



338048

To: B. Culp (Esso Expl. Sydney) / (AUSTRALIA) LTD.  
c.c. I.D. Cuthbert, Sydney  
M.Machin, Botany Laboratory

File *Corrosion - 1*  
Test Data

SERIAL NO. \_\_\_\_\_  
LOCATION \_\_\_\_\_  
Botany

LABORATORY TEST REPORT

GRADE Crude Oil	CUSTOMER Esso Exploration	DATE SAMPLED
BATCH NO. Cormorant No. 1 - FIT No. 6		SAMPLE DRAWN FROM
TANK NO. 4922 ft.	QUANTITY 2 x 1 Qt.	SHIPMENT

PROPERTY	INSPECTION	METHOD	PROPERTY	INSPECTION	METHOD
Acid No., Total mgs KOH/g	.....	ASTM D974	Doctor Test	.....	IP 30
Aniline Point °F	.....	ASTM D611/D1012	Flash, Abel °F	.....	IP 170
Appearance	.....	Visual	Flash, P.M. °F	.....	ASTM D93
Aromatics %	.....	ASTM D1019/D1319	Flash, Tag, °F	.....	ASTM D56
Ash, Wt. %	.....	ASTM D482	Gravity, °API	.....	ASTM D287
Burning Test	.....	ASTM D187	Gravity, Specific 60/60°F	0.924	ASTM D287/D1250
Carbon Residue, Con. Wt.%	.....	ASTM D189	Gum, Existent, mgs/100 ml	.....	ASTM D381
Carbon Residue (on 10% Resid)	.....	ASTM D189	Induction Period mins	.....	ASTM D525
Carbon Residue (10% Resid)	.....	ASTM D524	Octane No., Research	.....	ASTM D908
Cetane Index	.....	ASTM D975	Octane No., Motor	.....	ASTM D357
Cloud Point, °F	.....	ASTM D97	Odour	.....	
Colour	.....	Visual	Pour Point, °F	.....	ASTM D97
Colour ASTM	.....	ASTM D1500	Reid Vapour Pressure, lbs.	.....	ASTM D323
Colour, Saybolt	.....	ASTM D156	S. & W., vol. %	.....	ASTM D1796
Corrosion, Cu Strip @	.....	ASTM D130	Sediment by Extraction, wt.%	.....	ASTM D473
Diesel Index	.....	I.P. 21	Smoke Point, mm	.....	IP 57
Distillation °F	.....	ASTM D86/D850	Strong Acid No. mgs. KOH/g	.....	ASTM D974
IBP	.....		Sulphur, wt.%	.....	ASTM D1266
10% Rec.	.....		Sulphur, wt.%	0.38%	XRay
20% "	.....			(of C <sub>10</sub> <sup>+</sup> fraction)	Calculated
30% "	.....		Thermal Value (gross) BTU/lb.	.....	Calculated
40% "	.....		Tetra Alkyl Lead, gms Pb/l.G.	.....	
50% "	.....		Viscosity, Kin. CS @ °F	.....	ASTM D445
60% "	.....		Viscosity, Red. No. 1 @ 100°F	.....	Calculated
70% "	.....		Viscosity, SSF @ 122°F	.....	Calculated
80% "	.....		Viscosity, SSU @ 122°F	.....	Calculated
90% "	.....		Water by Distillation, vol. %	5.1%	ASTM D95
95% "	.....		Wick Char, mgs/Kg.	.....	IP 10
FBP/Dry Point	.....		C <sub>1</sub> -C <sub>4</sub> Fraction	Trace	Gas Chromatograph
% Recovered	.....		C <sub>5</sub> "	Undetectable	Distillation
% Residue	.....		C <sub>6</sub> "	0.45% (wt)	"
% Loss	.....		C <sub>7</sub> "	1.85% "	"
% evap. @	.....		C <sub>8</sub> "	2.38% "	"
% evap. @	.....		C <sub>9</sub> "	2.92% "	"
% evap. @	.....		C <sub>10</sub> <sup>+</sup> "	92.39% "	"

REMARKS: Total Hydrocarbons = 94.9% } Original  
Water = 5.1% } Sample  
Fractioned Distillation proved difficult due to Water present.

ANALYST \_\_\_\_\_ DATE 28.1.71 CHEMIST IN CHARGE M. Machin