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Essential Petroleum Resources Ltd
Level 2
226 Albert Road
SOUTH MELBOURNE VIC 3205

RECEIVED
10 OCT 2002
BY:.....

Attention: Wally Westman / Roger Blake

REPORT LQ12088

CLIENT REFERENCE: Request 25/9/02

WELL NAME/RE: Port Fairy-1

MATERIAL: Gas

WORK REQUIRED: Cylinder rental, gas composition & mobilisation

AUTHOR'S NAME: Carmelina Valente

Please direct technical enquiries regarding this work, to the signatory below, under whose supervision the work was carried out. This report relates specifically to the sample or samples submitted for testing.

Diane Cass
Operations Manager
Petroleum Services

dc.cm

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PETROLEUM SERVICES GAS ANALYSIS

Method GL-01-01 ASTM D 1945-96 (modified)

Client: ESSENTIAL PETROLEUM Report # LQ12088

Sample: PORT FAIRY-1
Gas
2850 kPag @ 10°C
22/09/02, 1100 h, Cyl# 484

GAS	MOL %
Nitrogen	9.13
Carbon Dioxide	0.00
Methane	82.02
Ethane	4.21
Propane	2.60
I-Butane	0.96
N-Butane	0.71
I-Pentane	0.22
N-Pentane	0.08
Hexanes	0.04
Heptanes	0.02
Octanes and higher h'cs	0.01
Total	100.00

(0.00 = less than 0.01%)

The above results are calculated on an air and water free basis assuming only the measured constituents are present. The following parameters are calculated from the above composition at 15°C and 101.325 kPa (abs) using ISO 6976 and the physical constants from the GPSA SI Engineering Data Handbook 11 th Ed.

Average Molecular Weight	19.38
Lower Flammability limit	4.89
Upper Flammability limit	15.86
Ratio of upper to lower	3.24
Wobbe Index	47.39
Compressibility Factor	0.9976
Ideal Gas Density (Rel to air = 1)	0.669
Real gas Density (Rel to air = 1)	0.670
Ideal Nett Calorific Value MJ/m3	35.05
Ideal Gross Calorific Value MJ/m3	38.76
Real Nett Calorific Value MJ/m3	35.13
Real Gross Calorific Value MJ/m3	38.86
Gross calorific value of water-saturated gas MJ/m3	38.08

This report relates specifically to the sample submitted for analysis.

Approved Signatory _____

Accreditation No. : 2013
Date : 12-12-02