

Sleep Profiler™

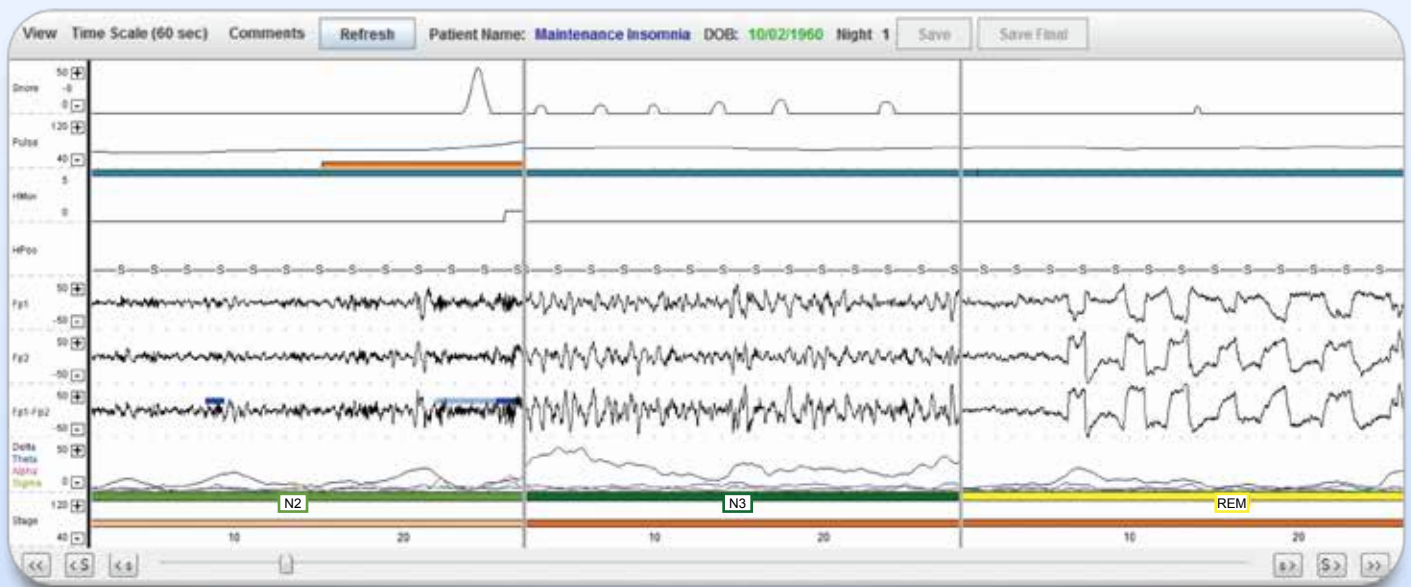


Night-to-night comparisons of sleep quality using validated algorithms to assist the physician with editing and interpretation

- Electroencephalography
- Electrooculography
- Pulse rate
- Voice alerts to manage signal quality
- Electromyography
- Electrocardiography
- Quantitative snoring
- Head movement and position

Key sleep parameters are provided via web-based editing and report generation:

- Total time and percentage sleep, REM, and SWS
- Sleep, REM, and SWS latency
- Sleep efficiency
- Total and average hourly number of cortical, sympathetic, and behavioral arousals
- Awakening index and Wake After Sleep Onset
- Frequency and intensity of snoring

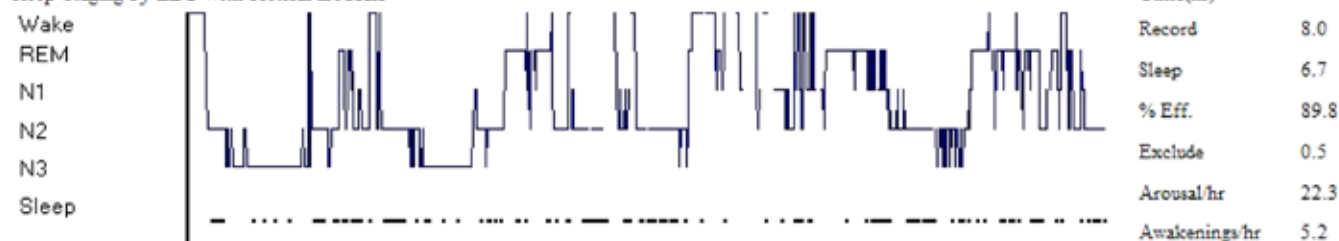


2237 Faraday Ave, Suite 100
Carlsbad, CA 92008
P 760.720.0099 | F 760.476.3620
info@advanced-sleep.com | advanced-sleep.com
Copyright © Advanced Brain Monitoring, Inc. 2013 42-8301 031413

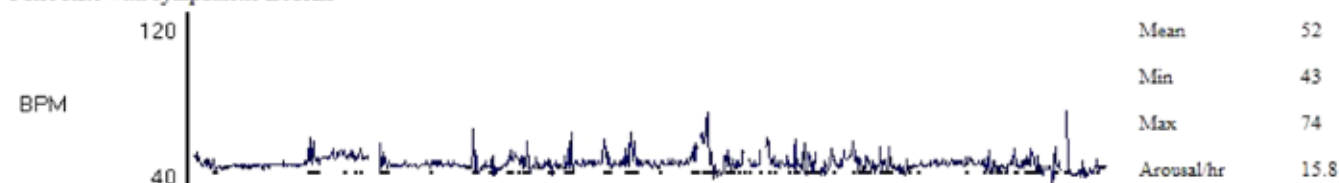
Sample Sleep Profiler Report

Sleep Profiler Study Report					
Patient Name	Sample, Patient			Study Date	04 Feb 2013
Record time (hr)	8.0	Sleep time (hr)	6.7	Predicted OSA risk	None
Latencies	Min	Valid Sleep Time	%		
Sleep Onset	9	Stage R	22.7	Sleep Efficiency (%)	89.8
Stage R	70	Stage N3	19.5	Wake after sleep onset (min)	37
Stage N3	12	Stage N2	46.0	Number sleep cycles	5
Awake	46	Stage N1	11.8	Average cycle length (min)	85

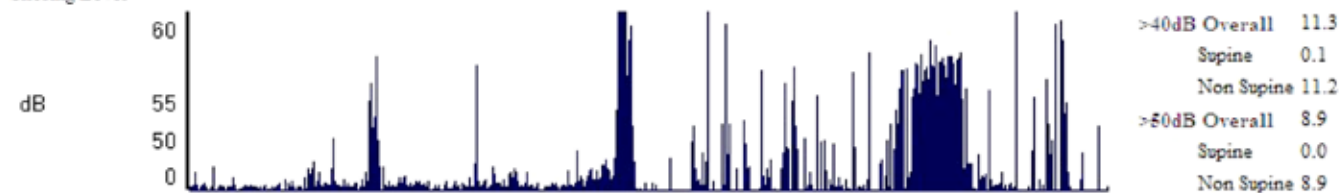
Sleep Staging by EEG with cortical arousals



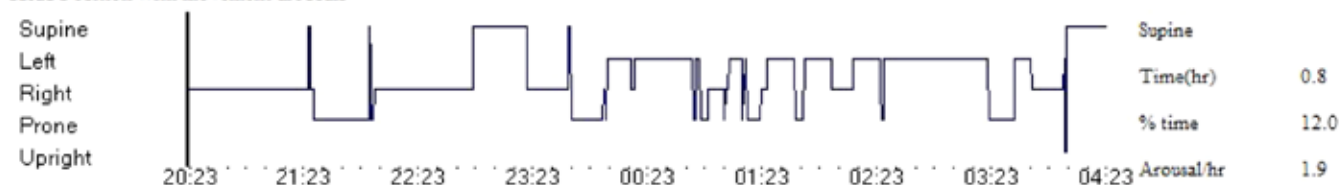
Pulse Rate with sympathetic arousals



Snoring Level



Head Position with movement arousals



CLINICAL HISTORY: 52-year-old female presented with an Insomnia Severity Index of 15 and an Epworth sleepiness score of 7, a BMI of 28 with a 14.0 inch neck, a history of insomnia and depression, and symptoms of morning headaches.

STUDY FINDINGS: The patient underwent a two-night EEG study.

Night One: The recording time of 8.0 hours and total sleep time of 6.7 hours resulted in a sleep efficiency of 89.8%. The patient fell asleep 9 minutes after the lights were turned off, started her first REM cycle 70 minutes later, transitioned from sleep to wake on average 5.2 times per hour, and was awake for a total of 37 minutes after initially falling asleep. The patient experienced on average 22.3 cortical, 15.8 sympathetic, and 1.9 movement arousals per hour of sleep; and slept 11.8% stage N1, 46.0% N2, 19.5% in slow-wave sleep (stage N3), and 22.7% in REM, while sleeping 12.0% of time supine and snoring 11.3% of the night above 40dB and 8.9% above 50dB. The patient's percentage of time in stage N1 was in the bottom 10th percentile as compared to normal gender-matched subjects; while the awakening index and the percentage of time in stage N1 were in the bottom 10th percentile when compared to normal age-matched subjects.