

AMERICAS ENGINE OIL DATABASE 2010 PRIMARY REPORT

Sample Report

Purchased In: ARKANSAS USA

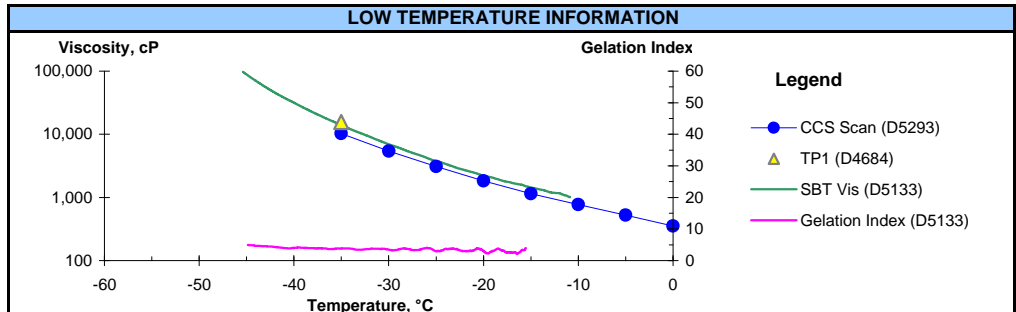
REPORT NO.: EOXXXX

Brand Name: ON TOP ALL-SEASON
Supplier: A B C SAMPLE CO.
Case Code: UNKNOWN
Can Code: XYZ-0H 000

Type of Oil: MINERAL
Service Class.: SM GF4
SAE Grade: 5W20
API 'Donut': YES
Energy Conserving: YES
ILSAC 'Starburst': YES

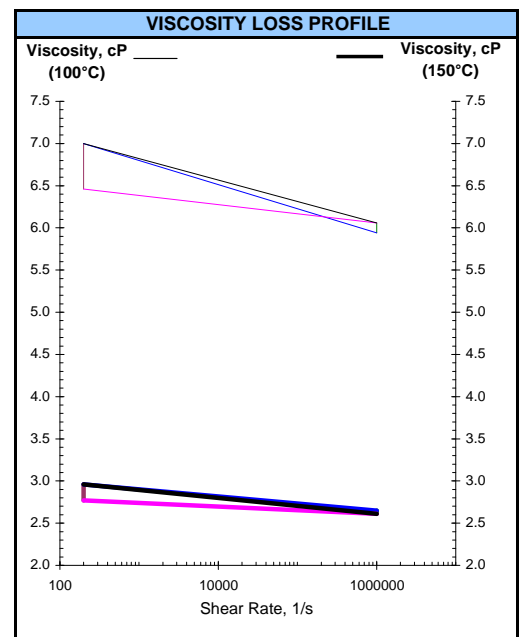
SEE NOTE: *

DYNAMIC VISCOSITY AT LOW TEMP.		
CCS (D5293)	at -30°C	5390 cP
TP1 (D4684)	at -35°C	15700 cP
SBT (D5133)	at -35°C	13900 cP
SBT (D5133)	at 60000 cP	-43 °C
Gel Index and Gel Temp (D5133)		5.0 at -45 °C



KINEMATIC VISCOSITY	
KV at 40°C (D445)	48.16 cSt
KV at 100°C (D445)	8.53 cSt
Viscosity Index (D2270)	155
Degraded Oil (D5275) 20 Passes	
KV at 100°C (D445)	7.97 cSt

DYNAMIC VISCOSITY AT HIGH TEMP.		
Fresh Oil	Viscosity at	
	100°C	150°C
Low Shear (SavLab LS)	7.00 cP	2.96 cP
High Shear (D6616 / D4683)	5.94 cP	2.65 cP
Fuel Efficiency Index (viscosity-based)		54.97
Degraded Oil (D5275) 20 Passes		
Low Shear (SavLab LS)	6.46 cP	2.77 cP
High Shear (D6616 / D4683)	6.06 cP	2.61 cP



ELEMENTAL ANALYSIS BY ICP (D4951)			
Element	ppm	Element	ppm
Aluminum	0	Magnesium	8
Antimony	0	Molybdenum	0
Barium	0	Nickel	0
Boron	0	Phosphorus	775
Calcium	1515	Silicon	0
Chromium	0	Silver	0
Copper	0	Sodium	411
Iron	0	Tin	0
Lead	0	Titanium	0
Values below 10 ppm may be less accurate		Zinc	885

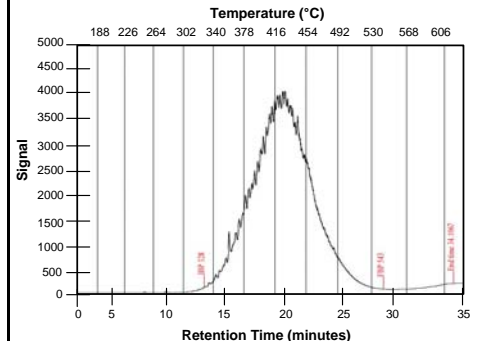
SHEAR STABILITY MEASURES		
Test	Viscosity Loss at	
	100°C	150°C
Low Shear Permanent Viscosity Loss (LSPVL)	7.7 %	6.4 %
High Shear Permanent Viscosity Loss (HSPVL)	0.0 %	1.4 %
Temporary Viscosity Loss (TVL)	15.1 %	10.5 %
Degraded Temporary Viscosity Loss (DTVL)	5.7 %	5.4 %
Overall Viscosity Loss (OVL)	13.4 %	11.8 %

CHEMICAL ANALYSIS	
Nitrogen (D5762)	0.07 %
Sulfur (D5453)	0.14 %
TBN (D2896)	7.17 mg/g
Calculated Sulfated Ash	0.76 %

VOLATILITY AND FLASH POINT	
Noack Volatility (D5800)	13.03 %
Volatilized % of Original Phosphorus	1.00 %
Phosphorus Emission Index (PEI)	6.1
Sulfur Emission Index (SEI)	123.8

OXIDATION CHARACTERISTICS		
TEOST	33C (D6335)	MHT (D7097)
Rod Deposits	14.0 mg	7.0 mg
Filter Deposits	1.2 mg	23.9 mg
Total Deposits	15.2 mg	30.9 mg
TFOUT (D4742)	164 minutes	

FOAMING CHARACTERISTICS (D892 & D6082)					
Sequence	Tendency (vol. after five min. blowing)		Stability (vol. after indicated time)		
	Temp.	ml	Time	ml	Settling Time
Seq. I	24 °C	0	10 min.	0	0 sec.
Seq. II	93 °C	0	10 min.	0	0 sec.
Seq. III	24 °C	0	10 min.	0	0 sec.
Seq. IV	150 °C	10	5 sec.	5	0 sec.
			1 min.	0	
			5 min.	0	
			10 min.	0	



GC - % Volatilized at 371°C (D6417) **7.2 %**
 Flash Point (D92) **226 °C (439 °F)**

Comments / Reruns:

† This symbol indicates that result is within limits of ASTM test method reproducibility.

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Issue Date: February 2011

Rev.2011/02

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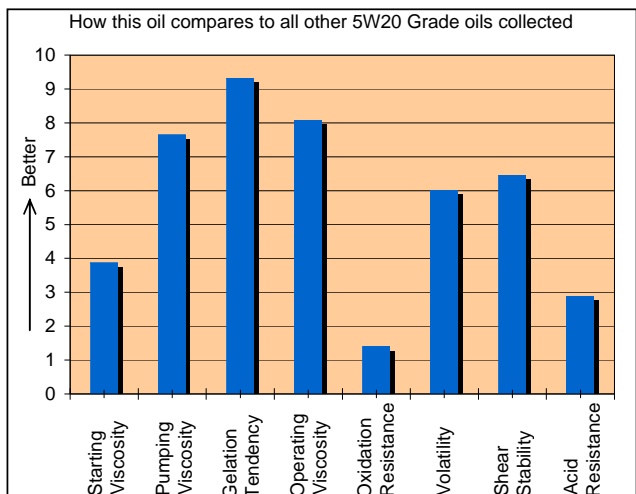
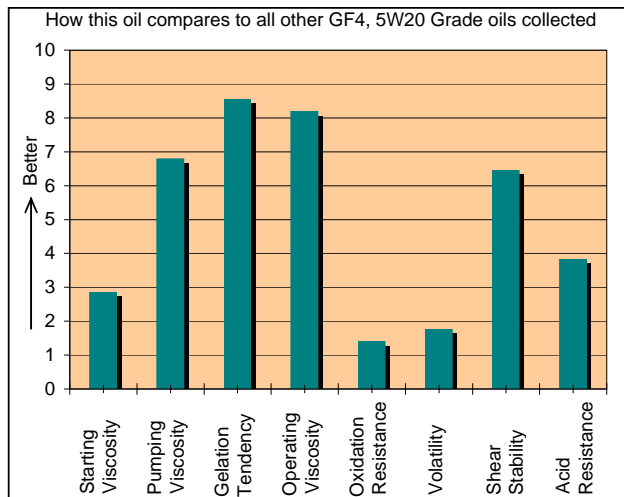
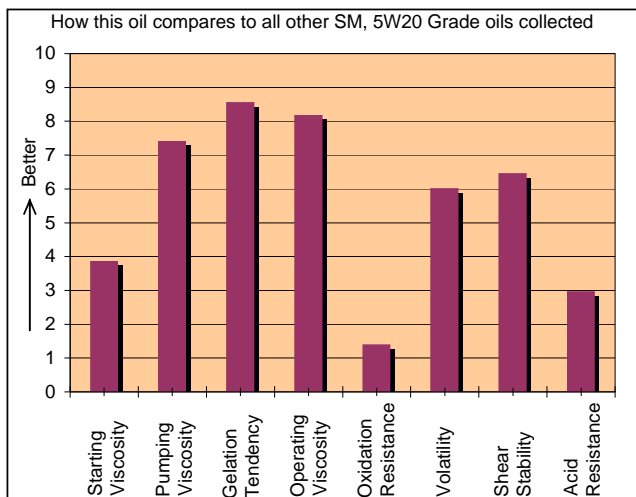
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Product Photo Here.

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