

DAFTAR ISI

	Halaman
HALAMAN JUDUL	i
HALAMAN PENGESAHAN.....	ii
PERNYATAAN KEASLIAN KARYA ILMIAH.....	iii
HALAMAN PERSEMAHAN.....	iv
KATA PENGANTAR.....	v
RINGKASAN	vi
DAFTAR ISI.....	vii
DAFTAR GAMBAR.....	x
DAFTAR TABEL.....	xii
BAB I. PENDAHULUAN.....	1
1.1. Latar Belakang	1
1.2. Rumusan Masalah.....	1
1.3. Batasan Masalah.....	2
1.4. Maksud dan Tujuan	2
1.5. Metodologi Penelitian	2
BAB II. TINJAUAN UMUM LAPANGAN AR	5
2.1. Letak Geografis Lapangan “AR”	5
2.2. Tinjauan Geologi Lapangan “AR”	5
2.3. Geologi Regional Cekungan Sumatera Selatan	6
2.3.1.1. Sistem Tektonik.....	6
2.3.2. Stratigrafi.....	8
2.3.3. Petroleum System.....	12
BAB III. DASAR TEORI.....	15
3.1. <i>Wireline Log</i>	15
3.1.1. <i>Lithology Tools</i>	15
3.1.1.1 <i>Spontaneous Potential Log</i>	15
3.1.1.2 <i>Gamma Ray Log</i>	17
3.1.1.3 <i>Caliper Log</i>	18
3.1.2 <i>Resistivity Tools</i>	18
3.1.2.1. <i>Normal Log</i>	19
3.1.2.2. <i>Induction Log</i>	19
3.1.2.3. <i>Lateral Log</i>	20
3.1.2.4. <i>Microresistivity Log</i>	20
3.1.3. <i>Porosity Tools</i>	20
3.1.3.1. <i>Density Log</i>	20
3.1.3.2. <i>Neutron Log</i>	22
3.1.3.3. <i>Sonic Log</i>	23
3.2. Analisa Petrofisik	24
3.2.1. <i>Environmental Correction</i>	24
3.2.1.1. <i>Koreksi Gamma Ray Log</i>	25

DAFTAR ISI (Lanjutan)

	Halaman
3.2.1.2. Koreksi Spontaneous Potential Log	25
3.2.2 Perhitungan <i>Volume Shale</i>	25
3.2.3. Perhitungan Porositas.....	26
3.2.4. Perhitungan <i>Water Resistivity</i>	27
3.2.4.1. Metode <i>Hingle Plot</i>	27
3.2.4.2. Metode <i>Pickett Plot</i>	28
3.2.5. Perhitungan <i>Water Saturation</i>	28
3.2.5.1. Metode <i>Archie</i>	28
3.2.5.2. Metode <i>Simandoux</i>	29
3.2.5.3. Metode <i>Indonesian Equation</i>	29
3.2.5.4. Metode <i>Modified Simandoux</i>	30
3.2.6. Faktor Tortuositas dan Faktor Sementasi.....	30
3.2.7. Penentuan Jenis Hidrokarbon.....	31
3.2.8. Penentuan Cut Off.....	32
3.2.9. Reservoir Lumping.....	33
BAB IV. ANALISA DAN HASIL INTERPRETASI LOG.....	35
4.1. Data Penelitian	35
4.2. Pengolahan Data.....	35
4.2.1. <i>Environmental Correction</i>	36
4.2.1.1. Koreksi Spontaneous Potential Log	36
4.2.1.2. Koreksi <i>Gamma Ray Log</i>	37
4.2.2. Analisis Kualitatif	37
4.2.2.1. Penentuan Zona <i>Permeable</i> dan Zona <i>Impermeable</i>	38
4.2.2.2. Penentuan <i>Marker</i> Lapisan	39
4.2.2.3. Penentuan Zona <i>Crossover</i>	40
4.2.3. Analisa Kuantitatif	41
4.2.3.1. Perhitungan <i>Vshale</i>	41
4.2.3.2. Perhitungan Porositas	42
4.2.3.3. Penentuan <i>Rw</i>	45
4.2.3.4. Penentuan <i>Rt</i>	46
4.2.3.5. Perhitungan Saturasi Air.....	47
4.2.4. Penentuan Jenis Hidrokarbon.....	48
4.2.5. <i>Cut Off</i>	48
4.2.6.1. Cut Off Porositas dan <i>Vshale</i>	49
4.2.6.2. Cut Off Saturasi Air.....	49
4.2.7. <i>Reservoir Lumping</i>	46
BAB V. PEMBAHASAN	47

DAFTAR ISI
(Lanjutan)

	Halaman
BAB VI. KESIMPULAN.....	51
Daftar Pustaka.....	52
LAMPIRAN.....	54