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ABBREVIATIONS AND SYMBOLS

A = Oil-/Gas-bearing Area of Reservoir, sq m

bbbl = Barrel

B_{gi} = Initial Formation Volume Factor of Gas, cu ft/scf

B_{oi} = Initial Formation Volume Factor of Oil, bbl/STB

BOPD = Barrel of Oil Per Day

cu ft = Cubic Feet

$EV(Z)$ = Expected Value of Z

F = Formation Resistivity Factor

Gas Reserve = Recoverable Gas Volume, scf

GCF = Geometric Correction Factor, fraction

CDF = Cumulative Distribution Function

GIIP = Gas-Initially-In-Place, cu ft

GR_{log} = Gamma Ray Value read on Gamma Ray Log, API units

GR_{min} = Minimum Value of Gamma Ray on Log, API units

GR_{max} = Maximum Value of Gamma Ray on Log, API units

h = Gross Reservoir Thickness, m

HIIP = Hydrocarbons-Initially-In-Place

I_{GR} = Gamma Ray Index

m = Mean

MLT = Measured Log Thickness, m

MM STB = Million Stock Tank Barrel

mTVD = True Vertical Depth, m

n = Saturation Exponent, usually 2

N/G_ratio = Net to Gross Ratio, fraction

Oil Reserve = Recoverable Oil Volume, STB

OIIP = Oil-Initially-In-Place, bbl

OOIP = Original-Oil-In-Place, bbl

OGIP = Original-Gas-In-Place, cu ft

OWC = Oil-Water-Contact

P10 = 10 Percentile

P50 = 50 Percentile

P90 = 90 Percentile

PDF = Probability Density Function

RF = Recovery Factor, fraction

R_t = Resistivity of a Rock, ohm meter

R_w = Water Resistivity, ohm meter

S_w = Water Saturation, fraction

S_o = Oil Saturation, fraction

S_g = Gas Saturation, fraction

SD = Standard Deviation

sq km = Square kilometer

sq m = Square meter

STB = Stock Tank Barrel

scf = Standard cubic feet

TVT = True Vertical Thickness, m

V_{ss} = Sand Volume, fraction

V_{cl} = Clay (shale) Volume, fraction

w_i = Weight (probability) of the i^{th} Data Point

α = Wellbore Deviation Angle, degree

β = True Bed Dip, degree

Δt = Tool Measured Interval Transit Time, microsecond per foot

Δt_{ma} = Transit Time of Matrix Material, microsecond per foot

Δt_f = Transit Time of Interstitial Fluid, microsecond per foot

Φ = Reservoir Porosity, fraction

Φ_D = Density Porosity, fraction

Φ_{N-D} = Neutron-Density Porosity, fraction

Φ_S = Sonic Porosity, fraction

γ = Acute Angle between the Wellbore Azimuth and the Azimuth of True Bed Dip

μ = Mean of the Natural Logarithm of the Distribution

ρ_{ma} = Matrix Density, g/cc

ρ_f = Fluid Density, g/cc

ρ_b = Corrected Bulk Density, g/cc

σ = Standard Deviation of the Natural Logarithm of the Distribution

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