

**Louisiana Sleep Diagnostics**  
**410 E. College St.**  
**Lake Charles, Louisiana 70601**  
**337 -474-8527 Fax 337-474-8565**  
**Toll Free 1-866-753-8555**

January 5, 2006

Test: CPAP

Patient: **Jane Doe**

Date of Study: 12/31/05

Date of Interpretation: 01/03/06

Referring Physician: Laura Trunk, M.D.

Indications: OSA

Demographics: 46 year-old female, 5'4" tall, weighing 350 pounds

Date of Birth: 06/29/1958

System: Alice 16 channel montage

Technician: Steve Savarese, R.PSG.T. Clinical Director

Interpreting Physician: Laura Trunk, M.D.

Ms. Jane Doe returned to Louisiana Sleep Diagnostics for a CPAP Titration Study. She slept for 377.5 minutes out of 408.5 minutes for a sleep efficiency of 92.4%. During this time, she suffered 2 obstructive apneas, 1 central apnea and 78 hypopneas for a total RDI of 9.1 and a REM RDI of 21.2. Her lowest desaturation was 91%. She had 41 arousals and 8 awakenings throughout the night. No PLM's were noted. Snoring was considered moderate and was eventually resolved. Sleep staging revealed an increase in Stage I, a slight decrease in Stage II, a decrease in Delta sleep and a slight increase in REM sleep. Positional data showed a supine RDI of 14.8 and a left side RDI of 2.5. No right side sleep was seen.

CPAP settings of 4 through 18cmH<sub>2</sub>O pressure were attempted. Obstructive events were seen up until 12cmH<sub>2</sub>O pressure. At 14cmH<sub>2</sub>O pressure, Ms. Doe had no obstructive events or snoring. This pressure also captured a sleep efficiency of 99.1%. We increased to 16cmH<sub>2</sub>O pressure which captured REM sleep and a sleep efficiency of 100%. We increased to 18cmH<sub>2</sub>O pressure but it did not prove to be any more beneficial than 14 or 16cmH<sub>2</sub>O pressure.

Axis A: See page 2.

Axis B: CPAP Titration Study.

Axis C: Other medical diagnoses as per history and physical.

Recommendations: 1. See page 3.

**LOUISIANA SLEEP DIAGNOSTICS  
CLINICAL POLYSOMNOGRAPHIC REPORT**

**PATIENT NAME:** Jane Doe  
**ACQ#:** 7315  
**DATE OF RUN:** 12/31/05

**TEST:** CPAP  
**AGE:** 46  
**REPORT DATE:** 01/03/06

- |                                                                 |                                                    |
|-----------------------------------------------------------------|----------------------------------------------------|
| <b>1. LIGHTS OUT TIME:</b> 17:59                                | <b>TOTAL RECORDING:</b> 408.5 min.                 |
| <b>2. SLEEP ONSET:</b> 5.0 min.                                 | <b>TOTAL SLEEP TIME:</b> 377.5 min.                |
| <b>3. STAGE 2 ONSET:</b> 15.0 min.                              |                                                    |
| <b>4. REM ONSET:</b> 58.0 min.                                  |                                                    |
| <b>5. EEG:</b> UNREMARKABLE                                     |                                                    |
| <b>6. HEART RATE:</b>                                           | <b>HIGH:</b> 84 <b>LOW:</b> 79                     |
| <b>7. EKG:</b> UNREMARKABLE                                     |                                                    |
| <b>8. RESPIRATORY RATE:</b>                                     | <b>HIGH:</b> 18 <b>LOW:</b> 15                     |
| <b>9. OXYGEN SATURATION:</b>                                    | <b>HIGH:</b> 98% <b>LOW:</b> 91% <b>BASAL:</b> 97% |
| <b>10. APNEA-TOTAL:</b> ( 2 OBS, 0 MIXED, 1 CENT): 78 HYPOPNEAS |                                                    |

**REM RDI = 21.2   EPISODES PER HOUR OF SLEEP**  
**TOTAL APNEA + HYPOPNEA (RDI) = 9.1   EPISODES PER HOUR OF SLEEP**  
**SNORING: 6   FOR LOUDNESS (SCALE OF 1-10)**

- 11. PERIODIC LIMB MOVEMENTS:** 0   **PLM INDEX:** 0   **EPISODES PHS**
- 12. SPONTANEOUS AROUSALS-TOTAL:** 41   **AWAKENINGS:** 8  
**SPONTANEOUS AROUSALS INDEX:** 7.8   **EPISODES PER HOUR OF SLEEP**
- 13. ESTIMATED SLEEP EFFICIENCY (TST/TIB X 100) = 92.4%**

**14. COMMENTS:**

- 1. AVOID DRIVING OR OPERATING HEAVY EQUIPMENT IF SLEEPY.**
- 2. DX:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 3. PERFORM:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**Laura Trunk, M.D./Date**

PATIENT NAME: **Jane Doe**      AGE: 46      TEST: CPAP

ACQ#: 7315

DATE OF RUN: 12/31/05

PATIENT VALUES

NORMAL RANGES

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SLEEP LATENCY	5.0 min.	20 MINS-35 MINS
REM LATENCY	58.0 min.	90 MINS
SLEEP EFFICIENCY	92.4%	88-96 Percent
STAGE 1	13.5%	5% OF TST
STAGE 2	52.8%	55% OF TST
STAGE DELTA	11.9%	20% OF TST
STAGE REM	21.7%	20% OF TST
TOTAL RDI=	9.1	RDI NORMS
REM RDI=	21.2	0-5    Normal 5-10   Mild 10-20   Moderate 20 or above   Severe

**Total Recording Time**

Supine	14.8	301.2 min.
Left Side	2.5	48.9 min.
Right Side	N/A	

VARIABLES MEASURED

SLEEP STAGING BY EOG, EMG AND EEG SURFACE ELECTRODES  
AIRFLOW BY NASAL THERMISTOR  
RESPIRATORY EFFORT BY INDUCTIVE PLETHYSMOGRAPHY  
OXYGEN SATURATION CONTINUOUSLY BY DIGITAL OXIMETRY  
BODY POSITION BY ELECTRONIC SENSOR  
TRACHEAL SOUND PRODUCTION BY TRACHEAL TRANSDUCER

# Cpap Data Table

NAME: Jane Doe

DATE: 12/31/05

cpap setting	time	sleep %	REM %	delta %	central apnea	obst apnea	mixed apnea	hypop	RDI	snoring	basal SpO2
4	40.0	86.3	0.0	30.0	0	0	0	18	31.3	Y	93%
6	31.5	100.0	0.0	49.2	0	1	0	4	9.5	Y	94%
8	34.0	95.6	14.7	0.0	0	1	0	13	25.8	Y	94%
10	60.0	84.2	0.0	10.8	0	0	0	19	22.6	Y	95%
12	21.5	100.0	95.3	0.0	1	0	0	24	69.8	Y	95%
14	57.0	99.1	0.0	14.0	0	0	0	0	0.0	N	96%
16	63.0	100.0	49.2	4.8	0	0	0	0	0.0	N	97%
18	101.5	95.6	25.1	0.0	0	0	0	0	0.0	N	97%

**MASK TYPE: Profile Lite**

**SIZE: Medium**