

DAFTAR ISI

KATA PENGANTAR.....	ii
DAFTAR ISI.....	iv
DAFTAR TABEL.....	vi
DAFTAR GAMBAR.....	vii
DAFTAR LAMPIRAN.....	viii
ABSTRAK.....	ix
ABSTRACT.....	x
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang.....	1
I.2 Tujuan Penelitian.....	4
BAB II TINJAUAN PUSTAKA.....	5
II.1 Abu Layang (Fly Ash).....	5
II.2 Silika Gel.....	6
II.3 <i>Polyethelene Glycole</i> (PEG).....	8
II.4 Ball Milling.....	10
II.5 Metode Sol – Gel.....	11
II.6 Adsorpsi.....	13
II.7 Timbal (Pb).....	14
II.8 Metode Analisis.....	15
II.8.1 Atomic Absorption Spectrophotometry (AAS).....	15
II.8.2 Gas Surface Area.....	16
II.8.3 Spektroskopi Inframerah Transformasi Fourier (FTIR).....	19
II.8.4 X-Ray Fluorescence (XRF).....	21
BAB III METODE PENELITIAN.....	22
III.1. Bahan.....	22
III.2 Alat.....	23
III.3 Prosedur Kerja.....	24

III.3.1 Preparasi Sampel (Abu Layang).....	24
III.3.2 Sintesis Silika Xerogel.....	24
III.3.3 Sintesis Silika Xerogel dengan Penambahan PEG.....	25
III.3.4 Sintesis Silika Xerogel dengan Perlakuan Milling.....	26
III.3.5 Adsorpsi Pb(II).....	26
BAB IV PEMBAHASAN.....	28
IV.1 Abu Layang.....	28
IV.2 Silika Xerogel.....	31
IV.3 Silika Xerogel perlakuan Milling.....	33
IV.4 Silika Xerogel dengan Penambahan PEG.....	34
IV.5 Hasil Analisis FTIR.....	36
IV. 6 Hasil Analisis GSA.....	39
IV.7 Adsorpsi Ion Logam Pb (II).....	41
BAB V KESIMPULAN.....	47
V.1 Kesimpulan.....	47
V.2 Saran.....	48
DAFTAR PUSTAKA.....	49
LAMPIRAN.....	54