




# SOS SAMPLES JUST GOT BETTER





We are now utilizing Cashman Fluids Analysis for your oil, coolant and diesel fuel samples.

Please refer to the new format below, a field will only be populated when the test is performed, if a field is blank it did not meet the minimum requirements for testing and is considered no action required. **If you have a specific concern please note it when submitting your oil sample.**

<b>Dealer Name</b> 	DEALER NAME - Dealer contact mailing address information		
	Phone: (555) 360-4112	Fax: (555) 360-4113	
	Email: DEALERSOS@CAT.COM		Web: cat.com

<b>ENGINE</b>	<b>EQUIP #: 813286</b>	<b>SERIAL #: BRL00388</b>
<b>Y100-49160-0001</b>	<b>CAT 836G - CAT 3456</b>	<b>COMP SERIAL #: BNT01127</b>
LABEL #: 1234567890	 <b>Action Required</b>	<b>Interpreted By: Lauren Christopher</b> <b>Interpreted On: 10-Jun-19</b>
SHOP JOB #: 42064255		
SAMPLE SHIP TIME (days): 1	<p>OIL AND FILTER CHANGE NOTED. SILICON AND ALUMINUM INDICATE DIRT ENTRY. OXIDATION, IRON, AND LEAD ARE ELEVATED; SUGGESTING MAIN BEARING OR ROD BEARING OVERLAY WEAR. CHECK FOR OVERHEATING. HAS THE LOAD FACTOR INCREASED? CHECK BLOWBY. CONSIDER SHORTER OIL DRAINS. INSPECT FOR SOURCE OF DIRT ENTRY. RESAMPLE IN 50 HR TO MONITOR.</p>	
LC- Illinois Missouri Valley		
S03858 - Milam RDF		
LOCATION: S03799		
REGION: IA, IL, NE, KS, STL		
AREA: Eastern Group		

SAMPLE INFORMATION				
				
Sampled Date	08-Jun-19	18-Jan-19	27-Nov-18	11-Sep-18
Sample Id	Y100-49160-0001	Y100-49019-0118	Y100-48335-0117	Y100-48257-0035
Sampled By	Lauren C			
Lab Date	09-Jun-19	19-Jan-19	01-Dec-18	14-Sep-18
Meter [Hr]	26104	25394	25165	24833
Comp Meter [Hr]	710			
Meter On Fluid	710	561	332	470
Fluid Brand	CAT	CAT	CAT	CAT
Fluid Weight	15W-40	15W-40	15W-40	15W-40
Fluid Type				
Fluid Change	Y	U	N	Y
Filter Change	Y	U	N	Y
Make Up Fluid [L]	10			
Kidney Loop	U			U
PM Level	Quarterly			

**PREVIOUS SAMPLE**

OXIDATION, BRONZE, AND IRON READINGS HAVE INCREASED. CHECK FOR OVERHEATING, OR OPERATION AT A HIGHER LOAD FACTOR. OTHER ANALYSIS READINGS APPEAR TO BE ACCEPTABLE. IF NOT DONE ALREADY, OIL CHANGE RECOMENDED. CONTINUE NORMALLY SCHEDULED SAMPLING.

For additional sample history, go to [my.cat.com](http://my.cat.com)

WEAR LEVELS / OIL ADDITIVES					
METALS (ppm) ASTM D1234					
	08-Jun-19	18-Jan-19	27-Nov-18	11-Sep-18	
Cu	Copper	33	16	4	8
Fe	Iron	163	37	24	40
Cr	Chromium	10	1	0	1
Al	Aluminum	26	4	1	1
Pb	Lead	15	7	2	5
Sn	Tin	1	0	0	0
Si	Silicon	102	9	3	5
Na	Sodium	14	4	4	4
K	Potassium	8	1	2	2
Mo	Molybdenum	15	9	9	8
Ni	Nickel	5	0	0	0
Ag	Silver	0	0	0	0
Ti	Titanium	2	1	0	0
V	Vanadium	0	0	0	0
Mn	Manganese	2	0	0	0
Cd	Cadmium	0	0	0	0
Ca	Calcium	3081	2733	2410	2542
P	Phosphorus	1262	1123	1001	1018
Zn	Zinc	1529	1367	1248	1295
Mg	Magnesium	32	24	21	21
Ba	Barium	1	0	0	0
B	Boron	63	56	53	40

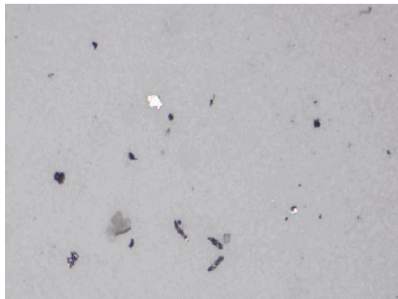
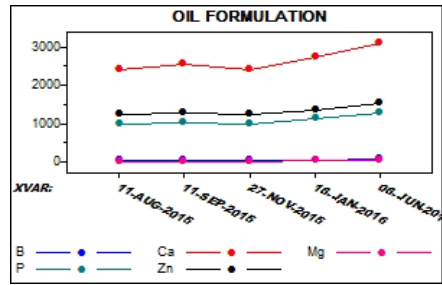
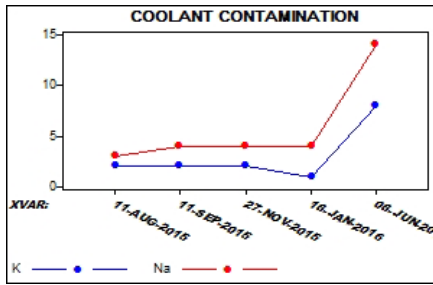
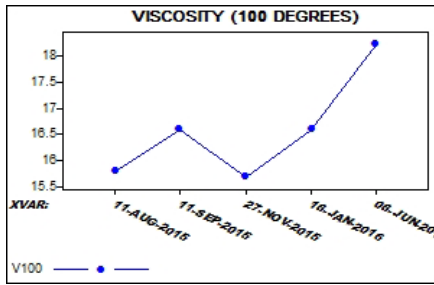
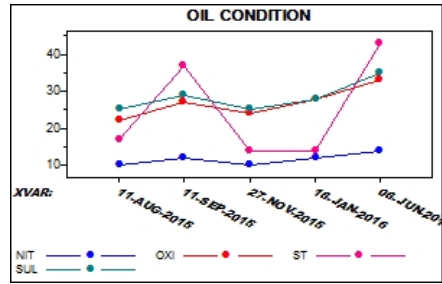
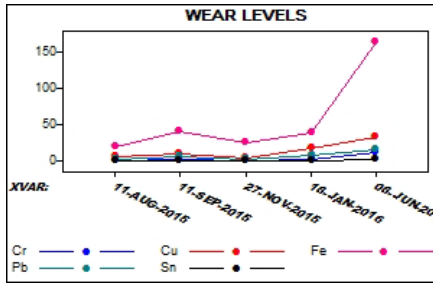
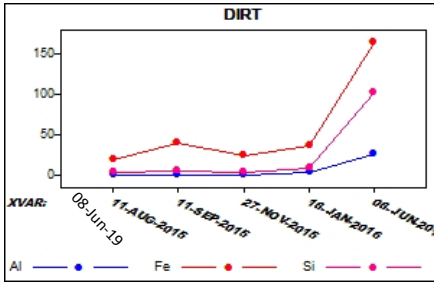
OIL CONDITION / OIL CONTAMINATION					
		08-Jun-19	18-Jan-19	27-Nov-18	11-Sep-18
<b>VISCOSITY (cst) ASTM D1234</b>					
V100	Viscosity at 100 C	18.2	16.6	15.7	16.6
<b>INFRARED ASTM D1234</b>					
ST	Soot	43	14	14	37
OXI	Oxidation	33	28	24	27
SUL	Sulfur Products	35	28	25	29
NIT	Nitration	14	12	10	12
<b>WATER</b>					
W	Water	N	N	N	N
<b>ANTIFREEZE</b>					
A	Antifreeze	N	N	N	N
<b>FUEL</b>					
F	Fuel	N	N	N	N

Special message from the dealer.

Y100-49160-0001



Action Required



Oil Analysis Image of Debris

Y100-49160-0001

Customer Name  
 Organization Name  
 Address, City, State  
 Zip, Country

Notice: This analysis is intended as an aid in predicting mechanical wear. No guarantee, expressed or implied, is made against failure of this piece of equipment or component thereof.