

## DAFTAR ISI

SKRIPSI .....	i
HALAMAN PENGESAHAN.....	iii
HALAMAN PERNYATAAN .....	iv
HALAMAN MOTO DAN PERSEMBAHAN .....	v
KATA PENGANTAR .....	vi
DAFTAR ISI .....	viii
DAFTAR GAMBAR .....	xi
DAFTAR TABEL.....	xxi
INTISARI .....	xxii
<i>ABSTRACT</i> .....	xxiii
BAB I PENDAHULUAN.....	1
1.1 Latar Belakang .....	1
1.2 Rumusan Masalah.....	3
1.3 Tujuan Penelitian .....	3
1.4 Batasan Penelitian.....	4
1.5 Manfaat Penelitian .....	5
1.6 Waktu dan Tempat Penelitian.....	5
BAB II TINJAUAN PUSTAKA .....	6
2.1 Tinjauan Geologi Daerah Penelitian .....	6
2.2 Tinjauan Geofisika.....	10
2.2.1 Konversi Langsung ( <i>Direct Time To Depth Conversion</i> ).....	10
2.2.2 Pemodelan Kecepatan ( <i>Velocity Modeling</i> ).....	12
BAB III .....	18
3.1 <i>Well Seismic Tie</i> .....	18
3.1.1 Impedansi Akustik ( <i>Acoustic Impedance, AI</i> ).....	18
3.1.2 Koefisien Refleksi ( <i>Reflection Coefficient, RC</i> ).....	19
3.1.3 <i>Wavelet</i> .....	21
3.1.4 <i>Synthetic Seismogram</i> .....	22
3.1.5 Proses <i>Well Seismic Tie</i> .....	23
3.2 <i>Velocity</i> .....	24
3.2.1 <i>Average Velocity (<math>V_{avg}</math>)</i> .....	25
3.2.2 <i>Instantaneous Velocity (<math>V_{inst}</math>)</i> .....	26
3.2.3 <i>Root Mean Square Velocity (<math>V_{RMS}</math>)</i> .....	27
3.2.4 <i>Stacking Velocity (<math>V_{stack}</math>)</i> .....	28

3.2.5	<i>Interval Velocity (<math>V_{int}</math>)</i> .....	29
3.3	<i>Time Depth Relationship</i> .....	30
3.3.1	<i>Sonic Log</i> .....	31
3.3.2	<i>Checkshot Survey</i> .....	32
3.3.3	<i>Vertical Seismic Profiling (VSP)</i> .....	33
3.4	Interpretasi Seismik.....	34
3.4.1	<i>Time Structure Map</i> .....	34
3.4.2	<i>Depth Structure Map</i> .....	35
3.5	<i>Time To Depth Conversion</i> .....	35
3.5.1	Prinsip <i>Time-To-Depth Conversion</i> .....	36
3.5.2	Metode <i>Time-To-Depth Conversion</i> .....	37
3.6	Perhitungan Volumetrik Gas.....	44
3.6.1	<i>Gas Water Contact (GWC)</i> .....	44
3.6.2	Perhitungan Volumetrik Gas.....	45
<b>BAB IV METODOLOGI PENELITIAN</b> .....		48
4.1	Area Penelitian.....	48
4.2	Perangkat Lunak dan Keras.....	48
4.3	Data Penelitian.....	49
4.3.1	Data Seismik.....	49
4.3.2	Data Sumur.....	50
4.4	Diagram Alir Penelitian.....	52
4.5	<i>Well Seismic Tie</i> .....	55
4.6	<i>Picking Horizon</i> .....	57
4.7	<i>Time Structure Map</i> .....	59
4.8	<i>Time To Depth Conversion</i> .....	60
4.8.1	<i>Direct Time To Depth Conversion</i> .....	60
4.8.2	<i>Velocity Modeling</i> .....	63
4.9	Analisis Ketidakpastian ( <i>Uncertainty</i> ).....	67
4.10	Perhitungan Volumetrik.....	68
<b>BAB V HASIL DAN PEMBAHASAN</b> .....		71
5.1	<i>Well Seismic Tie</i> .....	71
5.2	<i>Time Structure Map</i> .....	72
5.3	<i>Depth Structure Map</i> .....	78
5.3.1	<i>Metode Direct Time To Depth Conversion</i> .....	78
5.3.2	<i>Velocity Modeling</i> .....	87

5.4	Ketidakpastian ( <i>Uncertainty</i> ).....	103
5.5	Perhitungan Kasar Volumetrik.....	106
BAB VI KESIMPULAN DAN SARAN .....		109
6.1	Kesimpulan .....	109
6.2	Saran .....	110
DAFTAR PUSTAKA .....		111
LAMPIRAN A <i>WELL SEISMIC TIE</i> .....		114
LAMPIRAN B <i>PICKING HORIZON</i> .....		118
LAMPIRAN C <i>DEPTH MAP HASIL DIRECT TIME TO DEPTH CONVERSION...</i>		120
LAMPIRAN D <i>WELL VELOCITY MODELING MFS B</i> .....		124
LAMPIRAN E <i>WELL VELOCITY MODELING MFS H</i> .....		131
LAMPIRAN F <i>WELL VELOCITY MODELING MFS P</i> .....		138
LAMPIRAN G <i>WELL VELOCITY MODELING MFS AA</i> .....		145
LAMPIRAN H <i>NILAI RMS ERROR HASIL WELL VELOCITY MODELING.....</i>		152