

CONTAMINATION OIL CONDITION WEAR NORMAL NORMAL

29041 - Diesel Engine

Unit Make : 2004 AUTOCAR

Unit Model : EXPEDITOR Serial No : H201467 Date Rec'd : Jul 18, 2011 : CUMMINS Cust. Ref No.  $: \{n/a\}$ Sample Date : Jun 25, 2011 Comp Make · ISL 310 Stub No · KL-MF007071 Diagnostician · Don Baldridge Comp Model

Comp Model : ISL 310	Stub No. : K	L-MF007071	Diagnostician : Don Baldridge				ge
RECOMMENDATION		Sample Date	10/09/09	09/01/10	02/17/11	Current	UOM
Resample at the next service interval to monitor.		Time on Unit	10978	1355	2016	2520	hrs
		Time on Oil	1543	1355	2016	504	hrs
		Time on Fltr	1543	1355	661	504	hrs
		Oil Maint.	not chg	n/a	not chg	not chg	
		Filter Maint.	not chg	not chg	changed	changed	
CONTAMINATION		Sample Date	10/09/09	09/01/10	02/17/11	Current	Abn
There is no indication of any contami	ination in the component.	Silicon	6.3	5.2	5.2	8.3	15
There is no indication of any contam		Fuel (%)	<2.0	< 2.0	< 2.0	<2.0	
		Glycol					0.02
		Water (%)	< 0.1	< 0.1	< 0.1	< 0.1	0.1
		Soot (%)	3.6	0.4	2.1	2.5	
		>4µm(c)		282			
		>6µm(c)		153			
		>14µm(c)		26			
		>21µm(c)		8			
		>38µm(c)		1			
		>70µm(c)		0			
		ISO 4406(c)		14/12			
OIL CONDITION		Sample Date	10/09/09	09/01/10	02/17/11	Current	Base
		Potassium	1.2	0.0	1.3	12	
Oil Type: 10 GAL of CHEVRON DELO 400 MULTIGRADE 15W40			79	234	135	71	
The condition of oil is suitable for further service.		Barium	0.0	0.1	0.3	0.0	
		Calcium	1719	1651	1758	1766	
		Magnesium	551	258	225	192	
		Molybdenum	45	42	40	34	
		Sodium	2.6	11	4.4	5.5	
		Phosphorus	1000	934	802	916	
		Sulfur	1000 3525	934 3115	802 2503	916 2860	
		Sulfur Zinc	1000 3525 1342	934 3115 1095	802 2503 1038	916 2860 1093	
		Sulfur Zinc Visc@100°C	1000 3525 1342 15.98	934 3115 1095 14.74	802 2503 1038 14.43	916 2860 1093 15.47	14.4
		Sulfur Zinc	1000 3525 1342	934 3115 1095	802 2503 1038	916 2860 1093	14.4
WEAR	1	Sulfur Zinc Visc@100°C TBN Sample Date	1000 3525 1342 15.98	934 3115 1095 14.74 7.86	802 2503 1038 14.43 7.81	916 2860 1093 15.47 8.47	14.4 Abn
		Sulfur Zinc Visc@100°C TBN	1000 3525 1342 15.98 7.57	934 3115 1095 14.74 7.86	802 2503 1038 14.43 7.81	916 2860 1093 15.47 8.47 Current	
WEAR  All component wear rates are normal	<b>]</b> l.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron	1000 3525 1342 15.98 7.57 10/09/09	934 3115 1095 14.74 7.86 09/01/10	802 2503 1038 14.43 7.81 02/17/11  63	916 2860 1093 15.47 8.47 Current	Abn
	<u> </u> 	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel	1000 3525 1342 15.98 7.57 10/09/09  67 0.3	934 3115 1095 14.74 7.86 09/01/10  19 0.2	802 2503 1038 14.43 7.81 02/17/11  63 0.9	916 2860 1093 15.47 8.47 Current  87 0.1	Abn
	] l.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel Chromium	1000 3525 1342 15.98 7.57 10/09/09	934 3115 1095 14.74 7.86 09/01/10  19 0.2 0.6	802 2503 1038 14.43 7.81 02/17/11  63 0.9 3.1	916 2860 1093 15.47 8.47 Current  87 0.1 4.1	Abn
	<b>]</b> I.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel Chromium Titanium	1000 3525 1342 15.98 7.57 10/09/09  67 0.3 4.1 0.1	934 3115 1095 14.74 7.86 09/01/10  19 0.2 0.6 0.2	802 2503 1038 14.43 7.81 02/17/11  63 0.9 3.1 0.0	916 2860 1093 15.47 8.47 Current  87 0.1 4.1 0.3	Abn
	<b>]</b> 1.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel Chromium Titanium Copper	1000 3525 1342 15.98 7.57 10/09/09  67 0.3 4.1 0.1 3.9	934 3115 1095 14.74 7.86 09/01/10  19 0.2 0.6 0.2 1.5	802 2503 1038 14.43 7.81 02/17/11  63 0.9 3.1 0.0 3.3	916 2860 1093 15.47 8.47 Current  87 0.1 4.1 0.3 4.9	Abn
	] l.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel Chromium Titanium Copper Aluminum	1000 3525 1342 15.98 7.57 10/09/09  67 0.3 4.1 0.1 3.9 3.8	934 3115 1095 14.74 7.86 09/01/10  19 0.2 0.6 0.2 1.5 3.0	802 2503 1038 14.43 7.81 02/17/11  63 0.9 3.1 0.0 3.3 3.2	916 2860 1093 15.47 8.47 Current  87 0.1 4.1 0.3 4.9	Abn
	1.	Sulfur Zinc Visc@100°C TBN  Sample Date PQ Iron Nickel Chromium Titanium Copper	1000 3525 1342 15.98 7.57 10/09/09  67 0.3 4.1 0.1 3.9	934 3115 1095 14.74 7.86 09/01/10  19 0.2 0.6 0.2 1.5	802 2503 1038 14.43 7.81 02/17/11  63 0.9 3.1 0.0 3.3	916 2860 1093 15.47 8.47 Current  87 0.1 4.1 0.3 4.9	Abn