       1       0         Particles >71μm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >19/17/14       16/15/12       17/14/11       16/14/11         FLUID DEGRADATION       method       limit/base       current       history 1       history 2	Potassium		ASTM D5185m	>20	<1	0	0
Particles >6μm         ASTM D7647         >1300         178         124         85           Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	FLUID CLEANLIN	IESS	method	limit/base	current	history 1	history 2
Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Particles >4μm		ASTM D7647	>5000	481	641	571
Particles >14μm         ASTM D7647         >160         26         16         11           Particles >21μm         ASTM D7647         >40         8         7         2           Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Particles >6µm		ASTM D7647	>1300	178	124	85
Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Particles >14µm			>160	26	16	11
Particles >38μm         ASTM D7647         >10         1         1         0           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Particles >21µm		ASTM D7647	>40	8	7	2
Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	Particles >38µm						
Oil Cleanliness         ISO 4406 (c)         >19/17/14         16/15/12         17/14/11         16/14/11           FLUID DEGRADATION         method         limit/base         current         history 1         history 2	•			>3	0	0	0
							16/14/11
Acid Number (AN)         mg KOH/g         ASTM D8045         0.66         0.837         0.56	FLUID DEGRADA	ATION _	method	limit/base	current	history 1	history 2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.66	0.837	0.56



## OIL ANALYSIS REPORT







Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number** Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0802165 : 05863603 : 10498068

Received Diagnosed Diagnostician

: 02 Jun 2023 : Wes Davis

: 05 Jun 2023

515 WILLOW SPRINGS LN YORK, PA US 17406

Contact: Bill Trimmer

MOTOR TECHNOLOGY INC

btrimmer@motortechnologyinc.com T: (717)266-4045

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)