



Herguth Laboratories, Inc.

Abe Baksh
Cat Oil
15931 N. 80th Street
Scottsdale, AZ 85260

12/16/1998
11:26:36
CATOAB

Laboratory : 710940 Date: 12/07/1998
Description: SAMPLE ID: CAT OIL 10WT

Test Performed	Result
Viscosity @ 100 deg C, ASTM D445-96...	5.54 cSt
Viscosity @ 40 deg C, ASTM D445-96....	33.41 cSt
Viscosity @ -25 C, ASTM D5293-92.....	4200 cP
Viscosity @ -20 C, ASTM D5293-92.....	2150 cP
Viscosity Index, ASTM D2270-93.....	102
Pour Point, ASTM D97-96a.....	-33 Deg. C
Flash Point COC, ASTM D92-97.....	218 Deg. C
API Gravity @ 60 deg. F, ASTM D287-92...	27.5
Ramsbottom Carbon Res., ASTM D524-97.....	0.29 %
Sulfur, X-Ray Fluorescence, ASTM D4294-90	0.71 % Wt
Sulfated Ash, ASTM D874-96.....	0.258 % Wt
Acid Number, ASTM D664 (mod)	0.05 mg KOH/g
Base Number, ASTM D2896-96.....	2.20 mg KOH/g
Metals by I.C.P. Spectro., HL-1158(3.1)	
Iron (Fe).....	<1 ppm
Aluminum (Al).....	<1 ppm
Chromium (Cr).....	<1 ppm
Copper (Cu).....	<1 ppm
Lead (Pb).....	<1 ppm
Tin (Sn).....	<1 ppm
Nickel (Ni).....	<1 ppm
Silver (Ag).....	<1 ppm
Silicon (Si).....	<1 ppm
Sodium (Na).....	2 ppm
Boron (B).....	<1 ppm
Zinc (Zn).....	311 ppm
Phosphorus (P).....	378 ppm
Calcium (Ca).....	636 ppm
Magnesium (Mg).....	3 ppm
Barium (Ba).....	<1 ppm
Molybdenum (Mo).....	<1 ppm
Vanadium (V).....	<1 ppm





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ASTM D4624, High Temperature Shear at 100 degrees C. = 4.70 cSt
ASTM D4684, Apparent Viscosity = 27,200 cP at -35 degrees C
ASTM D3228, Kjeldahl Nitrogen = 0.046 WT. %
ASTM D2887, Simulated Distillation = attached.

Respectfully Submitted,
Herguth Laboratories, Inc.

by William R. Herguth

BH:dk

