

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: OILANA-1128-0000 Company Name: CHES CAIN Contact: Address: 1312 SNYDER CIRCLE SIOUX FALLS, SD 57106 US Phone Number: 605-361-4075		Component ID: EAGLE E Secondary ID: W/BYPASS KIT BMK-21 Component Type: UNLEADED GASOLINE ENGINE Manufacturer: AMERICAN MOTORS CORPORATION Model: EAGLE I6 Application: TRANSPORTATION Sump Capacity: 0		Tracking Number: 11085Y00077 Lab Number: I-191262 Lab Location: Indianapolis Data Analyst: KMS Sampled: 10-Jun-2011 Received: 15-Jun-2011 Completed: 16-Jun-2011	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: FULLFLOW & BYPASS Micron Rating: 15		Miscellaneous:		Product Manufacturer: AMSOIL Product Name: AMO SYN HIGH PERFORMANCE OIL Viscosity Grade: SAE 10W40	
Comments	Total Base Number is SIGNIFICANTLY LOW; Abrasives (silicon/dirt) are at a MODERATE LEVEL; Iron is at a MINOR LEVEL; IRON SOURCE in engines can be cylinder liners, iron pistons, hardened steel camshafts, crankshafts, gears, hardened rocker arms, valve bridges, alloyed steel cam follower rollers, etc.; Manganese sources in unleaded gasoline engines include manganese/bronze valve guides and/or an additive added to the fuel; Flagged additive levels are higher than expected for the lubricant that is identified (This does not imply that the lubricant does not meet proper API, SAE or ISO classifications.); Filter change acknowledged; Replace oil filter and top off system with fresh make-up oil if not done when oil sample was taken. Re-sample in 3,500 miles or 65 hours. Sample information has been added or tests have been rerun or additional testing was added and the report has been regenerated;				

Sample #	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)					Additive Metals (ppm)					
	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorous	Zinc
1	39	0	0	3	4	13	2	2	0	0	15	7	2	0	18	0	0	0	25	48	3048	0	1069	1231
2	77	1	1	6	3	26	0	0	0	0	27	18	3	0	10	1	75	0	2	23	3267	0	978	1215
3	71	1	1	4	4	20	1	0	0	0	32	24	2	0	10	0	45	0	3	23	3347	0	992	1203

Sample #	Sample Information								Contaminants			Fluid Properties					
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base Number	Oxidation	Nitration	
							% Vol	% Vol	% Vol	cSt	cSt	mg KOH/g	mg KOH/g	abs/cm	abs/cm		
1	26-Sep-2009	30-Sep-2009	91000	93000	Yes	1	Unk	<1 - Estimate	<.1	<.1 - FTIR		13.3		6.83	7	9	
2	11-Jan-2011	14-Feb-2011	9MONT	107300	No	1	Yes	<1 - Estimate	<.1 - FTIR	<.1 - FTIR		13.6		2.70	41	27	
3	10-Jun-2011	15-Jun-2011	3900		No	1	Yes	<1 - Estimate	<.1	<.1 - FTIR		15.1		2.59	48	29	

Sample #	Particle Count (particles/mL)										Additional Testing	
	ISO Code Based On 4/6/14	> 4 µm	> 6 µm	> 10 µm	> 14 µm	> 21 µm	> 38 µm	> 70 µm	> 100 µm	Test Method		
1												
2												
3												

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied.