



Example Interpretation Reports

Click on the report name below to view the interpretation report

1. Polysomnography (PSG)
2. Home Sleep Test (HST)
3. Multi-Night Home Home Sleep Test
4. Titration (PAP, ASV, Neurostimulation Therapy, Oral Appliance, O2)
5. Split Night
6. MSLT
7. Remote Physiological Monitoring (RPM) and Longitudinal Therapy Monitoring (LTM) (at-home unlimited titrations)



EnsoData Clinic

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

POLYSOMNOGRAM (PSG) INTERPRETATION REPORT

Patient Name:	Nate S. Sandmann	Study Date:	06/13/2025
Gender:	Male	MRN#:	123456
Date of Birth:	01/31/1982	Computer#:	B9ECBWRQF6XQK7NT
Age:	64	Referring Provider:	Physician Name
Height:	70 in	Sleep Specialist:	Physician Name
Weight:	200 lbs	Recorded by:	Recording Tech Name
BMI:	28.21	Scored by:	Scoring Tech Name

RECORDING INFORMATION:

Digital Polysomnographic recording attended by a technologist was completed using Natus Sandman Elite system. The following parameters were measured during the recording: EEG, EOG, ECG, EMG on chin and lower extremities, airflow via nasal cannula and thermistor, respiratory efforts at chest and abdomen, and finger pulse-oximetry. Hypopneas were scored per 3% desaturation rule.

EEG:

The total recording time (TRT) was 7h 30m 02s and the total sleep time (TST) was 5h 05m 30s, equating to a sleep efficiency of 67.9%. The total arousal index was 71.1 events/hour. The latency to sleep onset was 13.33min and the latency to stage REM sleep was 287.5min. The patient was awake for 131.2min throughout the night (WASO). The percentage of sleep time in each stage was: 24.2% N1, 36.4% N2, 2.0% N3, and 5.2% REM.

RESPIRATORY:

The overall apnea-hypopnea index (AHI) was **59.5 events/hour**. 114 apneas were detected: 26 obstructive; 0 mixed; 88 central; 189 hypopneas). AHI was influenced by sleep stage and body positions as follows: (REM-AHI = 10.2 events/hour; NREM-AHI = 63.6 events/hour; supine AHI = 93.0 events/hour; non-supine AHI = 17.0 events/hour). The patient slept in the supine position 58.8% of the time. The patient experienced an oxygen desaturation nadir of 64%. The patient spent 0.1% of the night at or below 88% SpO₂.

ECG:

The heart rate ranged from 51 - 71 BPM. The average heart rate was 57 BPM.

MOVEMENT ANALYSIS:

There were 0 periodic limb movements (PLMs) observed during sleep, with a PLM index of 0.0 events/hour and a PLM-arousal index of 0.0 events/hour.

IMPRESSION:

- Severe Obstructive Sleep Apnea (OSA) indicated by AHI=59.5 and RDI=59.5 with 114 total apneas + 189 total hypopneas recorded during this polysomnogram.
- There were 88 central apneas for a CA index of 17.3

DIAGNOSIS:

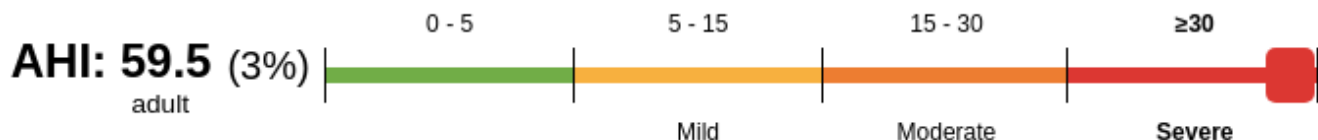
Obstructive Sleep Apnea (G47.33)

RECOMMENDATIONS:

- CPAP Titration by polysomnogram for mask fitting and optimal PAP pressure determination.
- Achieve and maintain ideal body weight.
- Maintain proper sleep hygiene: regular sleep and wake time, avoid caffeine, stimulants, and alcohol within 4hrs of bedtime.

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	AHI	Total Hypop	OH	CH	Total Apnea	CA	OA	MA	RERA	Total (RDI)
3% Count	303	189	189	0	114	88	26	0	0	303
3% Index	59.5	37.1	37.1	0	22.4	17.3	5.1	0	0	59.5
3% Mean Dur (sec)	22.7	23.9	23.9	0	20.6	21.2	18.6	0	0	22.7
3% Max Dur (sec)	50	50	50	0	33	33	28	0	0	50
3% REM Index	10.2	10.2	10.2	0	0	0	0	0	0	10.2
3% Non-REM Index	63.6	39.4	39.4	0	24.3	18.7	5.5	0	0	63.6
4% Count	200	86	86	0	114	88	26	0	96	296
4% Index	39.3	16.9	16.9	0	22.4	17.3	5.1	0	0	58.1
4% Mean Dur (sec)	23.0	26.2	26.2	0	20.6	21.2	18.6	0	0	22.7
4% Max Dur (sec)	50	50	50	0	33	33	28	0	0	50
4% REM Index	0	0	0	0	0	0	0	0	0	10.2
4% Non-REM Index	42.6	18.3	18.3	0	24.3	18.7	5.5	0	0	62.1



Sleep	Total Recording Time	7h 30m	Sleep Efficiency	67.9%	Duration	2h 24m	Percent (TST)	--
	Lights Off	08:57 PM	Sleep Latency	13m	Wake	1h 49m	N1	35.7%
	Lights On	04:27 AM	Wake After Sleep Onset	2h 11m	N2	2h 44m	N3	2.9%
	Total Sleep Time	5h 5m			REM	0h 23m		7.7%

Respiratory & Oxygen Saturation (3%)		Count	Index /hr		Count	Index /hr
	Resp. Disturbance (RDI)	303	59.5	All Hypopnea	189	37.1
	Apnea-Hypopnea (AHI)	303	59.5	Obstructive Hypopnea	189	37.1
	All Apnea	114	22.4	Central Hypopnea	0	0.0
	Obstructive Apnea	26	5.1	Mixed Hypopnea	0	0.0
	Central Apnea	88	17.3	Desaturation	229	45.0
	Mixed Apnea	0	0.0			

Respiratory & Oxygen Saturation (3%)	SpO2 (Sleep)	%	Oxygen Saturation	Time In Range	Snoring	
	Minimum	64	% time between 90 - 80	3m (1.2%)	Count	0
	Mean	94	% time between 80 - 70	0m (0.0%)	Percent	0%
	Maximum	99	% time between 70 - 60	0m (0.0%)		
			% time between 60 - 50	0m (0.0%)		
			% time between 89 - 0	1m (0.4%)		
			% time between 88 - 0	0m (0.1%)		

Position (3%)		Total Time	Sleep Time	Percent	RDI	AHI	AI	CAI	HI
	Left	2h 58m	2h 14m	39.7%	17.0	17.0	0.0	0.0	17.0
	Prone	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
	Right	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
	Supine	4h 24m	2h 51m	58.8%	93.0	93.0	40.0	30.9	53.0
	Upright	6m	0m	1.5%	0.0	0.0	0.0	0.0	0.0
	Non Supine	3h 5m	2h 14m	41.2%	17.0	17.0	0.0	0.0	17.0

Cardiac	Heart Rate (Sleep)			Time In Range
	Minimum	51	% time between 150 - 90	0m (0.0%)
	Mean	57	% time between 90 - 50	5h 3m (100.0%)
	Maximum	71	% time between 50 - 0	0m (0.0%)

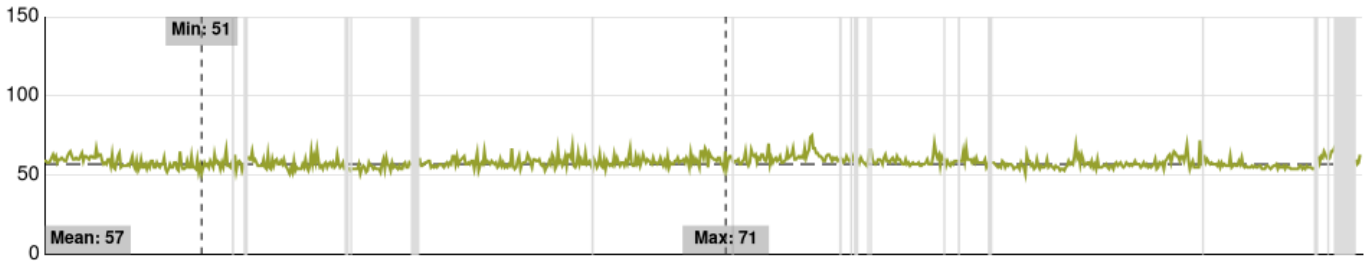
Staging



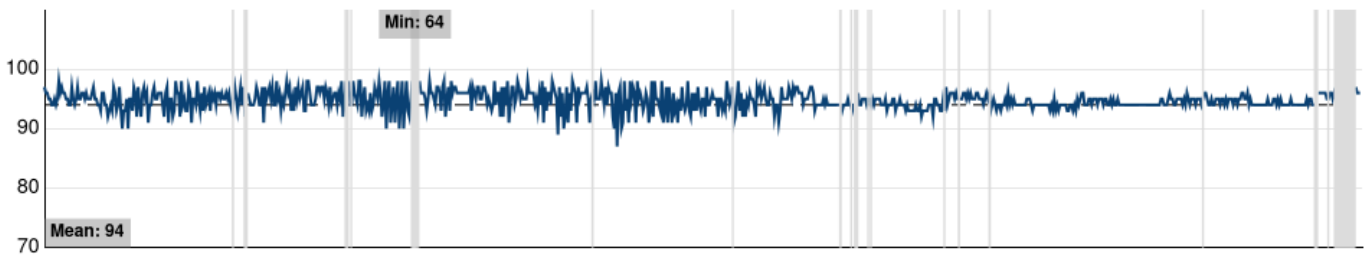
Position



Heart Rate



SpO2



Obstructive Apnea



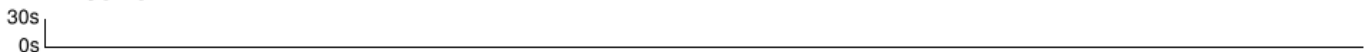
Obstructive Hypopnea



Central Apnea



Central Hypopnea



RERA



Desaturation



Snoring



Arousal



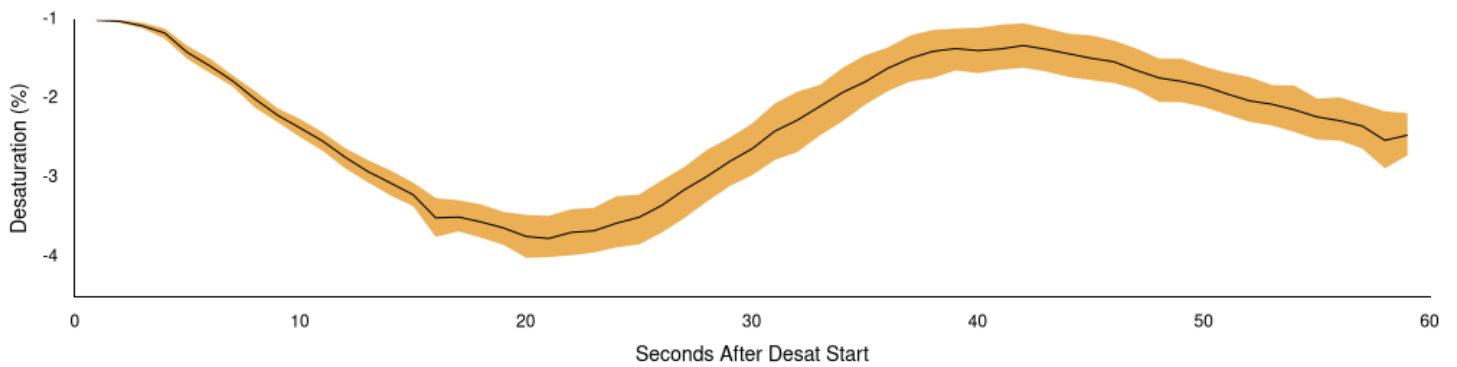
Leg Movement



Hypoxic Burden

Note: this is an advanced metric

Representative Desats Mean



The 3% hypoxic burden value calculated for this study is 49.47 %min/hr, which is in the 57.52 percentile of an age- and sex-matched clinical cohort (0 is least severe, 100 is most severe). This is based on a cohort of 11103 historical sleep studies.



EnsoData Clinic

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

HOME SLEEP TEST REPORT

Patient Name:	Alice Knight	Study Date:	06/13/2025
Date of Birth	01/29/1982	Gender:	Female
Age:	28 years	MRN#:	123456
Height:	70 in	Referring Provider:	Physician Name
Weight:	200 lbs	Sleep Specialist:	Physician Name
BMI:	28.69	Scored by:	Scoring Tech Name

RECORDING INFORMATION:

The study was recorded on a Sleepware G3 HSAT device using a pressure-based flow sensor. The heart rate is derived from the pulse-oximeter. The device also records body position. Hypopneas were scored per AASM definition 3% desaturation rule. Study was manually reviewed.

RECORDING OBSERVATIONS:

The patient slept for a total of 5h 44m 30s out of the 8h 45m 11s recording, for a sleep efficiency of 65.6%. Sleep onset occurred after 60.0min and the patient was awake for 2h 00m 41s during the night after sleep onset.

RESPIRATORY:

The overall apnea-hypopnea index (AHI) was 24.4 events/hour and the supine AHI = 26.7 events/hour. 41 total apneas were detected: 38 obstructive, 3 central; 99 hypopneas. The patient slept in the supine position 21.8% of the time. The patient experienced an oxygen desaturation nadir of 86% and spent 0h 02m below 88%.

ECG:

The heart rate ranged from 60 to 108 BPM. The average sleeping heart rate was 81 BPM. This study was not flagged by EnsoSleep advanced metrics for abnormal heart rate and/or heart rate variability.

IMPRESSION:

- Moderate Obstructive Sleep Apnea (OSA) indicated by AHI=24.4 and RDI=24.4 with 41 total apneas + 99 total hypopneas recorded.
- There were 3 central apneas for a CA index of 0.5.

DIAGNOSIS:

Obstructive Sleep Apnea (G47.33)

RECOMMENDATIONS:

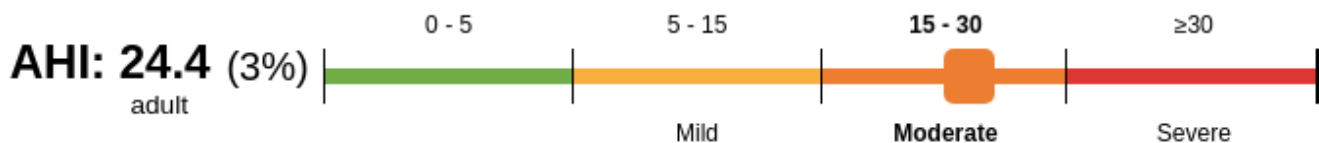
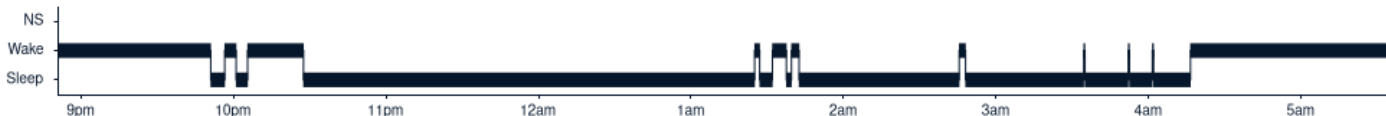
- Achieve and maintain ideal body weight.
- Maintain proper sleep hygiene: regular sleep/wake time.
- Avoid caffeine and stimulants within 4hrs of bedtime (if applicable).
- Discuss the role of alcohol and sedative/hypnotics in causing or worsening existing obstructive apnea (if applicable).

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	AHI	Total Hypop	OH	CH	Total Apnea	CA	OA	MA	RERA	Total (RDI)
3% Count	140	99	99	0	41	3	38	0	0	140
3% Index	24.4	17.2	17.2	0	7.1	0.5	6.6	0	0	24.4
3% Mean Dur (sec)	18.8	20.3	20.3	0	15.0	18.0	14.8	0	0	18.8
3% Max Dur (sec)	32	32	32	0	20	20	20	0	0	32
3% REM Index	0	0	0	0	0	0	0	0	0	0
3% Non-REM Index	24.4	17.2	17.2	0	7.1	0.5	6.6	0	0	24.4
4% Count	70	29	29	0	41	3	38	0	0	70
4% Index	12.2	5.1	5.1	0	7.1	0.5	6.6	0	0	12.2
4% Mean Dur (sec)	17.0	19.7	19.7	0	15.0	18.0	14.8	0	0	17.0
4% Max Dur (sec)	30	30	30	0	20	20	20	0	0	30
4% REM Index	0	0	0	0	0	0	0	0	0	0
4% Non-REM Index	12.2	5.1	5.1	0	7.1	0.5	6.6	0	0	12.2

Sleep	Total Recording Time	8h 45m	Sleep Efficiency	65.6%	Duration	Percent (TST)
	Lights Off	08:51 PM	Sleep Latency	1h 0m	Wake	3h 00m
	Lights On	05:36 AM	Wake After Sleep Onset	2h 0m	Sleep	5h 44m
	Total Sleep Time	5h 44m				100.0%

Staging



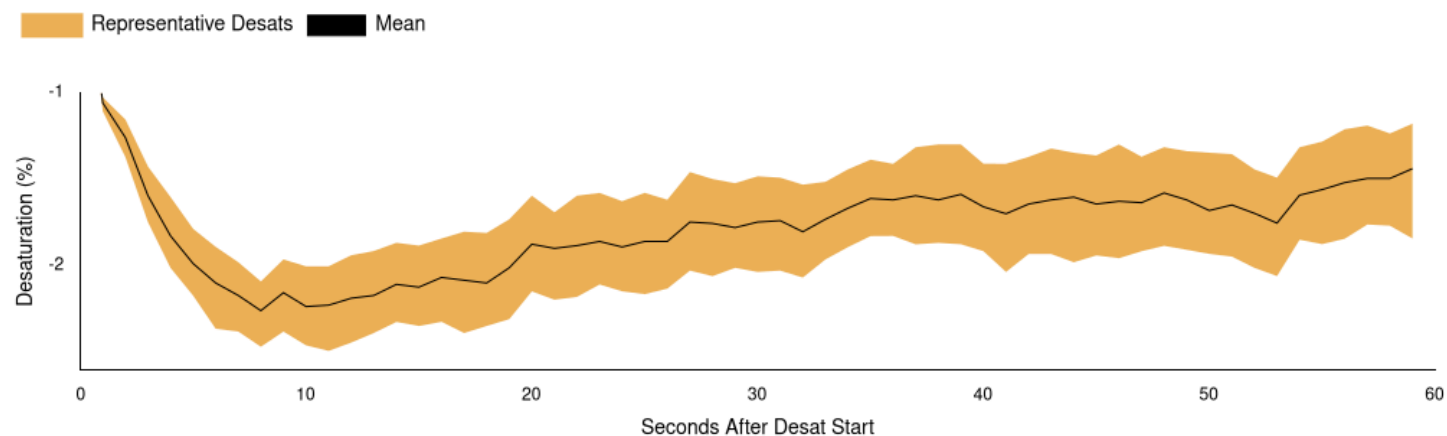
Respiratory & Oxygen Saturation (3%)	Count		Index /hr	
	Resp. Disturbance (RDI)	140	24.4	All Hypopnea
Apnea-Hypopnea (AHI)	140	24.4	Obstructive Hypopnea	99
All Apnea	41	7.1	Central Hypopnea	0
Obstructive Apnea	38	6.6	Mixed Hypopnea	0
Central Apnea	3	0.5	Desaturation	125
Mixed Apnea	0	0.0		21.8

Respiratory & Oxygen Saturation (3%)	SpO2 (Sleep) %		Oxygen Saturation		Time In Range		Snoring	
	Minimum	86	% time between 90 - 80	14m (4.2%)	Snoring Count	2678		
Mean	95	% time between 80 - 70	0m (0.0%)	Percent	17.9%			
Maximum	100	% time between 70 - 60	0m (0.0%)					
		% time between 60 - 50	0m (0.0%)					
		% time between 89 - 0	7m (2.3%)					
		% time between 88 - 0	2m (0.6%)					

Position (3%)	Total Time		Sleep Time		Percent		RDI	AHI	AI	CAI	HI
	Left	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prone	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right	4h 13m	3h 44m	48.3%	19.3	19.3	7.8	0.5	11.5			
Supine	1h 54m	4m	21.8%	26.7	26.7	0.0	0.0	26.7			
Upright	2h 36m	1h 55m	29.9%	34.2	34.2	6.2	0.5	28.0			
Non Supine	6h 50m	5h 40m	78.2%	24.4	24.4	7.2	0.5	17.1			

Hypoxic Burden

Note: this is an advanced metric



The 3% hypoxic burden value calculated for this study is 88.76 %min/hr, which is in the 85.05 percentile of an age- and sex-matched clinical cohort (0 is least severe, 100 is most severe). This is based on a cohort of 20884 historical sleep studies.



Ensodata Clinic

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

MULTI-NIGHT HOME SLEEP TEST REPORT

Patient Name:	Multinight Patient	Order Date:	07/08/2025
Gender:	Female	Date of Birth (Age):	08/07/1967 (35)
Height:	65.0	MRN#:	009988
Weight:	160.0	Scoring Technologist:	Scoring Tech
BMI:	26.62	Reviewing Physician:	Physician Name

RECORDING INFORMATION:

The studies were recorded on an FDA-approved continuous pulse oximeter device. The PPG signal was used to determine recording time and sleep/wake time. The record was scored for sleep, respiratory events, arousals, and other parameters in 30-second epochs. Hypopneas were scored per AASM definition 3% desaturation rule. The study was manually reviewed.

RECORDING OBSERVATIONS:

The patient slept for a total of 13h 01m 30s (Total Sleep Time) out of the 14h 05m 36s (Total Recording Time) recording across 2 nights. The eAHI (3%) is 13.3 and the eAHI (4%) is 8.4.

RESPIRATORY:

There were 173 obstructive respiratory events and 0 central respiratory events detected for an overall Ensodata **apnea-hypopnea index (eAHI) of 13.3 events/hour**. The patient experienced an oxygen desaturation nadir of 84%.

Arousal/RERA:

There were 153 total arousals detected for an arousal index of 11.7 events/hour. There were 19 RERAs leading to an Ensodata **respiratory disturbance index (eRDI) of 14.7**.

CARDIAC:

The pulse rate ranged from 50 to 97 BPM. The average pulse rate was 72 BPM. This patient **was not** flagged for any cardiac arrhythmias.

IMPRESSION:

- Mild obstructive sleep apnea detected.
- Oxygen saturation dropped below 90% for 0.5% of total sleep time.

RECOMMENDATIONS:

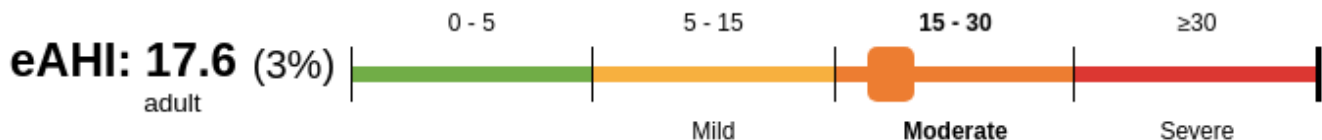
- Refer patient for an in-lab sleep study.
- Refer patient for follow-up visit to be evaluated for PAP therapy.
- Refer patient for follow-up visit to be evaluated for Oral Appliance Therapy (OAT).
- Achieve and maintain ideal body weight.
- Maintain proper sleep hygiene: regular sleep/wake time, quiet and dark room, etc.
- Avoid caffeine and stimulants within 4 hours of bedtime.
- Discuss the role of alcohol and sedatives/hypnotics in causing or worsening existing obstructive apnea.

Electronically signed None Signed by None None

Summary Info Table

Metric	Night 1	Night 2
Recording Date	2025/07/09	2025/07/15
eAHI (3%)	17.6	8.1
eAHI (4%)	11.1	5.2
eRDI (3%)	18.6	10.1
eRDI (4%)	13.5	8.4
TST	7h 6m	5h 55m
TRT	7h 21m	6h 44m
Minimum SpO2	84	84
Mean SpO2	95	95
Maximum SpO2	98	99
Percent below 90 SpO2	0.6%	0.5%
Percent bad data	0.2%	0.1%

Recording Date: 2025/07/09



	Total (eAHI)	eRDI	Obstructive Respiratory	Central Respiratory	Desat
3% Count	125	132	125	0	107
3% Index	17.6	18.6	17.6	0	15.1
3% Mean Dur (sec)	25.0	25.0	25.0	0	32.2
3% Max Dur (sec)	43	43	43	0	74
3% REM Index	33.7	36.1	33.7	0	31.3
3% Non-REM Index	10.9	11.3	10.9	0	8.4
4% Count	79	96	79	0	58
4% Index	11.1	13.5	11.1	0	8.2
4% Mean Dur (sec)	24.7	24.8	24.7	0	33.7
4% Max Dur (sec)	41	41	41	0	74
4% REM Index	23.1	28.0	23.1	0	19.8
4% Non-REM Index	6.2	7.6	6.2	0	3.4

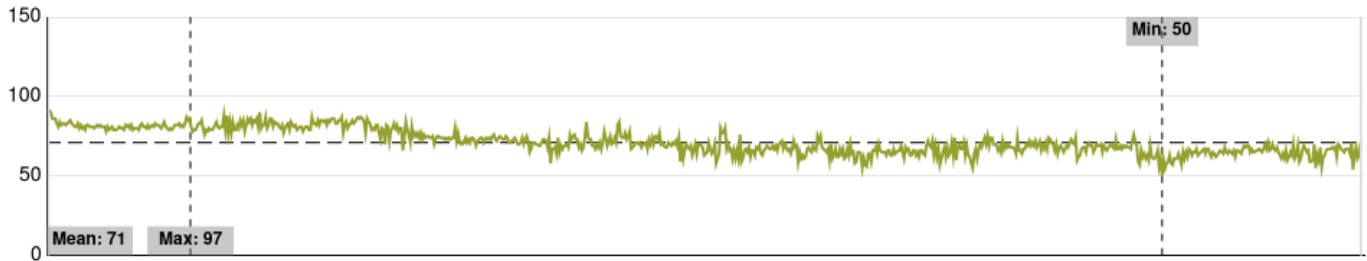
Sleep	Total Recording Time		Sleep Efficiency		Duration		Percent (TST)	
	Lights Off	7h 21m	96.6%	0h 15m	--	Wake	4h 36m	64.9%
Lights On	11:12 PM	Sleep Latency	10m	Light	0h 25m	5.9%		
Total Sleep Time	06:33 AM	Wake After Sleep Onset	5m	Deep	2h 04m	29.2%	REM	

Respiratory & Oxygen Saturation (3%)	EnsoData Resp. Disturbance (eRDI)		EnsoData Apnea-Hypopnea (eAHI)		Obstructive Respiratory		Central Respiratory		Desaturation		
	Count	132	Index /hr	18.6	Count	125	Index /hr	17.6	Count	0	Index /hr
Count	125	Index /hr	17.6	RERA	7	Index /hr	1.0	Count	107	Index /hr	15.1

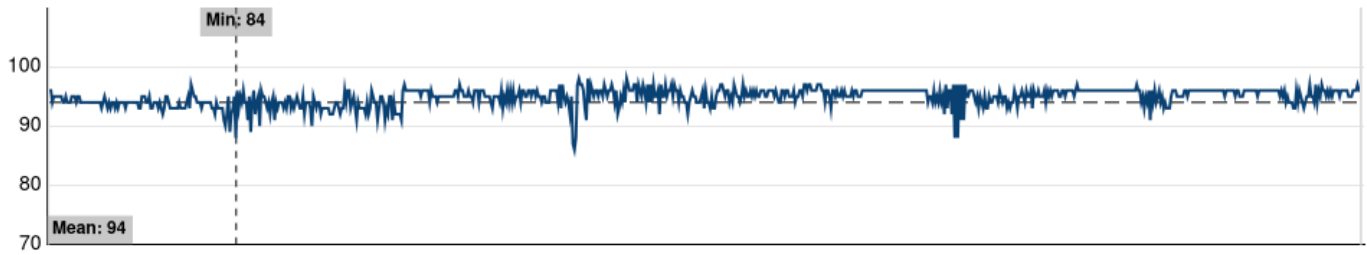
Respiratory & Oxygen Saturation (3%)	SpO2 (Sleep)		Oxygen Saturation		Time In Range		
	Minimum	84	% time between 90 - 80	4m (1.0%)	Mean	95	% time between 80 - 70
Maximum	98	% time between 70 - 60	0m (0.0%)	Maximum	98	% time between 60 - 50	0m (0.0%)
		% time between 89 - 0	2m (0.6%)			% time between 88 - 0	1m (0.4%)

Cardiac	Heart Rate (Sleep)		Time In Range	
	Minimum	50	% time between 150 - 90	0m (0.1%)
Mean	71	% time between 90 - 50	7h 5m (100.0%)	
Maximum	97	% time between 50 - 0	0m (0.0%)	

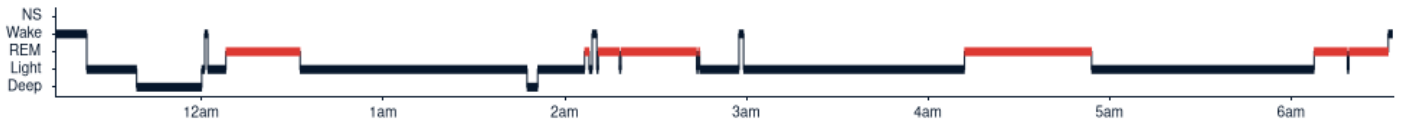
Heart Rate



SpO2



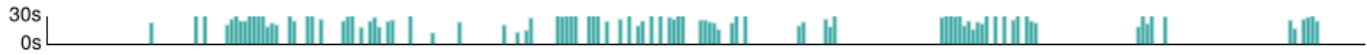
Staging



Position



Obstructive Respiratory



Central Respiratory



RERA



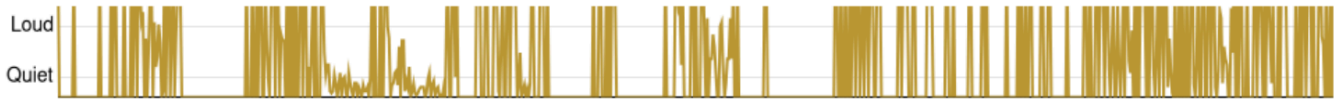
Desaturation



Arousal



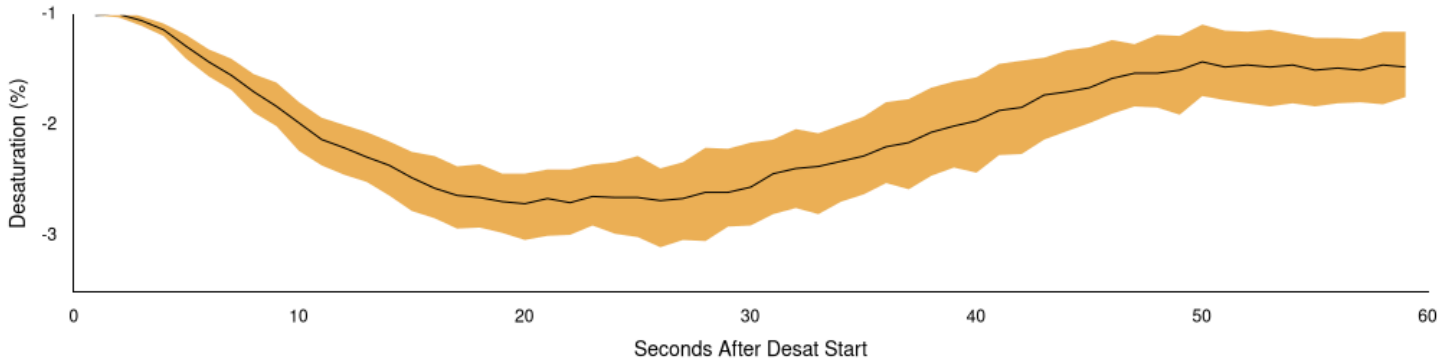
Snore Loudness



Hypoxic Burden

Note: this is an advanced metric

Representative Desats Mean



The 3% hypoxic burden value calculated for this study is 14.79 %min/hr, which is in the 35.45 percentile of an age- and sex-matched clinical cohort (0 is least severe, 100 is most severe). This is based on a cohort of 17037 historical sleep studies.



EnsoData Clinic

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

POLYSOMNOGRAM (PSG) with TITRATION Report

Patient Name:	Tye Traction	Study Date:	06/13/2025
Gender:	Male	MRN#:	None
Date of Birth / Age:	12/14/1975 / 31	Referring Provider:	Physician Name
Height:	73 in	Sleep Specialist:	Physician Name
Weight:	270 lbs	Recorded by:	Recording Tech Name
BMI:	28.17	Scored by:	Scoring Tech Name

RECORDING INFORMATION:

Digital Polysomnographic recording attended by a technologist was completed using Xltek system. The following parameters were measured during the recording: EEG, EOG, ECG, EMG on chin and lower extremities, airflow via cpap flow, respiratory efforts at chest and abdomen, and finger pulse-oximetry. Hypopneas were scored per 3% desaturation rule.

EEG:

The total recording time (TRT) was 6h 17m 16s and the total sleep time (TST) was 5h 38m 00s, equating to a sleep efficiency of 89.6%. The latency to sleep onset was 12.67min and the latency to stage REM sleep was 75.5min. The patient was awake for 26.6min throughout the night (WASO). The percentage of sleep time in each stage was: 2.1% N1, 52.7% N2, 9.4% N3, and 25.3% REM. The patient experienced 14 arousals for an arousal index of 2.5.

RESPIRATORY with PAP THERAPY:

CPAP was titrated from 0.0 to 12.0 cmH₂O using a XX mask. The most satisfactory pressure was XX cm H₂O, which resulted in an apnea-hypopnea index of XX events/hour and a total arousal index of XX events/hour. At this pressure the oxygen saturation ranged between XX% to XX%. The patient spent XX% of the night at or below 88% SpO₂.

ECG:

The heart rate ranged from 62 - 96 BPM. The average heart rate was 76 BPM. This study was not flagged by EnsoSleep advanced metrics for abnormal heart rate and/or heart rate variability.

MOVEMENT ANALYSIS:

There were 10 periodic limb movements (PLMs) observed during sleep, with a PLM index of 1.8 events/hour and a PLM-arousal index of 0.2 events/hour.

IMPRESSION:

- Mild Obstructive Sleep Apnea (OSA) indicated by AHI=10.8 and RDI=11.2 with 14 total apneas + 47 total hypopneas recorded during this polysomnogram.
- There were 8 central apneas for a CA index of 1.4.

DIAGNOSIS:

No diagnosis entered.

RECOMMENDATIONS:

- CPAP Titration by polysomnogram for mask fitting and optimal PAP pressure determination.
- Initiate PAP therapy with: XX Mask at XX cmH₂O Pressure
- Achieve and maintain ideal body weight.

- Maintain proper sleep hygiene: regular sleep and wake time, avoid caffeine, stimulants, and alcohol within 4hrs of bedtime.

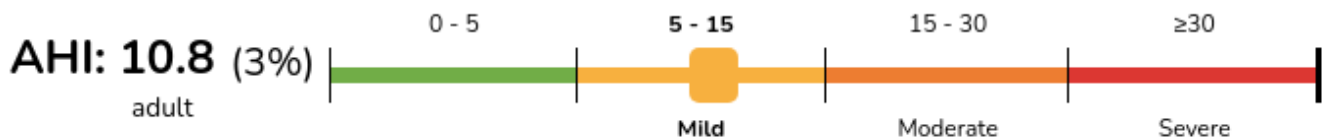
Electronically signed N/A by None None

Titration Table

Pressure Level	Time	TST	AHI	A+H Total	OH	OA	CI	MA	RERA	RDI	REM Time	REM AHI	Supine Time	Supine AHI	Min SpO2
CPAP 6 / 6	20:52:30	0h 12m	57.9/hr	12	10	2	0	0	0	57.9	0h 00m	0	0h 00m/hr	0/hr	90
CPAP 7 / 7	21:17:24	0h 33m	39.0/hr	22	21	0	1	0	0	39.0	0h 00m	0	0h 00m/hr	0/hr	84
CPAP 8 / 8	21:52:46	0h 41m	8.6/hr	6	5	0	1	0	0	8.6	0h 10m	5.7	0h 04m/hr	63.7/hr	91
CPAP 10 / 10	22:35:44	0h 39m	13.8/hr	9	3	4	2	0	1	15.3	0h 00m	0	0h 46m/hr	13.8/hr	92
CPAP 11 / 11	23:22:30	2h 51m	3.5/hr	10	7	0	3	0	1	3.9	0h 59m	8.1	0h 56m/hr	7.4/hr	91
CPAP 12 / 12	02:18:03	0h 39m	3.0/hr	2	1	0	1	0	0	3.0	0h 25m	4.7	0h 00m/hr	0/hr	94
Treatment Key:	IPAP / EPAP														

Sleep ☾	Total Recording Time	6h 17m	Sleep Efficiency	89.6%	Duration	Percent (TST)
	Lights Off	08:52 PM	Sleep Latency	12m	Wake	0h 39m --
	Lights On	03:09 AM	Wake After Sleep Onset	26m	N1	0h 08m 2.4%
	Total Sleep Time	5h 38m			N2	3h 19m 58.9%
					N3	0h 35m 10.5%
				REM	1h 35m 28.3%	

Staging



Respiratory & Oxygen Saturation (3%)		Count	Index /hr		Count	Index /hr
	Resp. Disturbance (RDI)	63	11.2	All Hypopnea	47	8.3
Apnea-Hypopnea (AHI)	61	10.8	Obstructive Hypopnea	47	8.3	
All Apnea	14	2.5	Central Hypopnea	0	0.0	
Obstructive Apnea	6	1.1	Mixed Hypopnea	0	0.0	
Central Apnea	8	1.4	RERA	2	0.4	
Mixed Apnea	0	0.0	Desaturation	66	11.7	

Respiratory & Oxygen Saturation (3%)	SpO2 (Sleep)	%	Oxygen Saturation	Time In Range	Snoring	
	Minimum	84	% time between 90 - 80	0m (0.3%)	Count	0
	Mean	98	% time between 80 - 70	0m (0.0%)	Percent	0%
	Maximum	100	% time between 70 - 60	0m (0.0%)		
			% time between 60 - 50	0m (0.0%)		
			% time between 89 - 0	0m (0.2%)		
			% time between 88 - 0	0m (0.1%)		

Position (3%)	Total Time	Sleep Time	Percent	RDI	AHI	AI	CAI	HI
Left	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
Prone	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
Right	4h 29m	3h 58m	71.4%	10.6	10.3	1.5	1.0	8.8
Supine	1h 47m	1h 39m	28.6%	12.7	12.1	4.8	2.4	7.2
Upright	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
Non Supine	4h 29m	3h 58m	71.4%	10.6	10.3	1.5	1.0	8.8

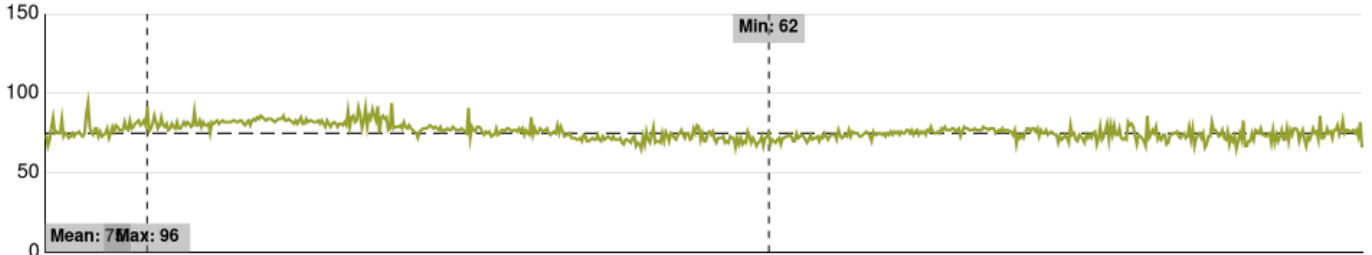
Position



Cardiac	Heart Rate (Sleep)			Time In Range
	Minimum	62	% time between 150 - 90	1m (0.4%)
	Mean	76	% time between 90 - 50	5h 37m (99.7%)
	Maximum	96	% time between 50 - 0	0m (0.0%)



Heart Rate



SpO2



Central Apnea



Obstructive Apnea



Obstructive Hypopnea



Central Hypopnea



RERA



Desaturation



Snoring



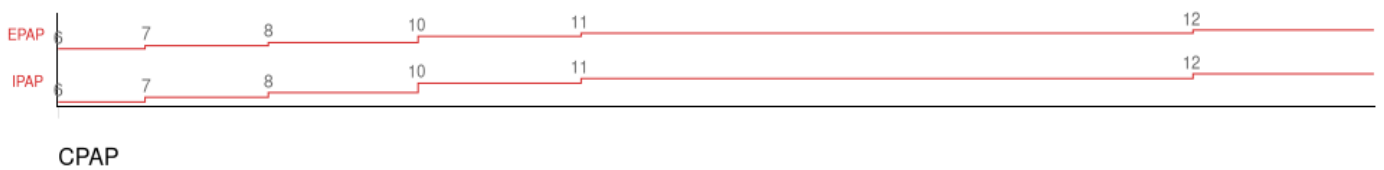
Arousal



Leg Movement



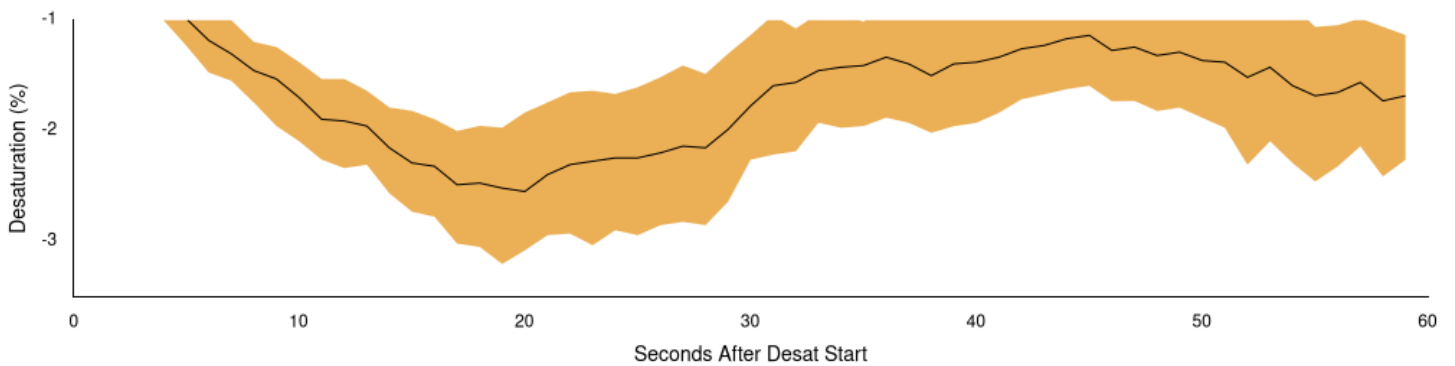
Titration



Hypoxic Burden

Note: this is an advanced metric

Representative Desats Mean



The 3% hypoxic burden value calculated for this study is 14.2 %min/hr, which is in the 0.0 percentile of an age- and sex-matched clinical cohort (0 is least severe, 100 is most severe). This is based on a cohort of 0 historical sleep studies.



EnsoData Clinic

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

DIAGNOSTIC SPLIT PSG REPORT

Patient Name:	Winnie Stephens	Study Date:	12/27/2017
Gender:	Female	MRN#:	123456
Date of Birth / Age:	01/01/2025 (25)	Referring Provider:	Physician Name
Height:	175.26 in	Sleep Specialist:	Physician Name
Weight:	88.45 lbs	Recorded by:	Recording Tech Name
BMI:	28.79	Scored by:	Scoring Tech Name

RECORDING INFORMATION:

Digital Polysomnographic recording attended by a technologist was completed using Sleepware G3 system. The following parameters were measured during the recording: EEG, EOG, ECG, EMG on chin and lower extremities, pressure and airflow via nasal cannula, thermistor and PAP machine, respiratory efforts at chest and abdomen, and finger pulse-oximetry. Hypopneas were scored per 3% desaturation rule.

DIAGNOSTIC SUMMARY**Dx EEG:**

The total recording time (TRT) was 4h 10m 00s and the total sleep time (TST) was 2h 01m 30s, equating to a sleep efficiency of 49.5%. The total arousal index was 30.1 events/hour. The latency to sleep onset was 104.5 min and the latency to stage REM sleep was 73.0 min. The patient was awake for 0h 19m (WASO).

The time spent in each sleep stage was 0h 00m 30s (Stage N1); 1h 13m 30s (Stage N2); 0h 03m 30s (Stage N3); and 0h 44m 00s (Stage R). The percentage of sleep time in each stage was: 0.2% (Stage N1); 29.9% (Stage N2); 1.4% (Stage N3); and 17.9% (Stage R).

Dx RESPIRATORY:

The apnea-hypopnea index (AHI) was 41.0 events/hour with 44 obstructive hypopneas and 39 total apneas. There were 39 obstructive apneas and 0 central apneas. The AHI was influenced by sleep stage and body positions as follows: (REM-AHI = 75.0 events/hour; NREM-AHI = 21.7 events/hour; supine-AHI = 109.1 events/hour; non-supine-AHI = 37.8 events/hour). The patient slept in the supine position 32.7% of the time. The patient experienced an oxygen desaturation nadir of 82%.

Dx ECG:

The heart rate ranged from 63 to 90 BPM. The average sleeping heart rate was 76 BPM.

Dx MOVEMENT ANALYSIS:

There were 15 periodic limb movements (PLMs) observed during sleep, with a PLM index of 7.4 events/hour and a PLM-arousal index of 1.0 events/hour.

TREATMENT SUMMARY**Tx EEG:**

The total recording time (TRT) was 3h 32m 32s and the total sleep time (TST) was 3h 23m 00s, equating to a sleep efficiency of 96.1%. The total arousal index was 22.5 events/hour. The patient was awake for 0h 04m throughout the night (WASO). The time spent in each sleep stage was 0h 01m 00s (Stage N1); 2h 07m 30s (Stage N2); 0h 19m 00s

(Stage N3); and 0h 55m 30s (Stage R). The percentage of sleep time in each stage was: 0.5% (Stage N1); 60.4% (Stage N2); 9.0% (Stage N3); and 26.3% (Stage R).

Tx RESPIRATORY:

The apnea-hypopnea index (AHI) was 5.3 events/hour with 13 obstructive hypopneas and 5 total apneas. There were 4 obstructive apneas; 1 central apneas. The AHI was influenced by sleep stage and body positions as follows: (REM-AHI = 9.7 events/hour; NREM-AHI = 3.7 events/hour; Supine-AHI = 0.0 events/hour; non-Supine-AHI = 5.3 events/hour). The patient slept in the supine position 0.0% of the time. The patient experienced an oxygen desaturation nadir of 89%.

Tx ECG:

The heart rate ranged from 65 to 87 BPM. The average sleeping heart rate was 74 BPM.

Tx MOVEMENT ANALYSIS:

There were 22 periodic limb movements (PLMs) observed during sleep, with a PLM index of 6.5 events/hour and a PLM-arousal index of 3.8 events/hour.

IMPRESSION:

- Severe Obstructive Sleep Apnea (OSA) in the *diagnostic* portion of the study, indicated by AHI=41.0 and RDI=51.9 with 39 apneas + 44 hypopneas recorded during this polysomnogram. There were 0 central apneas for a CA index of 0.0
- On treatment, the patients AHI was reduced to 5.3.
- PAP therapy was initiated at 5.0 cmH2O and increased due to respiratory events to XX cmH2O.
- A pressure of XXcm was optimal based on this titration study.

DIAGNOSIS:

N/A

RECOMMENDATIONS:

- Initiate PAP therapy with: XX Mask at XX cmH2O Pressure.
- Achieve and maintain ideal body weight.
- Maintain proper sleep hygiene: regular sleep and wake time, avoid caffeine, stimulants, and alcohol within 4hrs of bedtime.

Electronically signed N/A by None None

DIAGNOSTIC DATA**Dx RESPIRATORY**

Respiratory Events	Count	Index	Mean Duration (sec)	Longest Event (sec)	REM Count	Non-REM Count	REM Index	Non-REM Index
Apneas & Hypopneas	83	41.0/hr	14.7s	32s	55	28	75.0/hr	21.7/hr
Total Hypopneas	44	21.7/hr	15.4s	32s	20	24	27.3/hr	18.6/hr
Central Apnea	0	0/hr	0s	0s	0	0	0/hr	0/hr
Obstructive Apnea	39	19.3/hr	14.0s	28s	35	4	47.7/hr	3.1/hr
All Apneas	39	19.3/hr	14.0s	28s	35	4	47.7/hr	3.1/hr
Mixed Apnea	0	0/hr	0s	0s	0	0	0/hr	0/hr
RERA	22	10.9/hr	10.0s	10s	0	22	0/hr	17.0/hr
RDI	105	51.9/hr	13.7s	32s	55	50	75.0/hr	38.7/hr

Dx AROUSAL

Arousals	w/ Resp Count	w/ Resp Index	w/ PLM Count	w/ PLM Index	Spontaneous Count	Spontaneous Index	Total Count	Total Index
Sleep	38	18.8	2	1.0	20	9.9	61	30.1
Non-REM	22	17.0	0	0	15	11.6	38	29.4
REM	16	21.8	2	2.7	5	6.8	23	31.4

Dx LIMB MOVEMENTS

Limb Movements	Total LMs	
	Count	Index
All Sleep	15	7.4
N1	0	0/hr
N2	7	5.7/hr
N3	0	0/hr
REM	8	10.9/hr

Dx OXYGEN SATURATION

	Desat Count	Desat Index	SpO2 Max	SpO2 Mean	SpO2 Min
All Sleep	68	33.6	99%	95%	99%
Non-REM	12	9.3	99%	95%	87%
REM	56	76.4	99%	94%	82%
Wake	N/A	N/A	100%	98%	87%

Dx CARDIAC

HR min: 63

HR mean: 76

HR max: 90

Cardiac Events	Bradycardia	Asystole	Tachycardia	Narrow Cplx Tachy	Wide Cplx Tachy	Atrial Fibrillation
Count	0	0	0	0	0	0
Total Duration (sec)	0	0	0	0	0	0
Min Duration (sec)	0	0	0	0	0	0
Longest Event (sec)	0	0	0	0	0	0

TREATMENT DATA**Tx RESPIRATORY**

Respiratory Events	Count	Index	Mean Duration (sec)	Longest Event (sec)	REM Count	Non-REM Count	REM Index	Non-REM Index
Apneas & Hypopneas	18	5.3/hr	18.1s	41s	9	9	9.7/hr	3.7/hr
Total Hypopneas	13	3.8/hr	20.1s	41s	9	4	9.7/hr	1.6/hr
Central Apnea	1	0.3/hr	12.0s	12s	0	1	0/hr	0.4/hr
Obstructive Apnea	4	1.2/hr	13.2s	14s	0	4	0/hr	1.6/hr
All Apneas	5	1.5/hr	13.0s	14s	0	5	0/hr	2.0/hr
Mixed Apnea	0	0/hr	0s	0s	0	0	0/hr	0/hr
RERA	27	8.0/hr	10.0s	10s	2	25	2.2/hr	10.2/hr
RDI	45	13.3/hr	13.2s	41s	11	34	11.9/hr	13.8/hr

Tx AROUSAL

Arousals	w/ Resp Count	w/ Resp Index	w/ PLM Count	w/ PLM Index	Spontaneous Count	Spontaneous Index	Total Count	Total Index
Sleep	8	2.4	13	3.8	53	15.7	76	22.5
Non-REM	7	2.8	13	5.3	48	19.5	70	28.5
REM	1	1.1	0	0	5	5.4	6	6.5

Tx LIMB MOVEMENTS

Limb Movements	Total LMs	
	Count	Index
All Sleep	22	6.5
N1	0	0/hr
N2	20	9.4/hr
N3	0	0/hr
REM	2	2.2/hr

Tx OXYGEN SATURATION

	Desat Count	Desat Index	SpO2 Max	SpO2 Mean	SpO2 Min
All Sleep	28	8.3	99%	95%	99%
Non-REM	18	7.3	99%	95%	89%
REM	10	10.8	98%	95%	90%
Wake	N/A	N/A	99%	96%	92%

Tx CARDIAC

HR min: 65

HR mean: 74

HR max: 87

Cardiac Events	Bradycardia	Asystole	Tachycardia	Narrow Cplx Tachy	Wide Cplx Tachy	Atrial Fibrillation
Count	0	0	0	0	0	0
Total Duration (sec)	0	0	0	0	0	0
Min Duration (sec)	0	0	0	0	0	0
Longest Event (sec)	0	0	0	0	0	0

TITRATION TABLE:

Pressure Level	Time	TST	AHI	A+H Total	OH	OA	CI	MA	RERA	RDI	REM Time	REM AHI	Supine Time	Supine AHI	Min SpO2
CPAP 0 / 0	21:46:35	2h 01m	41.0/hr	83	44	39	0	0	22	51.9	0h 44m	75.0	1h 20m/hr	109.1/hr	82
CPAP 5 / 5	01:56:35	0h 16m	7.2/hr	2	1	1	0	0	1	10.9	0h 00m	0	0h 00m/hr	0/hr	94
CPAP 6 / 6	02:16:39	0h 49m	4.8/hr	4	3	1	0	0	10	16.9	0h 06m	9.6	0h 00m/hr	0/hr	90
CPAP 8 / 8	03:06:19	0h 27m	11.0/hr	5	5	0	0	0	0	11.0	0h 27m	11.0	0h 00m/hr	0/hr	90
CPAP 10 / 10	03:33:38	0h 17m	6.7/hr	2	2	0	0	0	1	10.1	0h 17m	6.7	0h 00m/hr	0/hr	93
CPAP 11 / 11	03:51:25	0h 59m	4.0/hr	4	2	1	1	0	8	12.1	0h 04m	14.4	0h 00m/hr	0/hr	91
CPAP 12 / 12	04:54:42	0h 32m	1.9/hr	1	0	1	0	0	7	14.8	0h 00m	0	0h 00m/hr	0/hr	89
Treatment Key:	IPAP / EPAP														

Titration



Sleep	Total Recording Time	7h 36m	Sleep Efficiency	71.1%	Duration	Percent (TST)
	Lights Off	09:51 PM	Sleep Latency	1h 44m	Wake	2h 12m --
	Lights On	05:27 AM	Wake After Sleep Onset	27m	N1	0h 01m 0.5%
	Total Sleep Time	5h 24m			N2	3h 21m 61.9%
					N3	0h 22m 6.9%
				REM	1h 39m 30.7%	

Staging



Position		Total Time	Sleep Time	Percent	RDI	AHI	AI	CAI	HI
	Left	3h 32m	3h 14m	46.6%	33.6	23.4	12.3	0.3	11.1
	Prone	0m	0m	0.0%	0.0	0.0	0.0	0.0	0.0
	Right	2h 33m	2h 4m	33.7%	14.9	7.2	1.4	0.0	5.8
	Supine	1h 20m	5m	17.6%	109.1	109.1	10.9	0.0	98.2
	Upright	9m	0m	2.1%	0.0	0.0	0.0	0.0	0.0
	Non Supine	6h 16m	5h 19m	82.4%	26.3	17.1	8.1	0.2	9.0

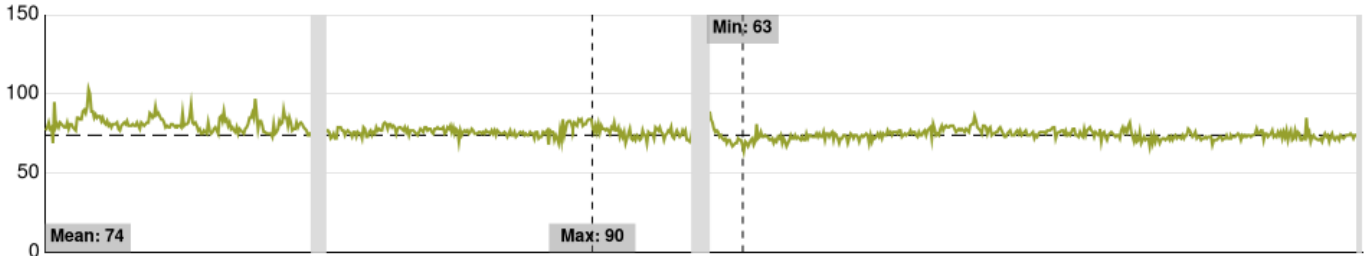
Position



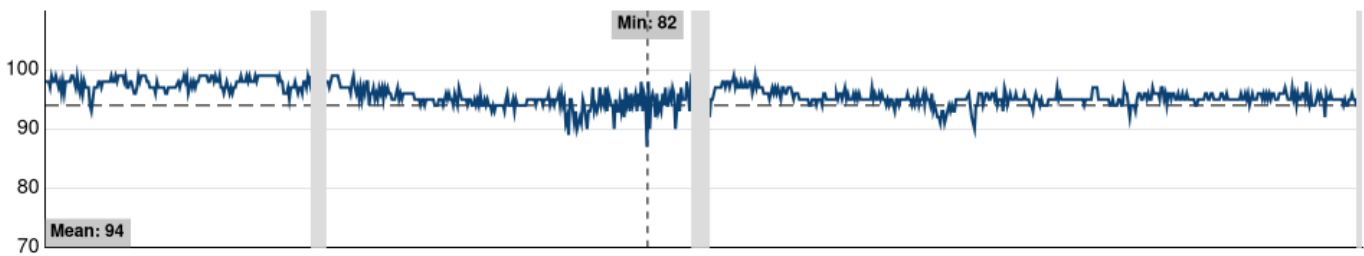
Cardiac	Heart Rate (Sleep)		Time In Range	
	Minimum	63	% time between 150 - 90	0m (0.0%)
	Mean	75	% time between 90 - 50	5h 24m (100.0%)
Maximum	90	% time between 50 - 0	0m (0.0%)	



Heart Rate



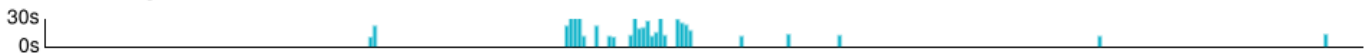
SpO2



Central Apnea



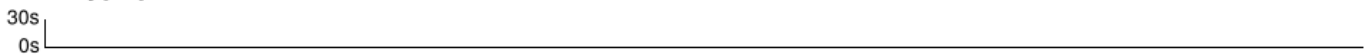
Obstructive Apnea



Obstructive Hypopnea



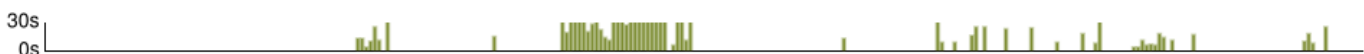
Central Hypopnea



RERA



Desaturation



Snoring



Arousal



Leg Movement



**EnsoData Clinic**

608-509-4704

team@ensodata.com

10 E Doty St Suite 449 Madison, WI 53703

ADULT DIAGNOSTIC MSLT REPORT

Patient Name:	Patient Name	Study Date:	08/20/2025
Gender:	Male	MRN#:	None
Date of Birth / Age:	01/01/2025 (25)	Referring Provider:	Physician Name
Height:	170.18 in	Sleep Specialist:	Physician Name
Weight:	56.7 lbs	Recorded by:	Recording Tech Name
BMI:	19.58	Scored by:	Scoring Tech Name

MSLT RECORDING INFORMATION::

This MSLT is a series of five naps conducted at 2-hour intervals throughout the day. Parameters monitored include: frontal, central and occipital electroencephalographic (EEG) derivations, the electro-oculogram (EOG), the electromyogram (EMG) from the muscles beneath the chin and the electrocardiogram (ECG). This report is based on the technical data and patient questionnaires provided.

METHODS:

The patient underwent a nocturnal Polysomnogram and remained in the lab for a Multiple Sleep Latency Test, which consisted of 5 naps spaced at approximately two-hour intervals.

RESULT:

Nap #	Analysis Start Time	Analysis End Time	Time in Bed	Total Sleep Time	Sleep Onset	REM Latency
1	08:59 AM	09:35 AM	0h 36m 18s	0h 25m 00s	0h 09m 57s	0h 10m 30s
2	11:05 AM	11:35 AM	0h 30m 17s	0h 16m 30s	0h 13m 36s	N/A
3	13:00 PM	13:35 PM	0h 35m 05s	0h 14m 30s	0h 19m 52s	N/A
4	14:58 PM	15:20 PM	0h 21m 21s	0h 00m 00s	0h 20m 00s	N/A
5	17:02 PM	17:25 PM	0h 22m 44s	0h 00m 00s	0h 20m 00s	N/A
MEAN	N/A	N/A	0h 29m 09s	0h 11m 12s	0h 16m 41s	N/A

SOREM was seen in 1 of the 5 naps

Sleep was seen in 3 of the 5 naps

IMPRESSION:

-

DIAGNOSIS:

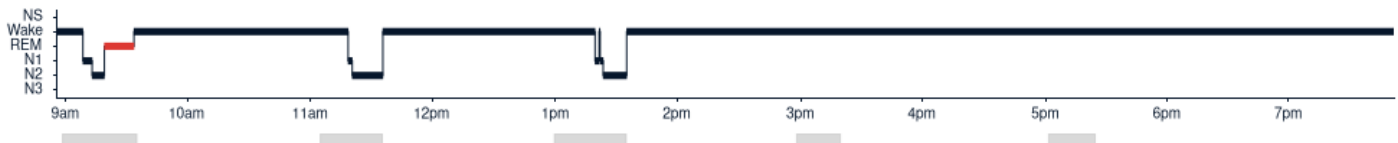
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RECOMMENDATIONS:

-

Electronically signed N/A by None None

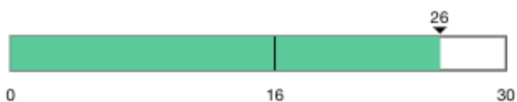
Staging



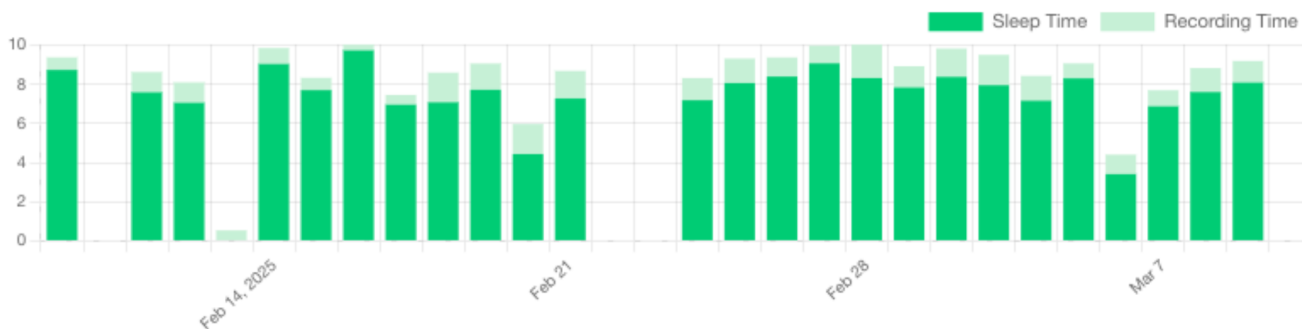
Remote Physiological Monitoring collected for
26 out of 30 days

02/09/2025 - 03/11/2025

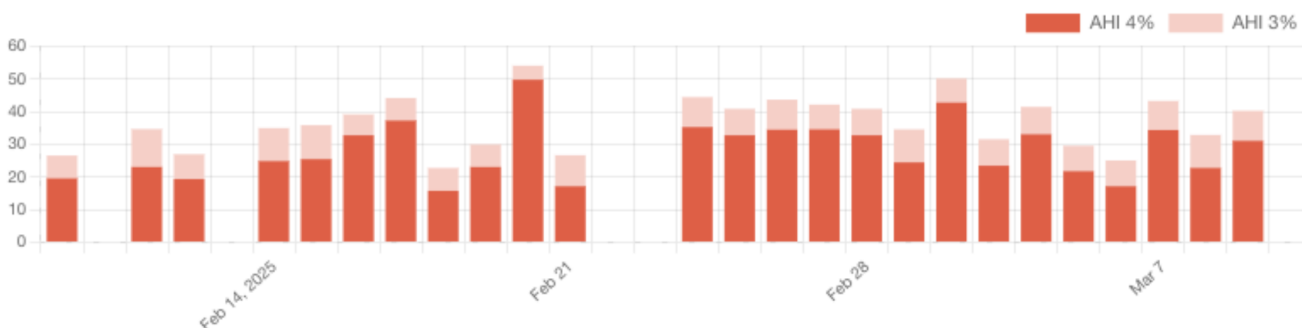
Date of Birth: 01/01/2000



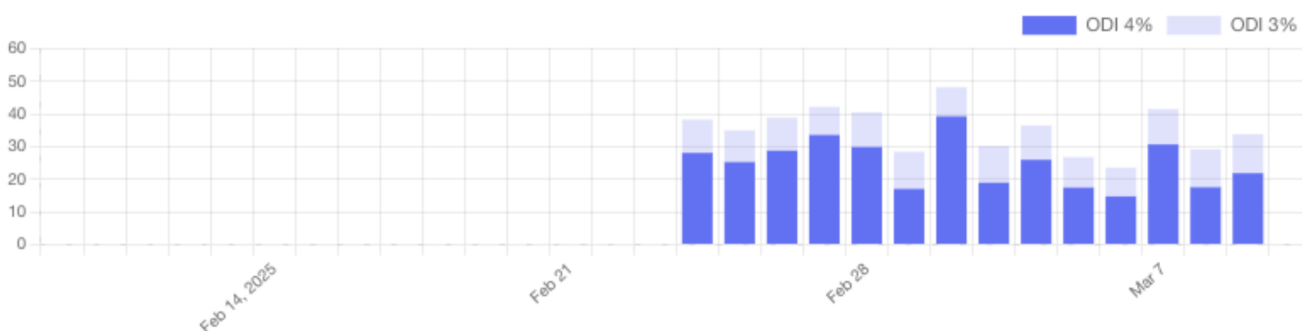
Total Sleep Time (hours)



Apnea-Hypopnea Index (events/hour)



Oxygen Desaturation Index (events/hour)



Hypoxic Burden Index (% min/hour)

