

# SARIMAX Results

```

=====
Dep. Variable:      Nuevos  No. Observations:      36
Model:      SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -580.317
Date:      Wed, 23 Oct 2024  AIC      1178.634
Time:      16:22:01  BIC      1190.296
Sample:      01-31-2022  HQIC      1182.102
- 12-31-2024

```

Covariance Type: opg

```

=====
      coef  std err      z  P>|z|  [0.025  0.975]
-----
ar.L1      1.3083    0.651    2.011    0.044    0.033    2.583
ar.L2      4.3130    8.185    0.527    0.598   -11.730    20.356
ma.L1     13.0982    3.701    3.540    0.000    5.845    20.351
ma.L2     -1.9310   24.772   -0.078    0.938   -50.484    46.622
ar.S.L3     0.3130    2.272    0.138    0.890   -4.139    4.765
ar.S.L6     0.7670    2.529    0.303    0.762   -4.189    5.723
ma.S.L3     0.1084    3.279    0.033    0.974   -6.317    6.534
ma.S.L6    -0.1920    2.229   -0.086    0.931   -4.561    4.177
sigma2    3.644e+15  5.96e-15  6.11e+29    0.000  3.64e+15  3.64e+15

```

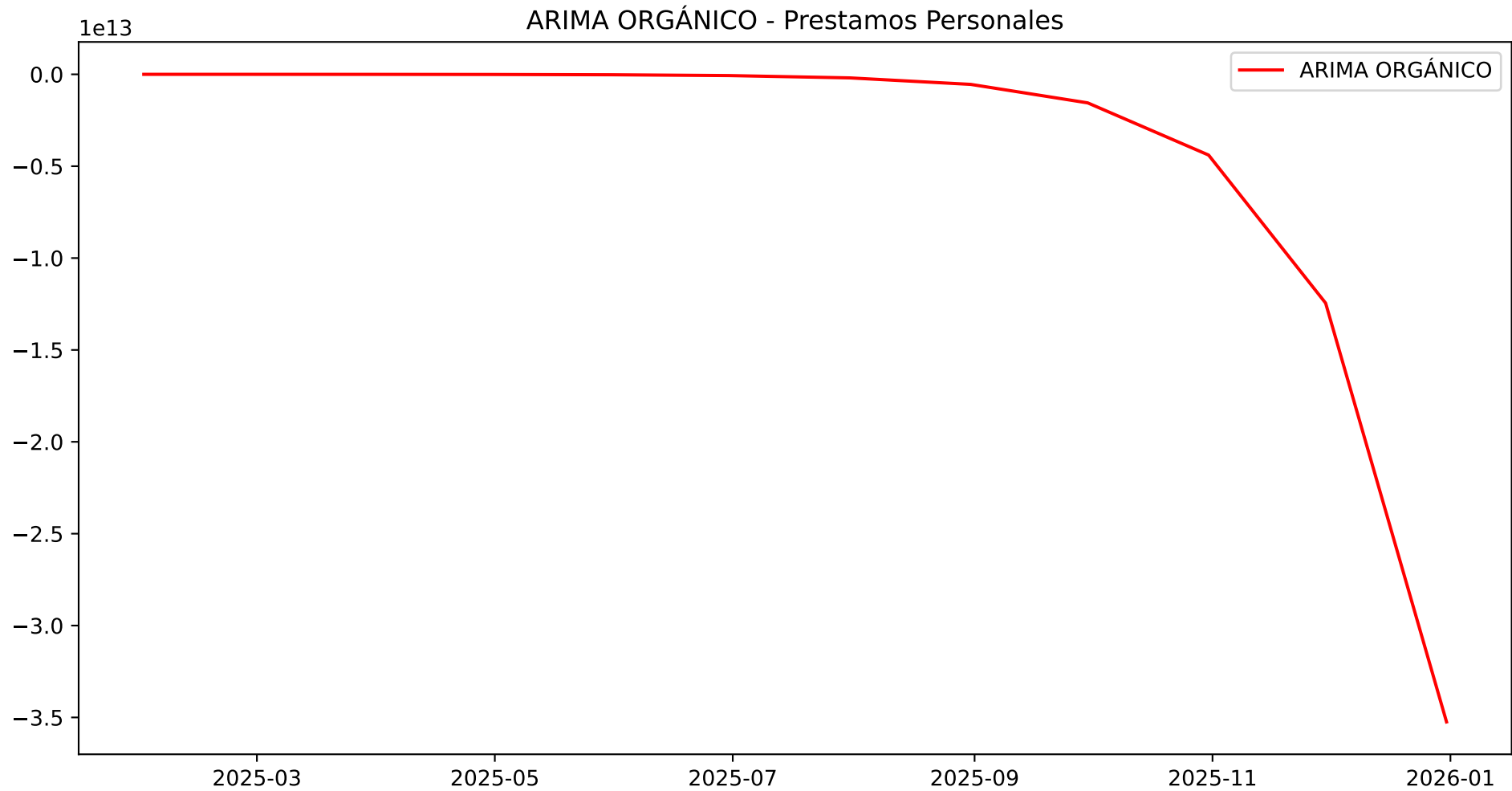
```

=====
Ljung-Box (L1) (Q):      11.89  Jarque-Bera (JB):      1.89
Prob(Q):      0.00  Prob(JB):      0.39
Heteroskedasticity (H):      1.52  Skew:      0.54
Prob(H) (two-sided):      0.54  Kurtosis:      3.73
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 3.04e+46. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:      Prestamos Personales  No. Observations:      36
Model:             SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -580.317
Date:              Wed, 23 Oct 2024  AIC      1178.634
Time:              16:22:03  BIC      1190.296
Sample:            01-31-2022  HQIC      1182.102
                  - 12-31-2024

```

Covariance Type: opg

```

=====
              coef  std err          z      P>|z|    [0.025    0.975]
-----
ar.L1         1.3083    0.651     2.011    0.044    0.033    2.583
ar.L2         4.3130    8.185     0.527    0.598   -11.730   20.356
ma.L1        13.0982    3.701     3.540    0.000    5.845   20.351
ma.L2        -1.9310   24.772    -0.078    0.938   -50.484   46.622
ar.S.L3        0.3130    2.272     0.138    0.890    -4.139    4.765
ar.S.L6        0.7670    2.529     0.303    0.762    -4.189    5.723
ma.S.L3        0.1084    3.279     0.033    0.974    -6.317    6.534
ma.S.L6       -0.1920    2.229    -0.086    0.931    -4.561    4.177
sigma2       3.644e+15  5.96e-15  6.11e+29    0.000   3.64e+15  3.64e+15

```

```

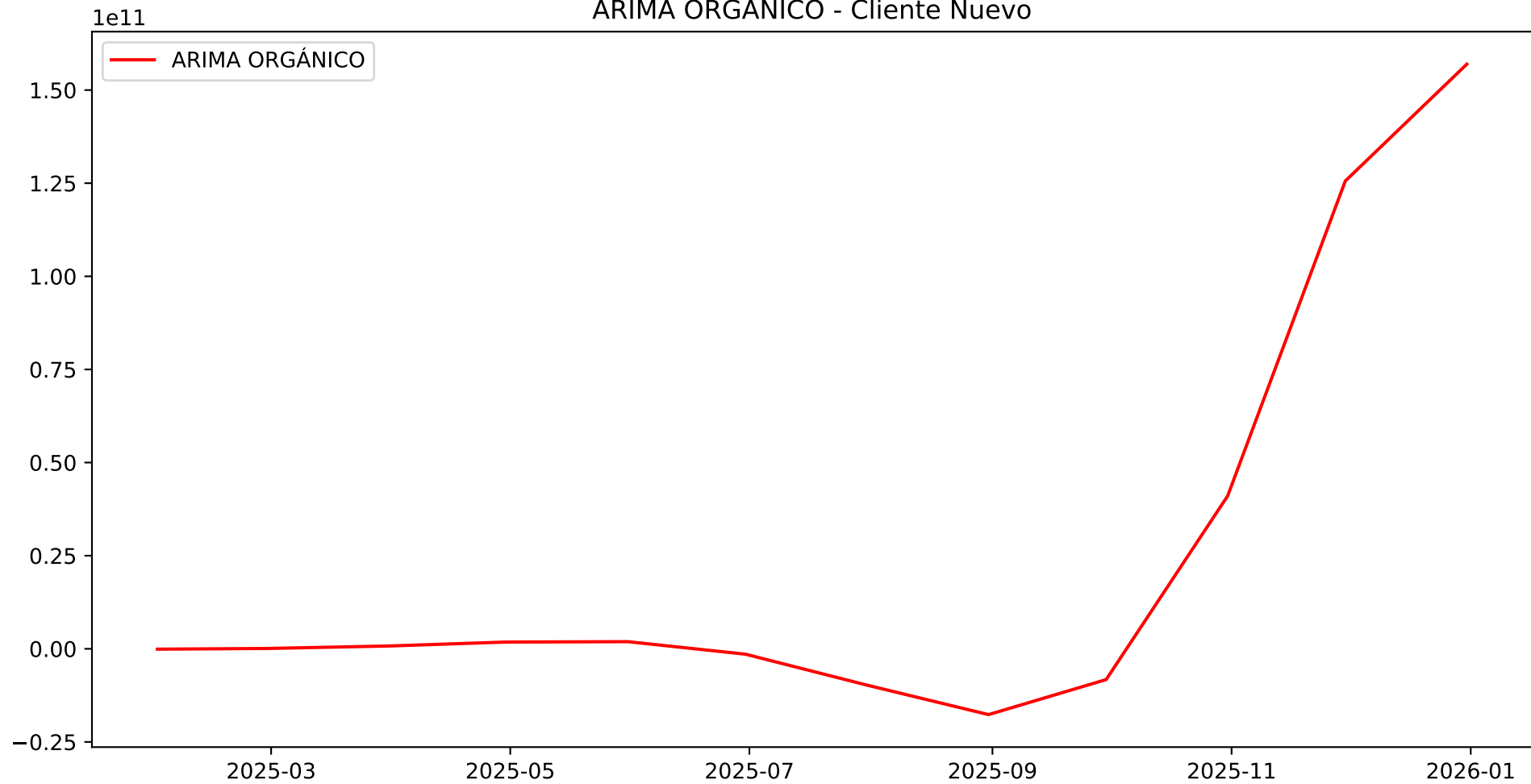
=====
Ljung-Box (L1) (Q):      11.89  Jarque-Bera (JB):      1.89
Prob(Q):                 0.00  Prob(JB):              0.39
Heteroskedasticity (H):    1.52  Skew:              0.54
Prob(H) (two-sided):      0.54  Kurtosis:       3.73

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 3.04e+46. Standard errors may be unstable.

ARIMA ORGÁNICO - Cliente Nuevo



# SARIMAX Results

```
=====
Dep. Variable:      Cliente Nuevo  No. Observations:      36
Model:              SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -643.824
Date:              Wed, 23 Oct 2024  AIC              1305.649
Time:              16:22:04  BIC              1317.311
Sample:            01-31-2022  HQIC             1309.117
                  - 12-31-2024
```

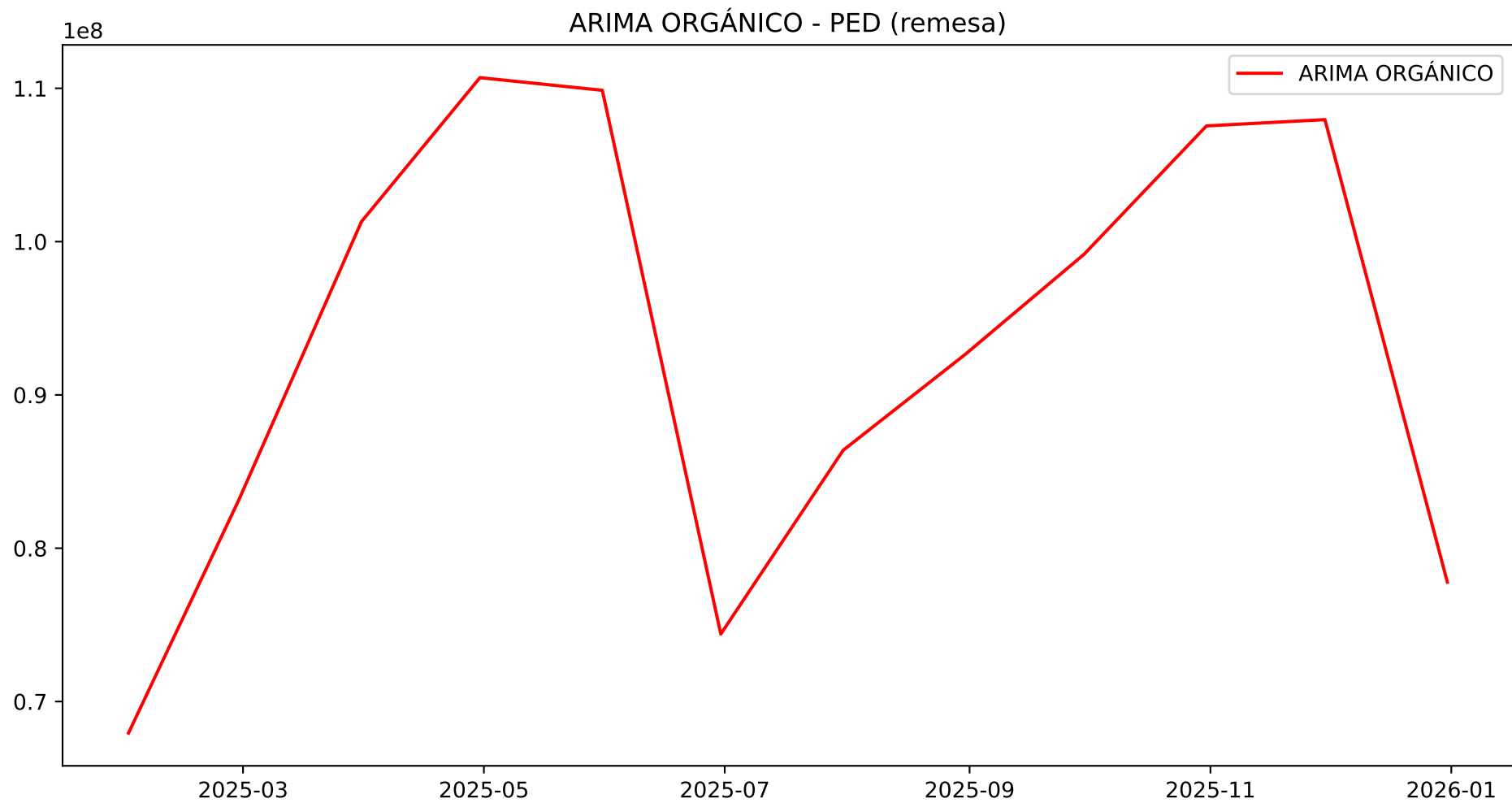
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	2.3649	0.068	34.559	0.000	2.231	2.499
ar.L2	-3.4158	0.204	-16.755	0.000	-3.815	-3.016
ma.L1	-2.9181	0.173	-16.909	0.000	-3.256	-2.580
ma.L2	0.7354	0.135	5.461	0.000	0.471	0.999
ar.S.L3	0.2743	0.058	4.758	0.000	0.161	0.387
ar.S.L6	0.6231	0.053	11.831	0.000	0.520	0.726
ma.S.L3	0.6019	0.065	9.314	0.000	0.475	0.729
ma.S.L6	-0.3867	0.055	-7.074	0.000	-0.494	-0.280
sigma2	1.082e+15	3.12e-16	3.47e+30	0.000	1.08e+15	1.08e+15

```
=====
Ljung-Box (L1) (Q):      2.37  Jarque-Bera (JB):      1.15
Prob(Q):      0.12  Prob(JB):      0.56
Heteroskedasticity (H):      1.33  Skew:      0.07
Prob(H) (two-sided):      0.68  Kurtosis:      2.00
=====
```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.59e+46. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          PED (remesa)  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -480.030
Date:                  Wed, 23 Oct 2024  AIC          978.059
Time:                  16:22:06  BIC          989.722
Sample:                01-31-2022  HQIC          981.527
                        - 12-31-2024
Covariance Type:          opg
=====

```

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	1.4666	0.439	3.344	0.001	0.607	2.326
ar.L2	-0.6728	0.429	-1.568	0.117	-1.514	0.168
ma.L1	-1.0558	0.441	-2.397	0.017	-1.919	-0.192
ma.L2	0.1374	0.468	0.294	0.769	-0.780	1.054
ar.S.L3	0.1494	0.321	0.465	0.642	-0.480	0.779
ar.S.L6	0.9284	0.364	2.551	0.011	0.215	1.642
ma.S.L3	-0.4801	0.619	-0.776	0.438	-1.693	0.732
ma.S.L6	-0.3866	0.669	-0.578	0.563	-1.698	0.925
sigma2	2.196e+14	4.07e-15	5.39e+28	0.000	2.2e+14	2.2e+14

```

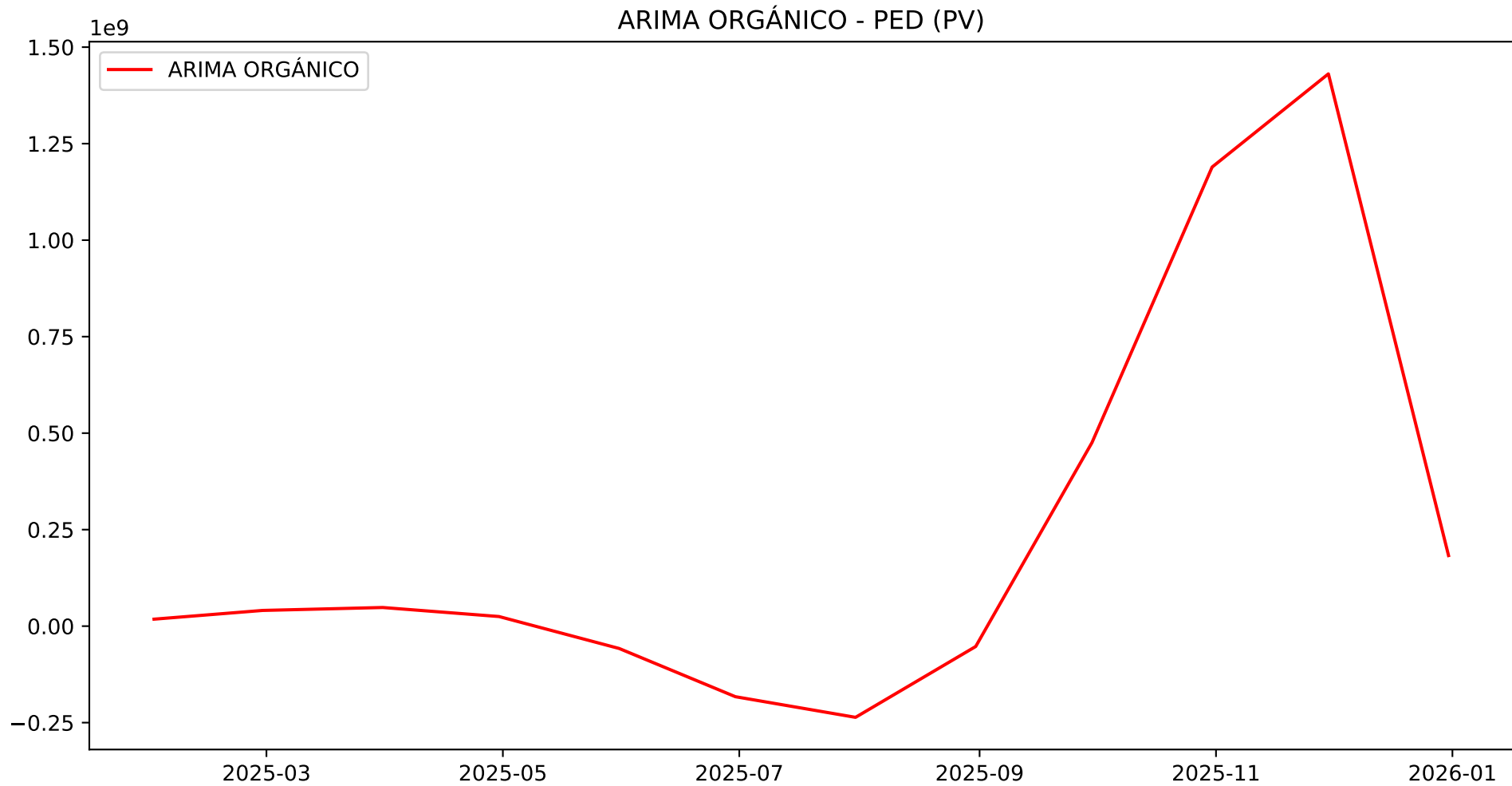
=====
Ljung-Box (L1) (Q):          2.93  Jarque-Bera (JB):          1.02
Prob(Q):                    0.09  Prob(JB):          0.60
Heteroskedasticity (H):          0.44  Skew:          0.45
Prob(H) (two-sided):          0.23  Kurtosis:          2.70
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 6.67e+45. Standard errors may be unstable.





# SARIMAX Results

```

=====
Dep. Variable:          PED (PV)  No. Observations:          36
Model:          SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -531.026
Date:          Wed, 23 Oct 2024  AIC          1080.052
Time:          16:22:08  BIC          1091.715
Sample:          01-31-2022  HQIC          1083.520
          - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	2.1899	0.087	25.033	0.000	2.018	2.361
ar.L2	-2.4842	0.204	-12.175	0.000	-2.884	-2.084
ma.L1	-2.5419	0.136	-18.682	0.000	-2.809	-2.275
ma.L2	0.6586	0.195	3.377	0.001	0.276	1.041
ar.S.L3	0.3843	0.194	1.983	0.047	0.004	0.764
ar.S.L6	0.4537	0.190	2.393	0.017	0.082	0.825
ma.S.L3	-0.4657	0.154	-3.033	0.002	-0.767	-0.165
ma.S.L6	0.0788	0.151	0.520	0.603	-0.218	0.376
sigma2	2.125e+13	1.27e-14	1.68e+27	0.000	2.13e+13	2.13e+13

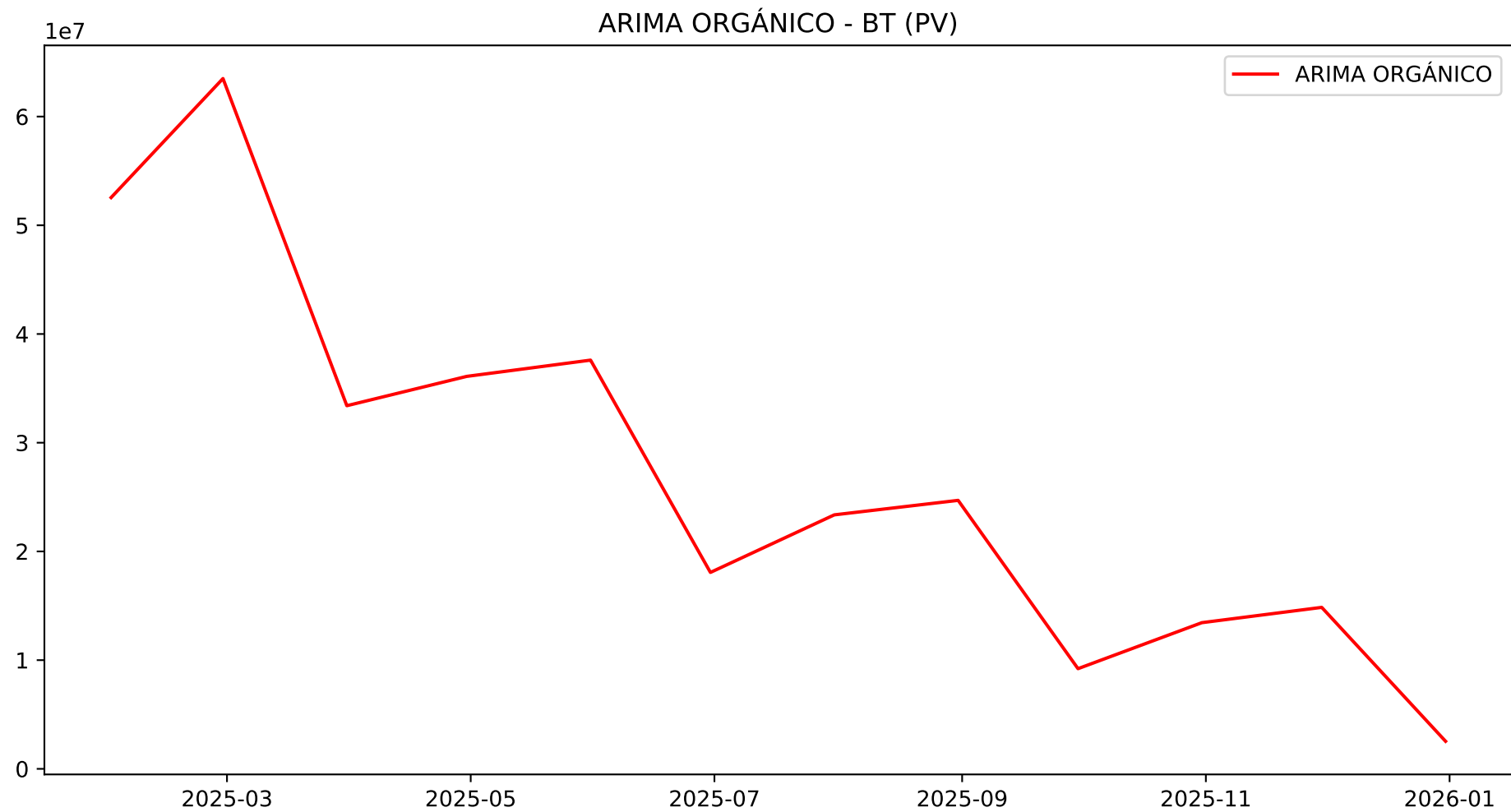
```

=====
Ljung-Box (L1) (Q):          7.81  Jarque-Bera (JB):          0.71
Prob(Q):          0.01  Prob(JB):          0.70
Heteroskedasticity (H):          0.08  Skew:          0.13
Prob(H) (two-sided):          0.00  Kurtosis:          2.25
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.41e+43. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          BT (PV)  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -483.457
Date:                  Wed, 23 Oct 2024  AIC          984.914
Time:                  16:22:10  BIC          996.577
Sample:                01-31-2022  HQIC          988.382
                        - 12-31-2024

```

Covariance Type: opg

```

=====
              coef  std err          z      P>|z|    [0.025    0.975]
-----
ar.L1          0.4671     0.515     0.906     0.365    -0.543     1.477
ar.L2          0.4641     0.391     1.185     0.236    -0.303     1.231
ma.L1           0.7223     0.256     2.816     0.005     0.220     1.225
ma.L2          -0.5654     0.462    -1.225     0.221    -1.470     0.339
ar.S.L3         0.7498     0.432     1.735     0.083    -0.097     1.597
ar.S.L6         0.0476     0.343     0.139     0.890    -0.625     0.720
ma.S.L3        -1.3207     0.227    -5.827     0.000    -1.765    -0.876
ma.S.L6         0.7080     0.342     2.069     0.039     0.037     1.379
sigma2         2.74e+14  5.16e-16  5.31e+29     0.000  2.74e+14  2.74e+14

```

```

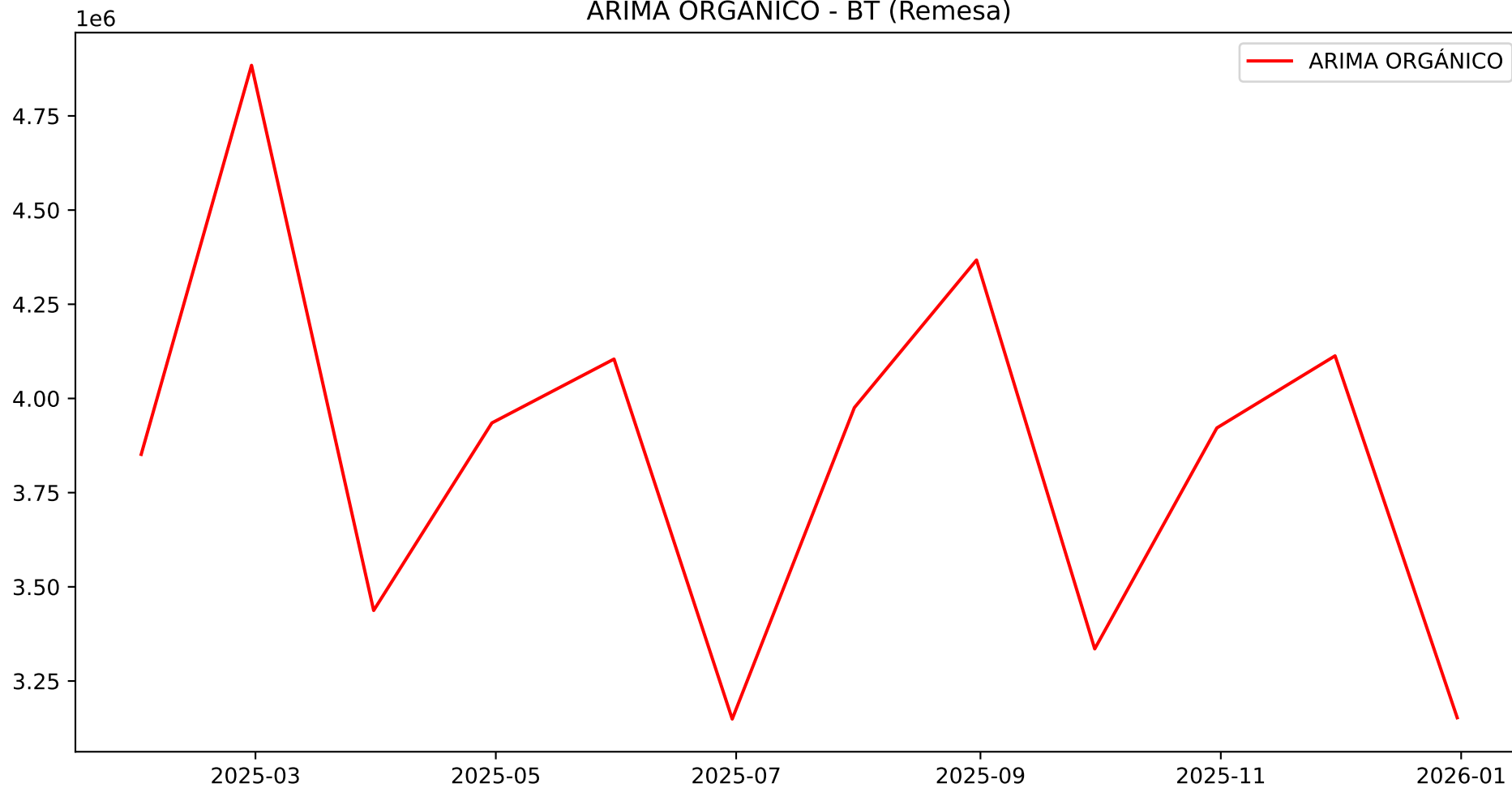
=====
Ljung-Box (L1) (Q):          0.15  Jarque-Bera (JB):          0.61
Prob(Q):                    0.70  Prob(JB):          0.74
Heteroskedasticity (H):        1.66  Skew:          -0.07
Prob(H) (two-sided):          0.46  Kurtosis:          2.27
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 6.59e+45. Standard errors may be unstable.

ARIMA ORGÁNICO - BT (Remesa)



# SARIMAX Results

```

=====
Dep. Variable:          BT (Remesa)  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -409.466
Date:                  Wed, 23 Oct 2024  AIC              836.933
Time:                  16:22:11  BIC              848.595
Sample:                01-31-2022  HQIC              840.401
                   - 12-31-2024

```

Covariance Type: opg

```

=====
              coef  std err          z      P>|z|    [0.025    0.975]
-----
ar.L1         -0.1037    0.393    -0.264    0.792    -0.873    0.666
ar.L2         -0.1041    0.551    -0.189    0.850    -1.184    0.976
ma.L1          0.4061    0.239     1.699    0.089    -0.062    0.875
ma.L2          0.6896    0.113     6.121    0.000     0.469    0.910
ar.S.L3        0.2442    0.663     0.368    0.713    -1.055    1.544
ar.S.L6        0.7433    0.646     1.150    0.250    -0.523    2.010
ma.S.L3       -0.0392    0.583    -0.067    0.946    -1.181    1.103
ma.S.L6       -0.4425    0.343    -1.288    0.198    -1.116    0.231
sigma2        1.22e+12  1.58e-13  7.73e+24    0.000  1.22e+12  1.22e+12

```

```

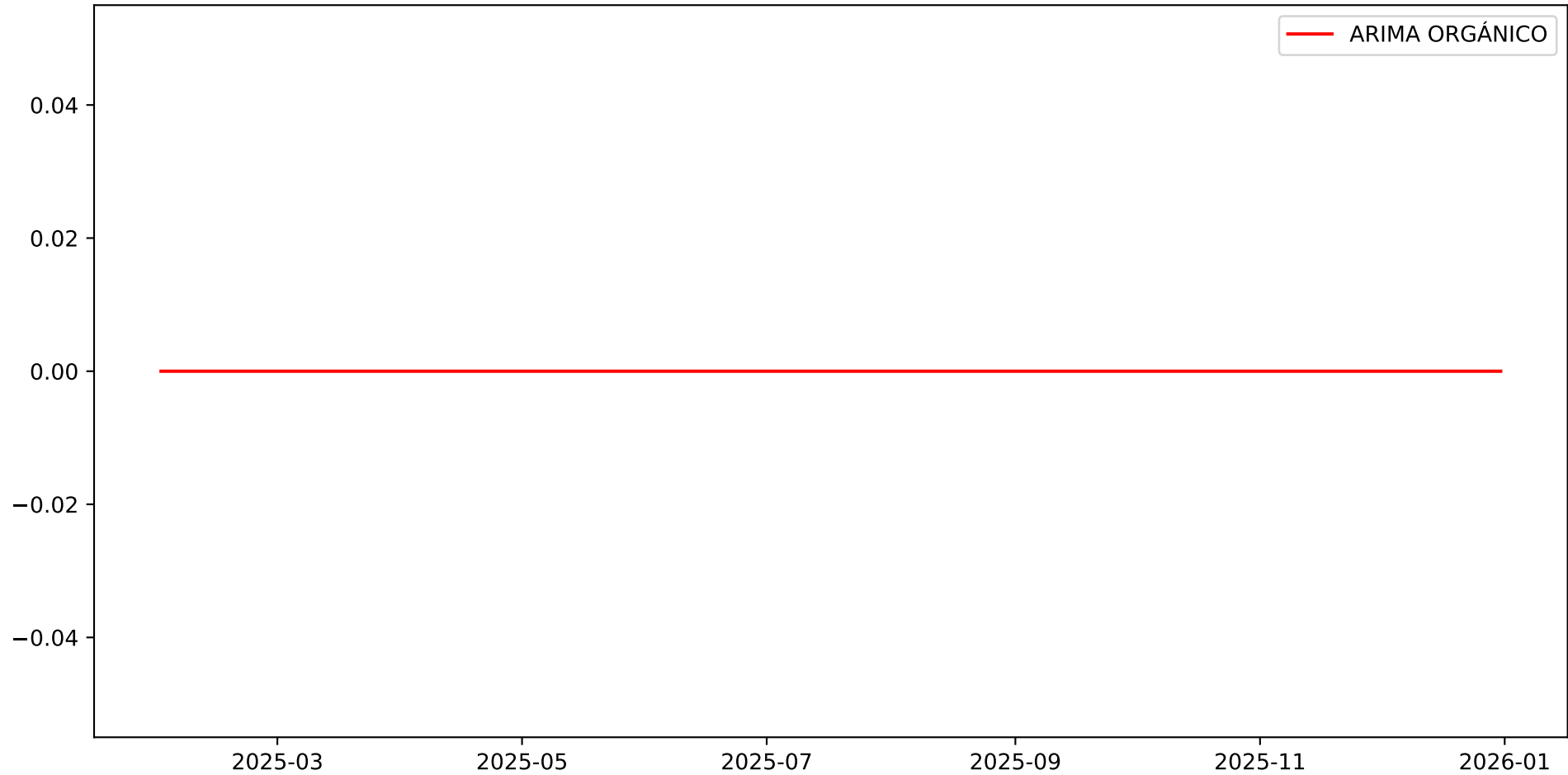
=====
Ljung-Box (L1) (Q):          0.04  Jarque-Bera (JB):          0.27
Prob(Q):                    0.84  Prob(JB):              0.87
Heteroskedasticity (H):      1.41  Skew:                0.00
Prob(H) (two-sided):         0.61  Kurtosis:            2.51

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.53e+41. Standard errors may be unstable.

# ARIMA ORGÁNICO - Trabajadores BT



# SARIMAX Results

```

=====
Dep. Variable:      Trabajadores BT  No. Observations:      36
Model:      SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      286.038
Date:      Wed, 23 Oct 2024  AIC      -554.075
Time:      16:22:13  BIC      -542.413
Sample:      01-31-2022  HQIC      -550.607
              - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	0	-0	nan	nan	0	0
ar.L2	0	-0	nan	nan	0	0
ma.L1	0	-0	nan	nan	0	0
ma.L2	0	-0	nan	nan	0	0
ar.S.L3	0	-0	nan	nan	0	0
ar.S.L6	0	-0	nan	nan	0	0
ma.S.L3	0	-0	nan	nan	0	0
ma.S.L6	0	-0	nan	nan	0	0
sigma2	1e-10	3.81e-10	0.262	0.793	-6.48e-10	8.48e-10

```

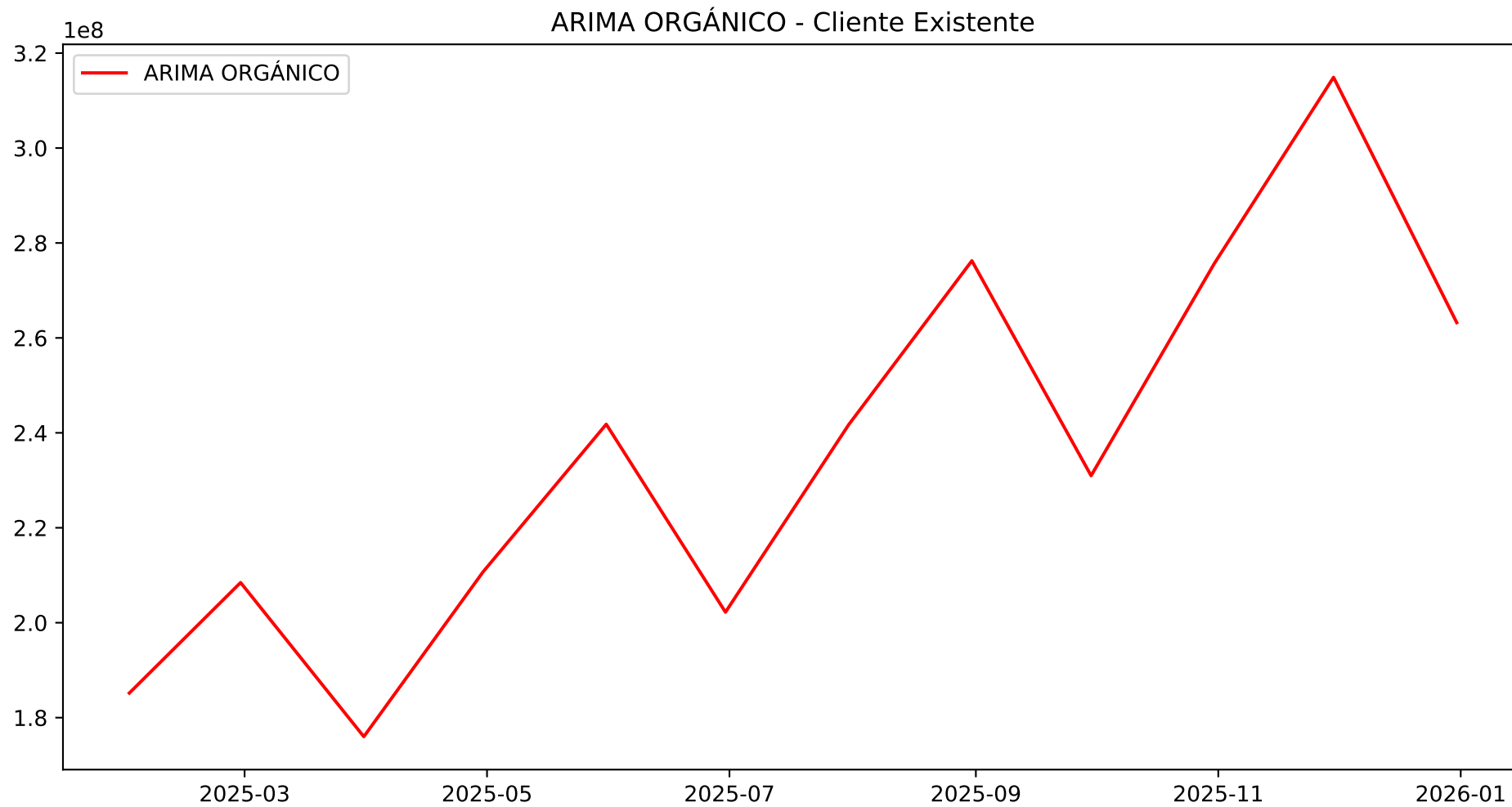
=====
Ljung-Box (L1) (Q):      nan  Jarque-Bera (JB):      nan
Prob(Q):      nan  Prob(JB):      nan
Heteroskedasticity (H):      nan  Skew:      nan
Prob(H) (two-sided):      nan  Kurtosis:      nan
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number inf. Standard errors may be unstable.





# SARIMAX Results

=====

Dep. Variable:	Cliente Existente	No. Observations:	36
Model:	SARIMAX(2, 0, 2)x(2, 0, 2, 3)	Log Likelihood	-490.977
Date:	Wed, 23 Oct 2024	AIC	999.953
Time:	16:22:15	BIC	1011.616
Sample:	01-31-2022	HQIC	1003.421
	- 12-31-2024		

Covariance Type: opg

=====

	coef	std err	z	P> z	[0.025	0.975]
-----	-----	-----	-----	-----	-----	-----
ar.L1	0.1908	2.306	0.083	0.934	-4.328	4.710
ar.L2	0.3045	0.462	0.659	0.510	-0.601	1.210
ma.L1	1.1233	2.331	0.482	0.630	-3.444	5.691
ma.L2	-0.1329	2.593	-0.051	0.959	-5.215	4.949
ar.S.L3	1.1114	4.796	0.232	0.817	-8.290	10.512
ar.S.L6	0.0314	5.446	0.006	0.995	-10.643	10.706
ma.S.L3	-0.6011	3.978	-0.151	0.880	-8.398	7.196
ma.S.L6	-0.0389	3.133	-0.012	0.990	-6.180	6.102
sigma2	5.11e+14	6.23e-14	8.2e+27	0.000	5.11e+14	5.11e+14

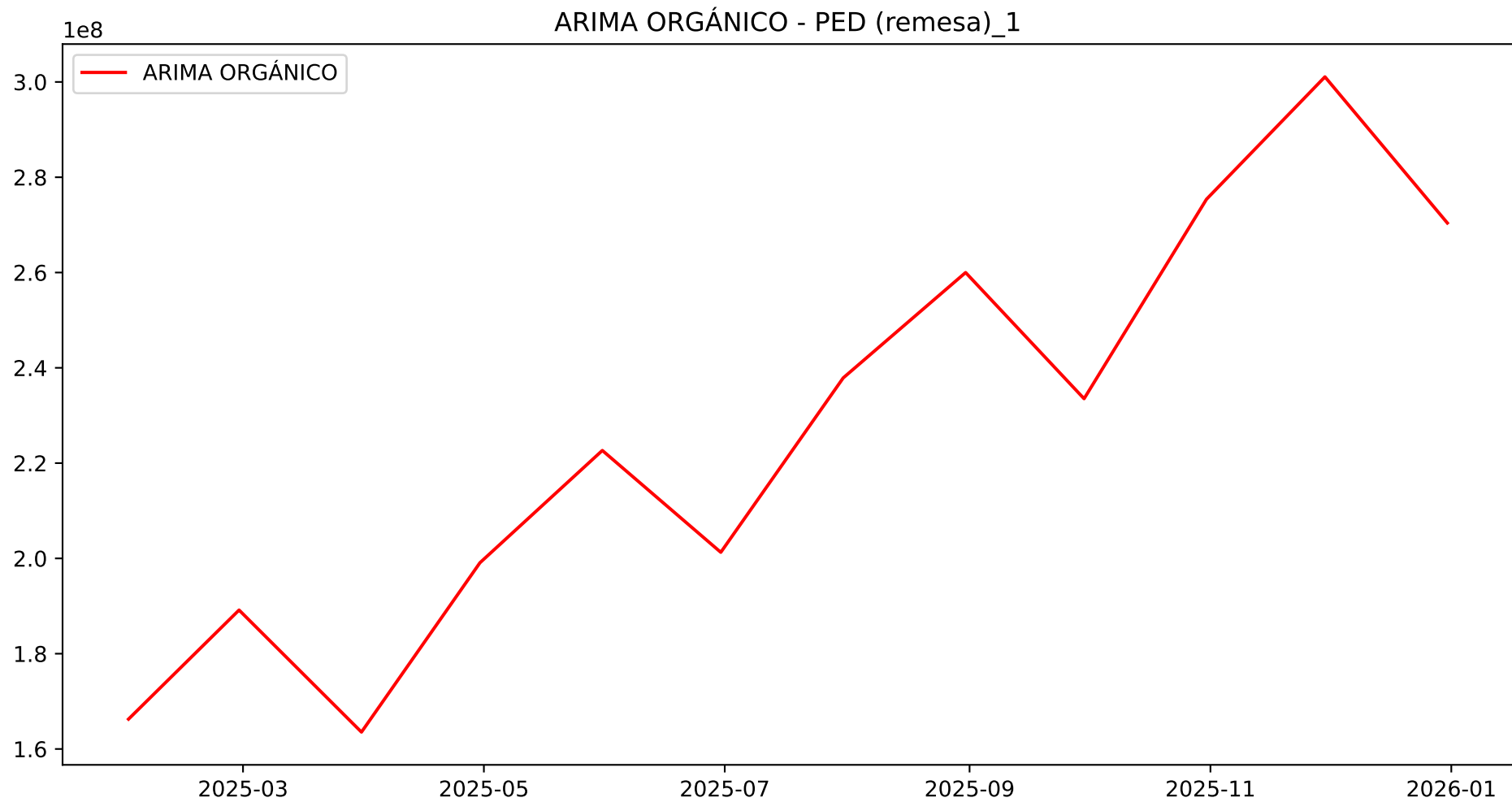
=====

Ljung-Box (L1) (Q):	0.04	Jarque-Bera (JB):	0.79
Prob(Q):	0.85	Prob(JB):	0.67
Heteroskedasticity (H):	1.16	Skew:	-0.31
Prob(H) (two-sided):	0.83	Kurtosis:	2.45

=====

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.13e+44. Standard errors may be unstable.



# SARIMAX Results

Dep. Variable: PED (remesa)\_1 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood -490.105  
 Date: Wed, 23 Oct 2024 AIC 998.210  
 Time: 16:22:16 BIC 1009.872  
 Sample: 01-31-2022 HQIC 1001.678  
 - 12-31-2024

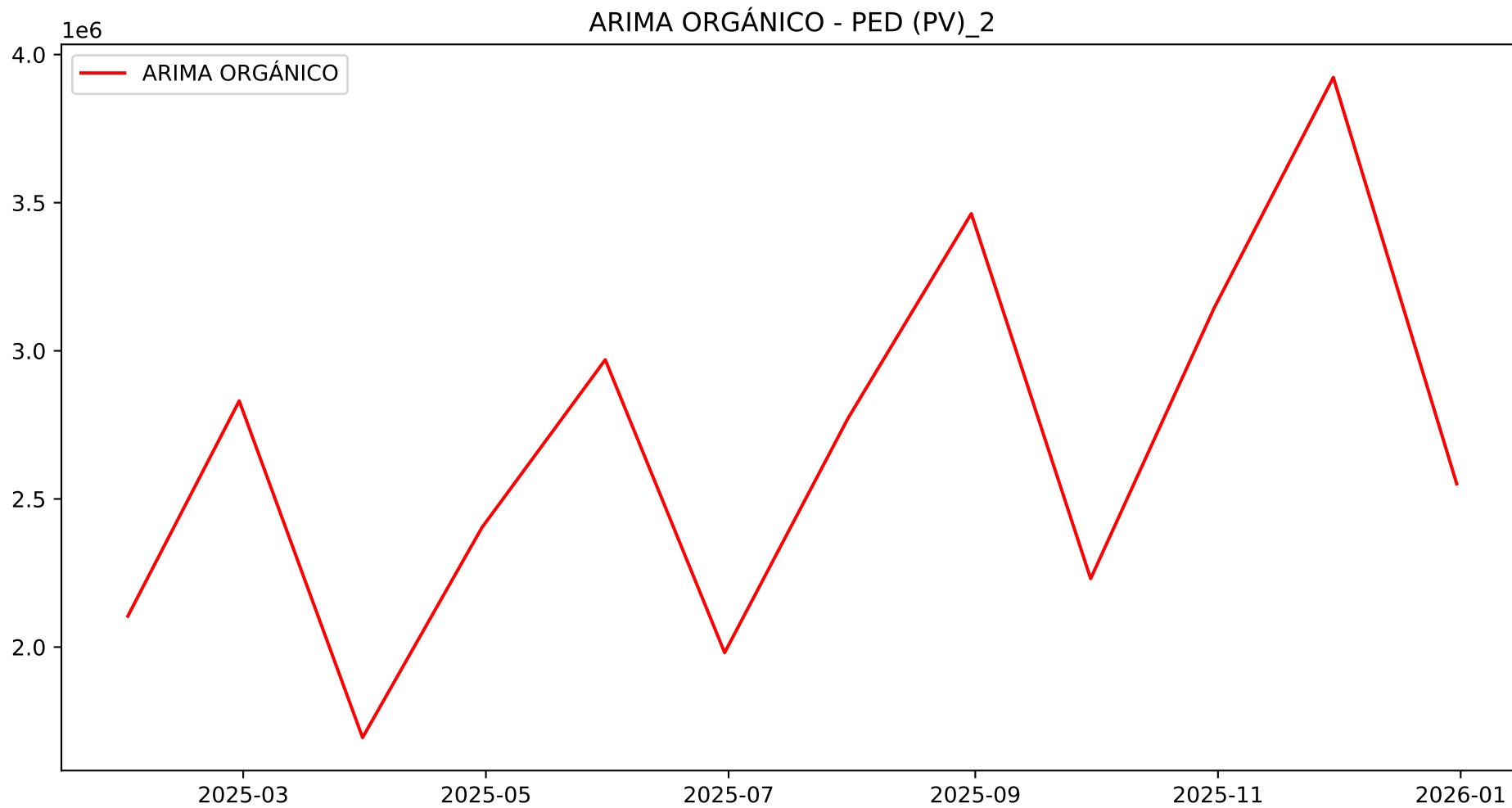
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0.1174	0.779	0.151	0.880	-1.410	1.645
ar.L2	0.1224	0.295	0.415	0.678	-0.455	0.700
ma.L1	1.1916	0.632	1.886	0.059	-0.046	2.430
ma.L2	0.0010	0.931	0.001	0.999	-1.824	1.826
ar.S.L3	1.0945	1.241	0.882	0.378	-1.337	3.526
ar.S.L6	0.0733	1.473	0.050	0.960	-2.814	2.960
ma.S.L3	-0.5887	1.053	-0.559	0.576	-2.653	1.476
ma.S.L6	-0.3564	1.091	-0.327	0.744	-2.495	1.782
sigma2	4.803e+14	2.32e-15	2.07e+29	0.000	4.8e+14	4.8e+14

Ljung-Box (L1) (Q): 0.20 Jarque-Bera (JB): 0.91  
 Prob(Q): 0.66 Prob(JB): 0.63  
 Heteroskedasticity (H): 0.66 Skew: 0.02  
 Prob(H) (two-sided): 0.54 Kurtosis: 2.10

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 3.76e+46. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          PED (PV)_2  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -382.283
Date:                  Wed, 23 Oct 2024  AIC              782.567
Time:                  16:22:18  BIC              794.229
Sample:                01-31-2022  HQIC              786.035
                    - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	0.3100	0.456	0.680	0.497	-0.584	1.204
ar.L2	-0.3136	0.402	-0.781	0.435	-1.101	0.474
ma.L1	-0.7268	0.713	-1.019	0.308	-2.125	0.671
ma.L2	1.3454	0.524	2.569	0.010	0.319	2.372
ar.S.L3	0.8354	0.696	1.201	0.230	-0.528	2.199
ar.S.L6	0.3461	0.851	0.407	0.684	-1.322	2.014
ma.S.L3	-0.4974	0.855	-0.582	0.561	-2.174	1.179
ma.S.L6	-0.0792	0.587	-0.135	0.893	-1.231	1.072
sigma2	1.94e+11	1.02e-12	1.9e+23	0.000	1.94e+11	1.94e+11

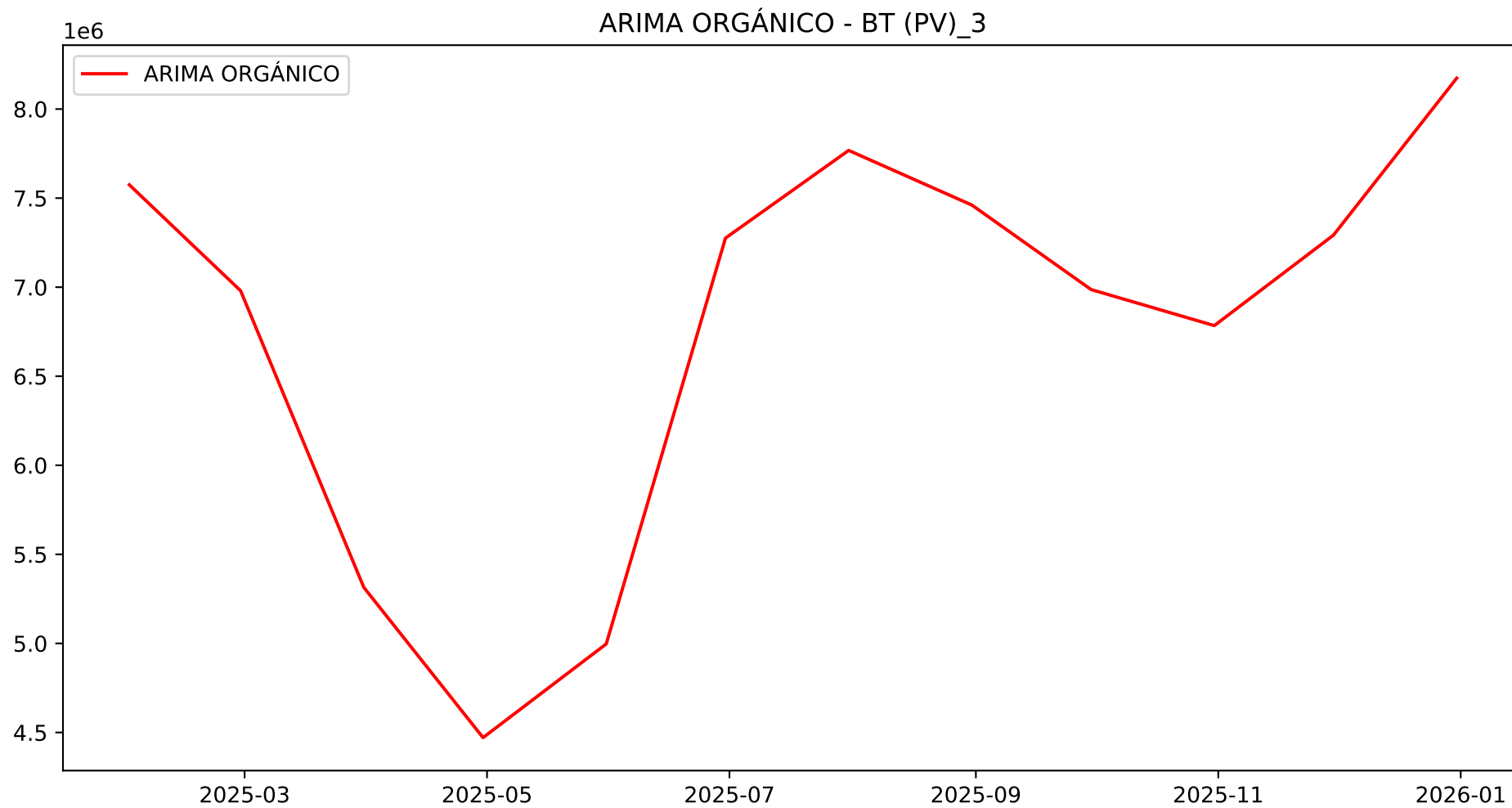
```

=====
Ljung-Box (L1) (Q):          0.79  Jarque-Bera (JB):          0.72
Prob(Q):                    0.37  Prob(JB):          0.70
Heteroskedasticity (H):          0.99  Skew:          -0.02
Prob(H) (two-sided):          0.99  Kurtosis:          2.20
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 7.54e+39. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          BT (PV)_3  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -417.218
Date:                  Wed, 23 Oct 2024  AIC          852.437
Time:                  16:22:19  BIC          864.099
Sample:                01-31-2022  HQIC          855.905
                   - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	0.3723	0.154	2.417	0.016	0.070	0.674
ar.L2	0.6826	0.158	4.311	0.000	0.372	0.993
ma.L1	-0.3282	0.262	-1.253	0.210	-0.842	0.185
ma.L2	-1.0807	0.292	-3.705	0.000	-1.652	-0.509
ar.S.L3	-0.1900	0.313	-0.608	0.543	-0.803	0.423
ar.S.L6	0.2624	0.262	1.001	0.317	-0.252	0.776
ma.S.L3	0.3981	0.339	1.175	0.240	-0.266	1.062
ma.S.L6	-0.7427	0.430	-1.725	0.084	-1.586	0.101
sigma2	2.141e+12	7.31e-14	2.93e+25	0.000	2.14e+12	2.14e+12

```

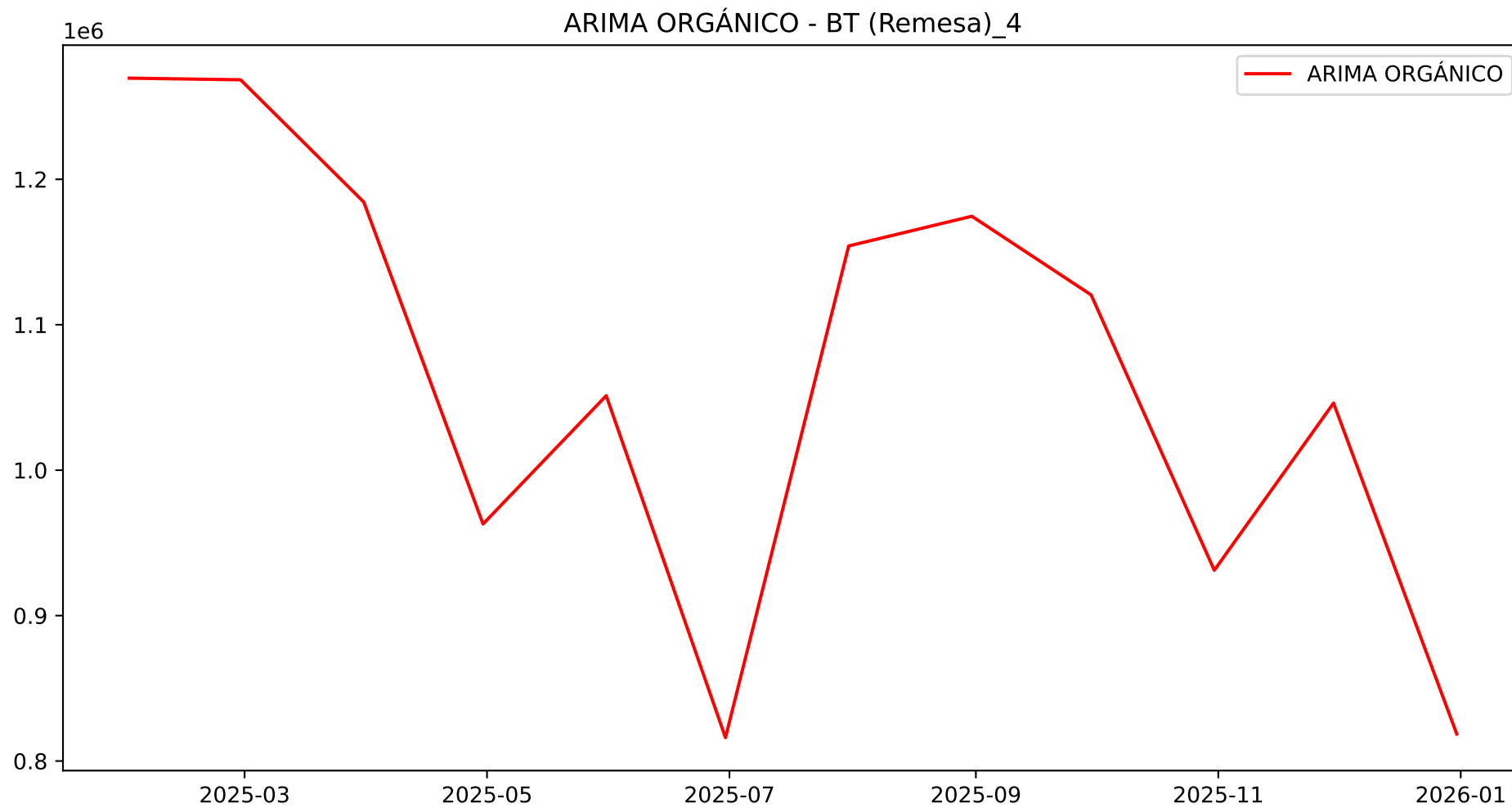
=====
Ljung-Box (L1) (Q):          0.51  Jarque-Bera (JB):          0.97
Prob(Q):                    0.47  Prob(JB):          0.62
Heteroskedasticity (H):          1.55  Skew:          0.12
Prob(H) (two-sided):          0.53  Kurtosis:          2.10
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 3.47e+41. Standard errors may be unstable.





# SARIMAX Results

Dep. Variable: BT (Remesa)\_4 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: -369.728  
 Date: Wed, 23 Oct 2024 AIC: 757.457  
 Time: 16:22:21 BIC: 769.119  
 Sample: 01-31-2022 HQIC: 760.925  
 - 12-31-2024

Covariance Type: opg

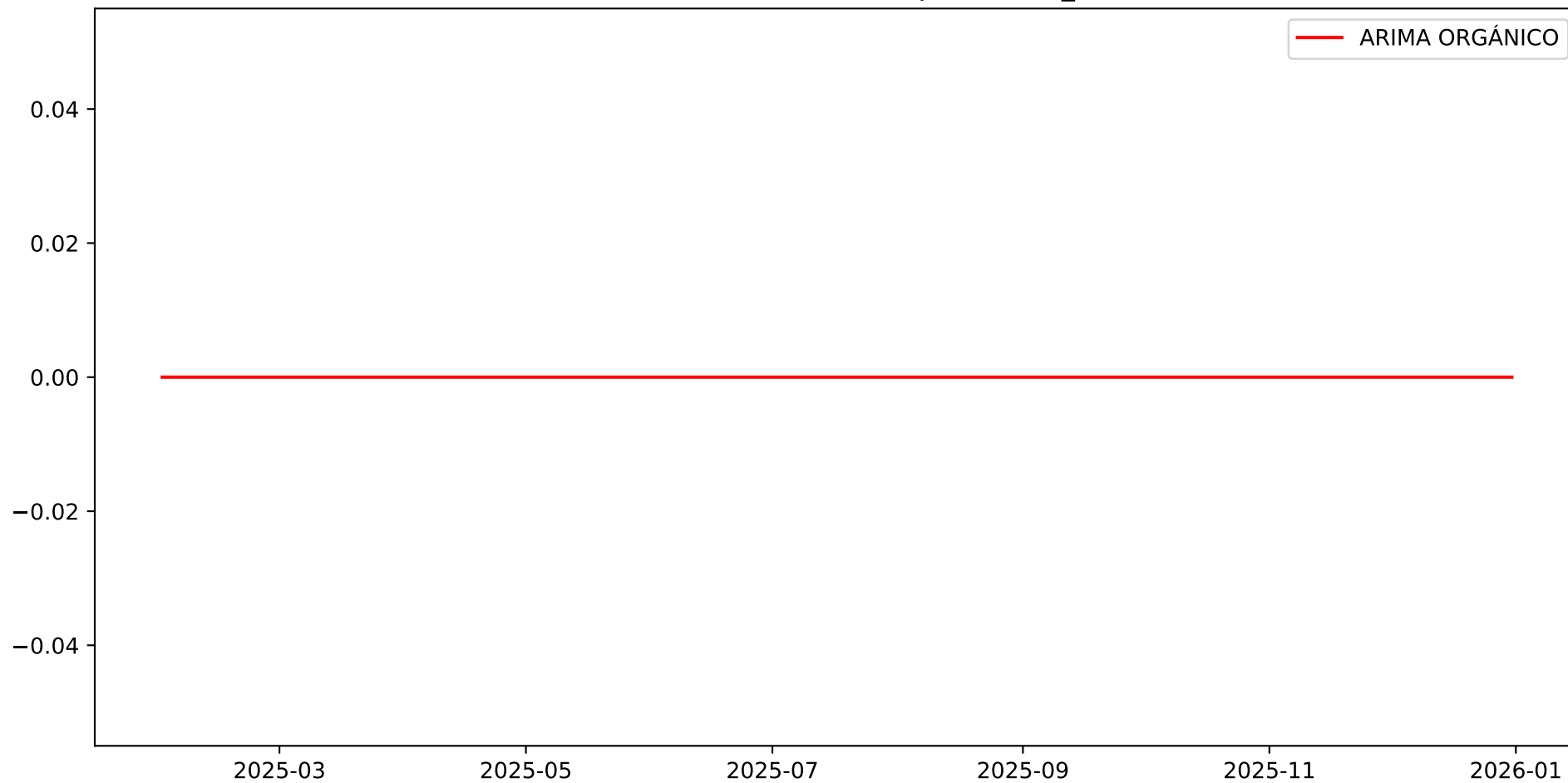
	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0.6785	0.565	1.200	0.230	-0.430	1.787
ar.L2	0.0785	0.493	0.159	0.873	-0.887	1.044
ma.L1	0.0813	0.668	0.122	0.903	-1.229	1.391
ma.L2	0.1080	0.337	0.321	0.748	-0.552	0.768
ar.S.L3	0.0322	0.145	0.222	0.825	-0.252	0.316
ar.S.L6	1.0360	0.132	7.833	0.000	0.777	1.295
ma.S.L3	0.0369	0.199	0.186	0.853	-0.353	0.426
ma.S.L6	-0.8611	0.176	-4.886	0.000	-1.207	-0.516
sigma2	6.3e+10	1.43e-12	4.4e+22	0.000	6.3e+10	6.3e+10

Ljung-Box (L1) (Q): 0.19 Jarque-Bera (JB): 1.00  
 Prob(Q): 0.66 Prob(JB): 0.61  
 Heteroskedasticity (H): 1.86 Skew: 0.12  
 Prob(H) (two-sided): 0.37 Kurtosis: 2.09

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.66e+39. Standard errors may be unstable.

ARIMA ORGÁNICO - Trabajadores BT\_5



# SARIMAX Results

Dep. Variable: Trabajadores BT\_5 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: 286.038  
 Date: Wed, 23 Oct 2024 AIC: -554.075  
 Time: 16:22:22 BIC: -542.413  
 Sample: 01-31-2022 HQIC: -550.607  
 - 12-31-2024

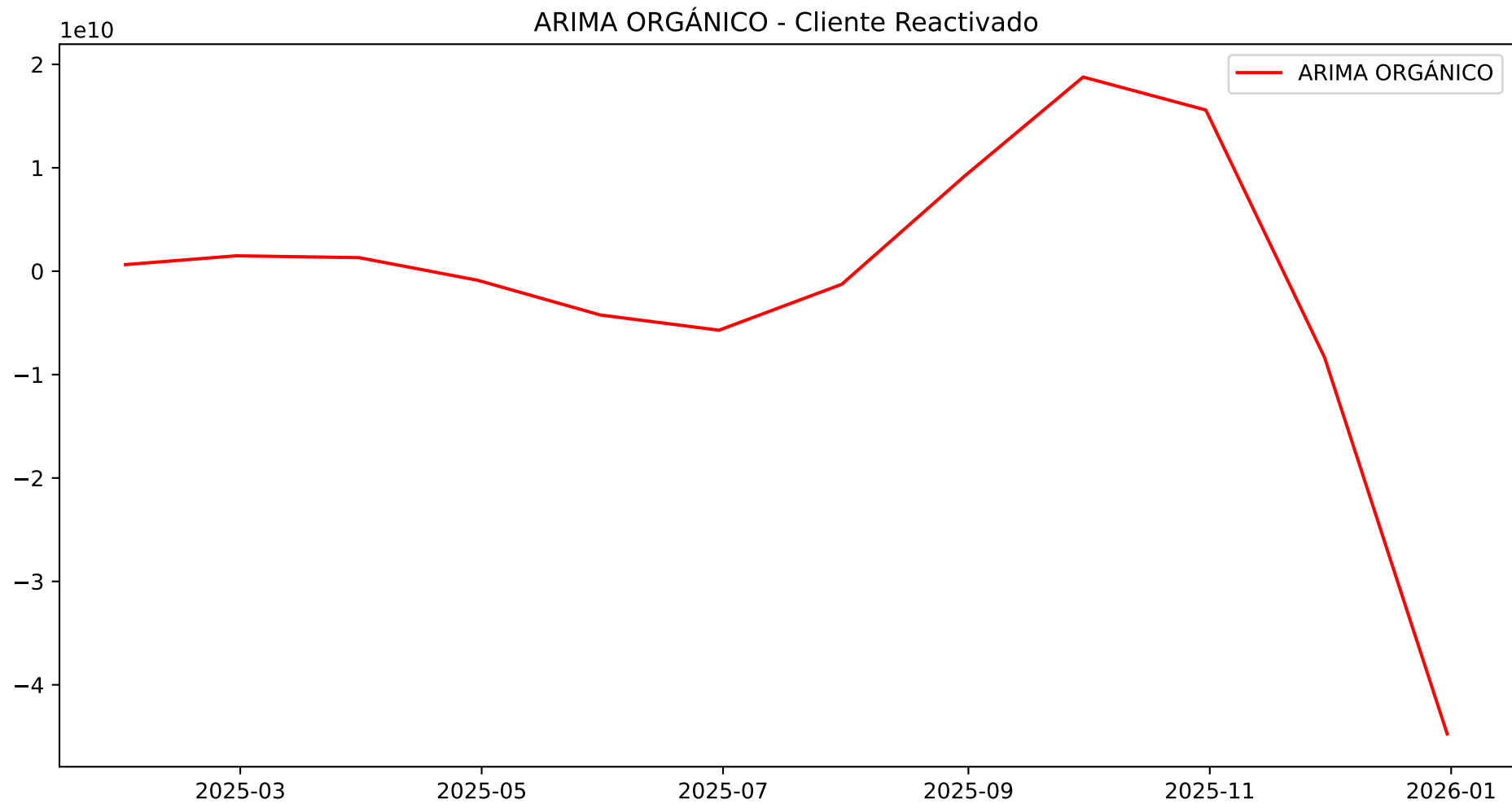
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0	-0	nan	nan	0	0
ar.L2	0	-0	nan	nan	0	0
ma.L1	0	-0	nan	nan	0	0
ma.L2	0	-0	nan	nan	0	0
ar.S.L3	0	-0	nan	nan	0	0
ar.S.L6	0	-0	nan	nan	0	0
ma.S.L3	0	-0	nan	nan	0	0
ma.S.L6	0	-0	nan	nan	0	0
sigma2	1e-10	3.81e-10	0.262	0.793	-6.48e-10	8.48e-10

Ljung-Box (L1) (Q): nan Jarque-Bera (JB): nan  
 Prob(Q): nan Prob(JB): nan  
 Heteroskedasticity (H): nan Skew: nan  
 Prob(H) (two-sided): nan Kurtosis: nan

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number inf. Standard errors may be unstable.



# SARIMAX Results

```
=====
Dep. Variable:      Cliente Reactivado  No. Observations:      36
Model:              SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -1375.094
Date:              Wed, 23 Oct 2024  AIC      2768.188
Time:              16:22:24  BIC      2779.851
Sample:            01-31-2022  HQIC      2771.656
                  - 12-31-2024
```

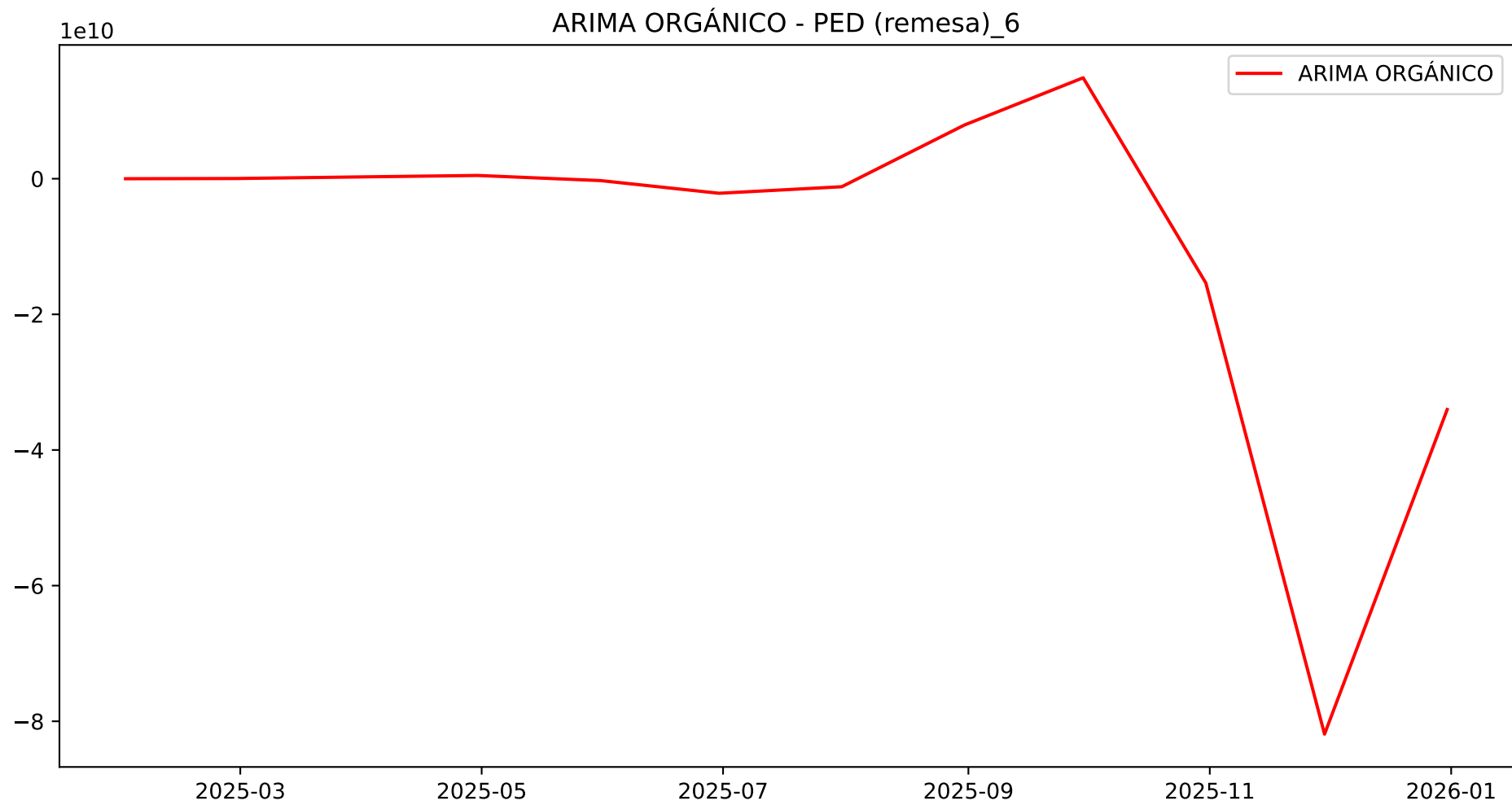
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	1.7952	0.036	50.394	0.000	1.725	1.865
ar.L2	-1.9252	0.073	-26.260	0.000	-2.069	-1.781
ma.L1	-2.1282	0.010	-214.484	0.000	-2.148	-2.109
ma.L2	0.2537	0.016	15.384	0.000	0.221	0.286
ar.S.L3	-0.0657	0.003	-20.766	0.000	-0.072	-0.059
ar.S.L6	1.0404	0.005	205.916	0.000	1.031	1.050
ma.S.L3	0.5489	0.016	33.373	0.000	0.517	0.581
ma.S.L6	-0.7234	0.021	-34.572	0.000	-0.764	-0.682
sigma2	3.259e+14	nan	nan	nan	nan	nan

```
=====
Ljung-Box (L1) (Q):      7.33  Jarque-Bera (JB):      0.68
Prob(Q):      0.01  Prob(JB):      0.71
Heteroskedasticity (H):      4.33  Skew:      -0.04
Prob(H) (two-sided):      0.04  Kurtosis:      2.23
=====
```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 4.81e+46. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          PED (remesa)_6  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -532.800
Date:                  Wed, 23 Oct 2024  AIC              1083.600
Time:                  16:22:25  BIC              1095.262
Sample:                01-31-2022  HQIC              1087.068
                    - 12-31-2024
Covariance Type:                opg
=====

```

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	1.2174	0.553	2.200	0.028	0.133	2.302
ar.L2	-4.2602	4.774	-0.892	0.372	-13.617	5.096
ma.L1	-9.1841	3.308	-2.776	0.005	-15.668	-2.700
ma.L2	0.3305	10.545	0.031	0.975	-20.337	20.998
ar.S.L3	0.4009	1.102	0.364	0.716	-1.760	2.561
ar.S.L6	0.4946	1.166	0.424	0.672	-1.791	2.780
ma.S.L3	-0.4627	0.708	-0.653	0.514	-1.851	0.926
ma.S.L6	0.0834	0.585	0.143	0.887	-1.064	1.230
sigma2	2e+14	9.36e-14	2.14e+27	0.000	2e+14	2e+14

```

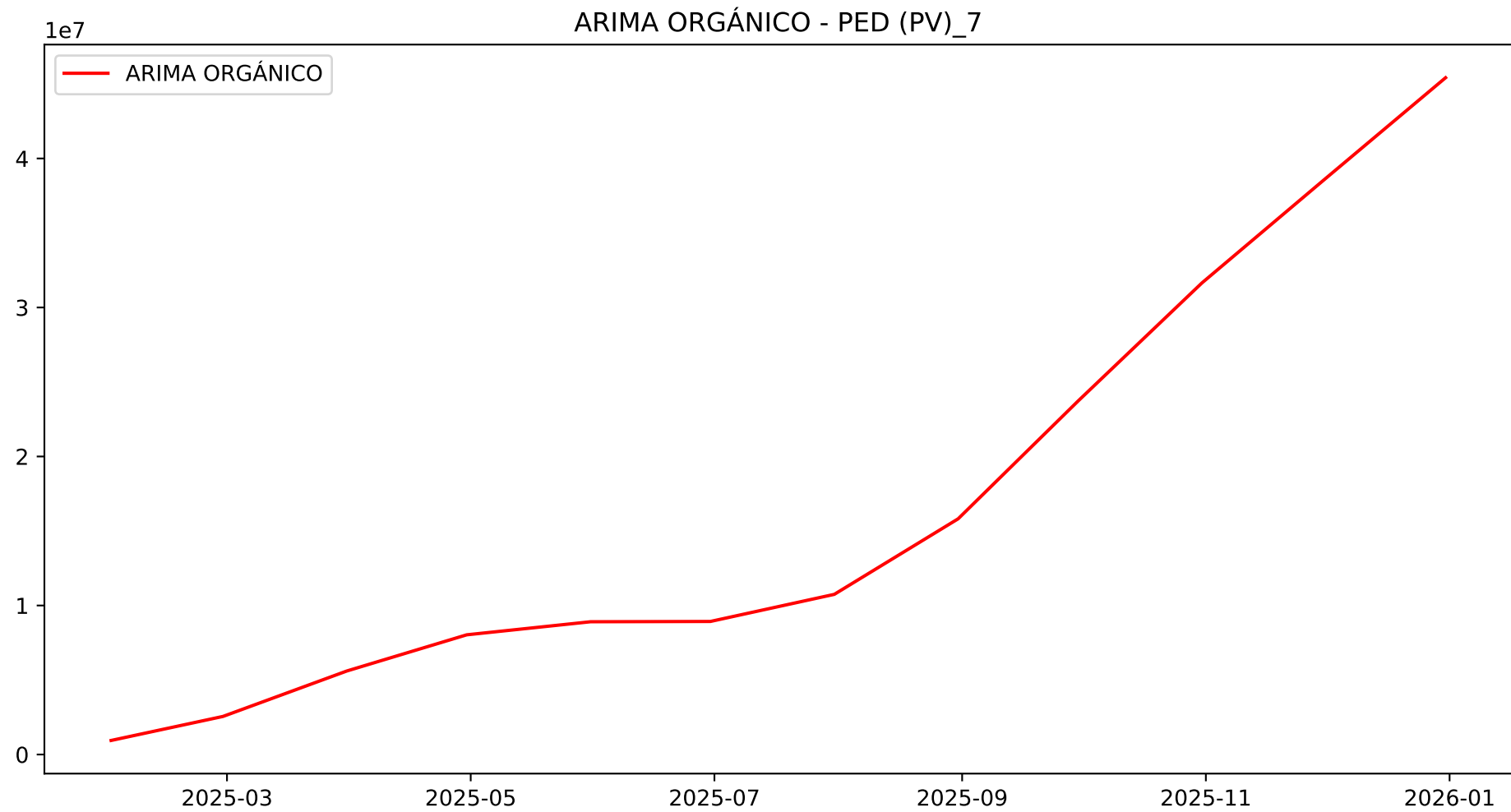
=====
Ljung-Box (L1) (Q):          0.46  Jarque-Bera (JB):          0.59
Prob(Q):                    0.50  Prob(JB):              0.74
Heteroskedasticity (H):      1.85  Skew:                -0.24
Prob(H) (two-sided):        0.37  Kurtosis:            2.45
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.27e+44. Standard errors may be unstable.





# SARIMAX Results

```

=====
Dep. Variable:          PED (PV)_7  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -420.993
Date:                  Wed, 23 Oct 2024  AIC          859.986
Time:                  16:22:27  BIC          871.649
Sample:                01-31-2022  HQIC          863.454
                    - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	2.4823	0.163	15.266	0.000	2.164	2.801
ar.L2	-1.5410	0.181	-8.499	0.000	-1.896	-1.186
ma.L1	-2.3651	0.510	-4.634	0.000	-3.365	-1.365
ma.L2	0.5353	0.560	0.956	0.339	-0.562	1.632
ar.S.L3	-0.8325	2.217	-0.375	0.707	-5.179	3.514
ar.S.L6	0.4792	3.052	0.157	0.875	-5.503	6.461
ma.S.L3	0.8367	2.370	0.353	0.724	-3.809	5.482
ma.S.L6	-0.5738	3.306	-0.174	0.862	-7.053	5.906
sigma2	5.403e+11	3e-11	1.8e+22	0.000	5.4e+11	5.4e+11

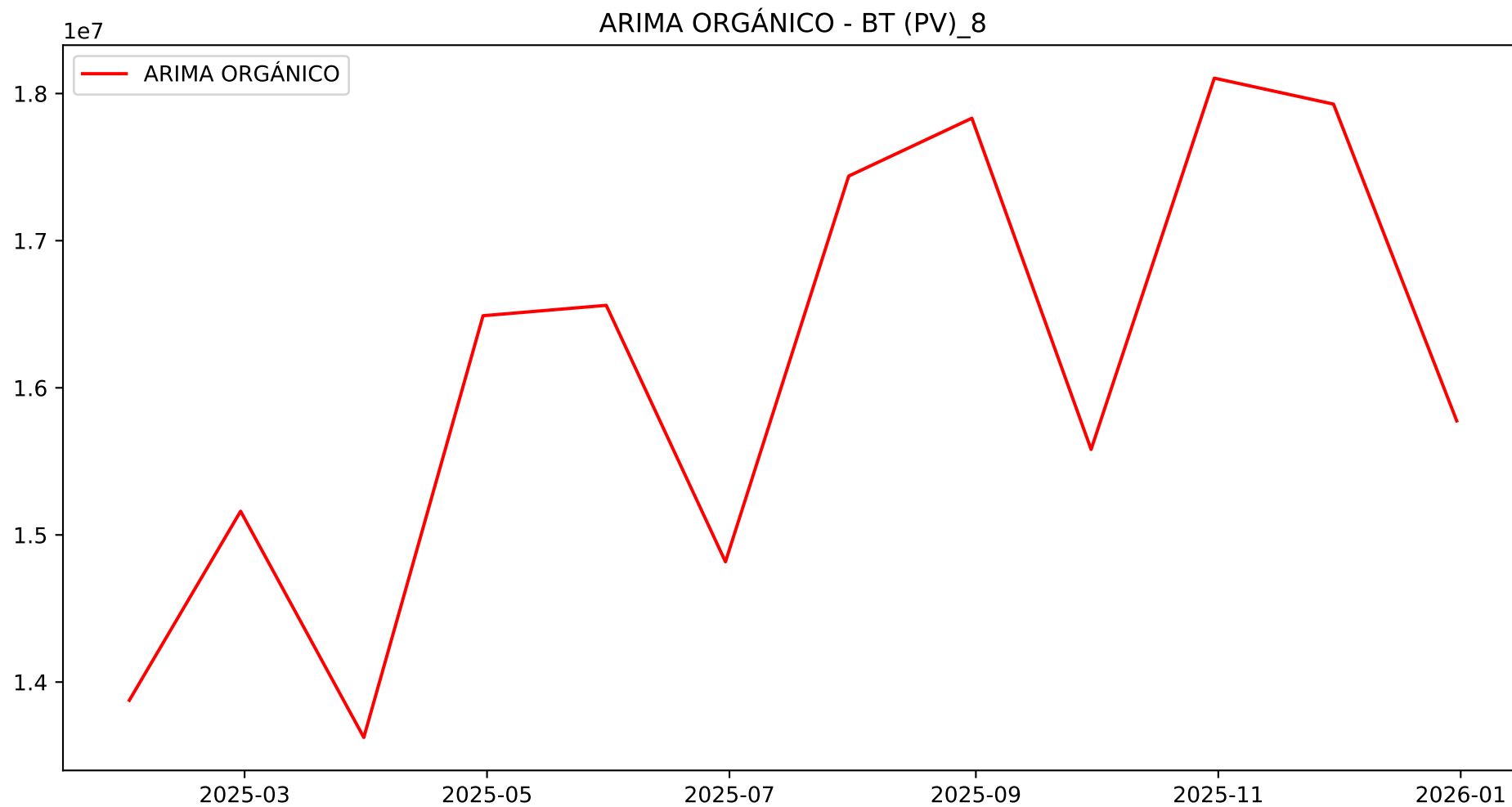
```

=====
Ljung-Box (L1) (Q):          0.09  Jarque-Bera (JB):          1.03
Prob(Q):                    0.77  Prob(JB):          0.60
Heteroskedasticity (H):          0.63  Skew:          -0.47
Prob(H) (two-sided):          0.50  Kurtosis:          2.78
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 8.36e+39. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:          BT (PV)_8  No. Observations:          36
Model:                SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood          -444.492
Date:                  Wed, 23 Oct 2024  AIC          906.984
Time:                  16:22:28  BIC          918.647
Sample:                01-31-2022  HQIC          910.452
                        - 12-31-2024
Covariance Type:                opg
=====

```

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	1.4705	0.217	6.791	0.000	1.046	1.895
ar.L2	-0.5828	0.243	-2.400	0.016	-1.059	-0.107
ma.L1	-1.2996	0.328	-3.967	0.000	-1.942	-0.657
ma.L2	0.1768	0.334	0.529	0.597	-0.478	0.831
ar.S.L3	0.2096	0.284	0.738	0.460	-0.347	0.766
ar.S.L6	0.8453	0.312	2.711	0.007	0.234	1.456
ma.S.L3	-0.1589	0.335	-0.474	0.635	-0.816	0.498
ma.S.L6	-0.8763	0.377	-2.324	0.020	-1.615	-0.137
sigma2	1.614e+13	6.52e-15	2.48e+27	0.000	1.61e+13	1.61e+13

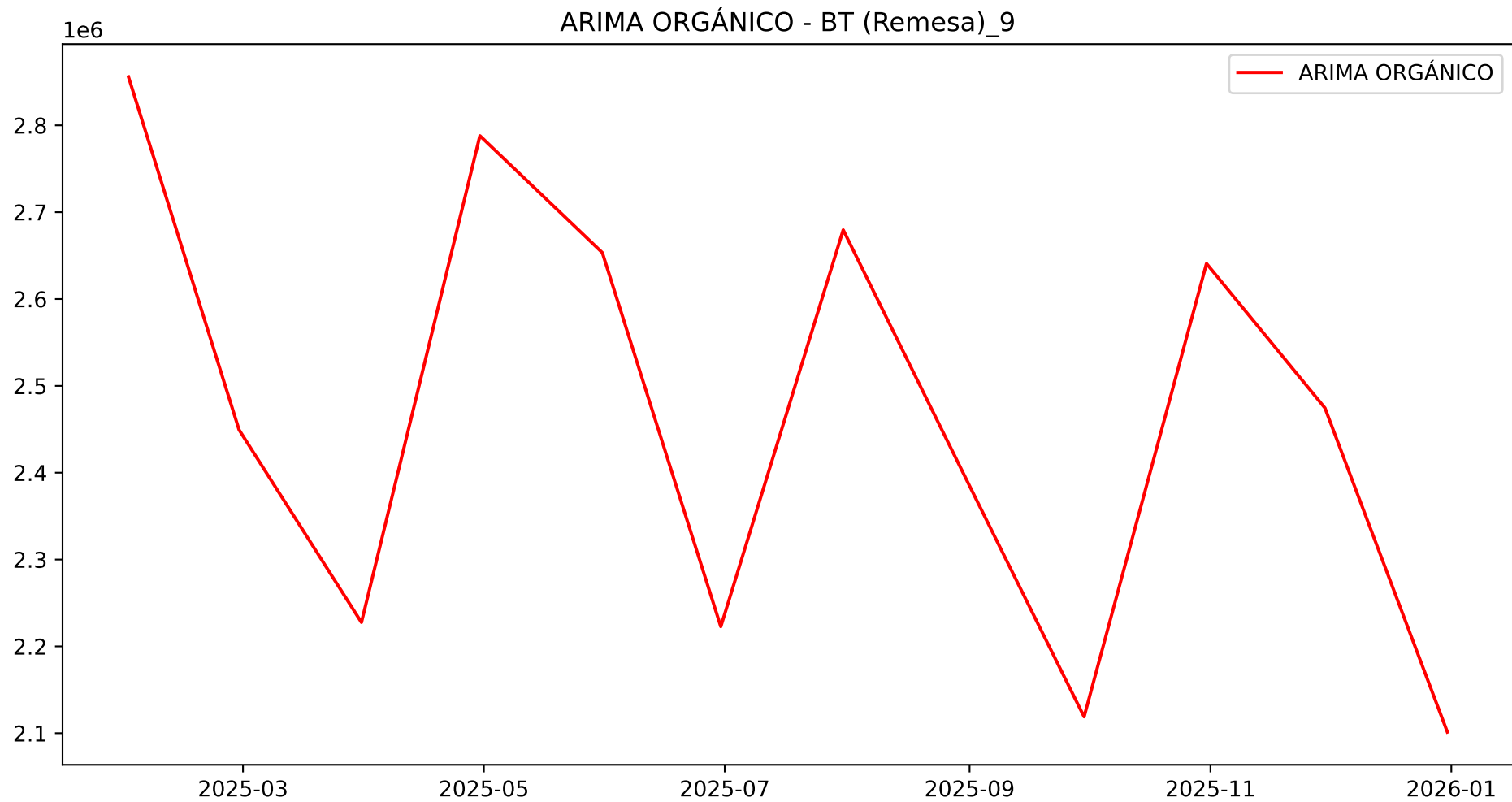
```

=====
Ljung-Box (L1) (Q):          0.05  Jarque-Bera (JB):          0.74
Prob(Q):                    0.82  Prob(JB):          0.69
Heteroskedasticity (H):          0.30  Skew:          -0.32
Prob(H) (two-sided):          0.09  Kurtosis:          2.51
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.36e+44. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:      BT (Remesa)_9  No. Observations:      36
Model:              SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -399.258
Date:              Wed, 23 Oct 2024  AIC              816.516
Time:              16:22:30  BIC              828.178
Sample:            01-31-2022  HQIC             819.984
                  - 12-31-2024
Covariance Type:    opg
=====

```

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	0.4633	0.387	1.197	0.231	-0.295	1.222
ar.L2	0.3339	0.320	1.042	0.297	-0.294	0.962
ma.L1	0.4529	0.416	1.089	0.276	-0.363	1.268
ma.L2	-0.7634	0.436	-1.751	0.080	-1.618	0.091
ar.S.L3	0.2466	0.358	0.689	0.491	-0.455	0.948
ar.S.L6	0.7158	0.350	2.048	0.041	0.031	1.401
ma.S.L3	-0.4772	0.518	-0.921	0.357	-1.493	0.538
ma.S.L6	-0.3725	0.523	-0.713	0.476	-1.397	0.652
sigma2	6.684e+11	1.6e-13	4.17e+24	0.000	6.68e+11	6.68e+11

```

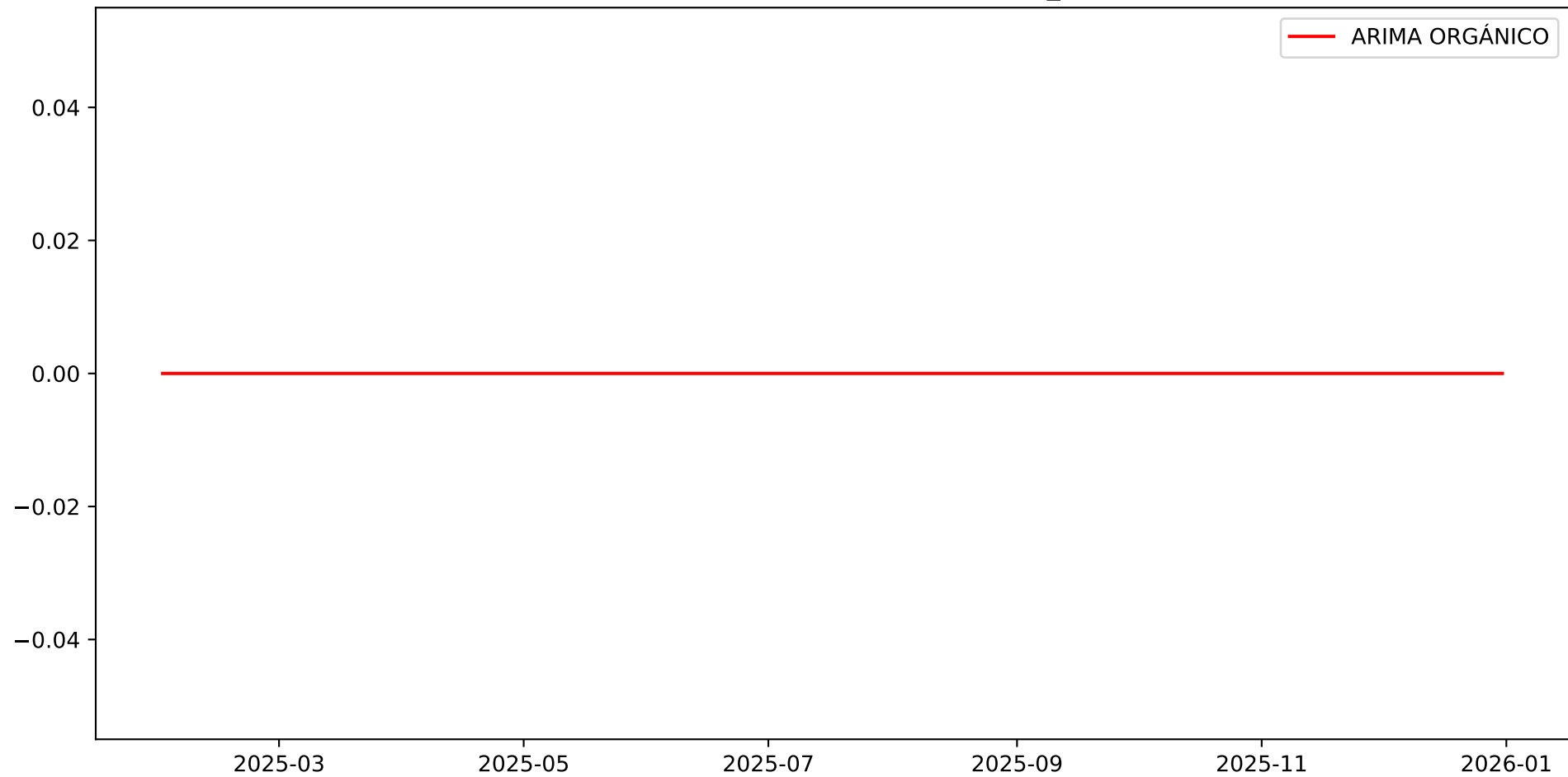
=====
Ljung-Box (L1) (Q):      1.18  Jarque-Bera (JB):      1.76
Prob(Q):                 0.28  Prob(JB):              0.41
Heteroskedasticity (H):   0.62  Skew:              -0.23
Prob(H) (two-sided):      0.49  Kurtosis:           1.83
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 4.36e+41. Standard errors may be unstable.

ARIMA ORGÁNICO - Trabajadores BT\_10



# SARIMAX Results

Dep. Variable: Trabajadores BT\_10 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: 286.038  
 Date: Wed, 23 Oct 2024 AIC: -554.075  
 Time: 16:22:31 BIC: -542.413  
 Sample: 01-31-2022 HQIC: -550.607  
 - 12-31-2024

Covariance Type: opg

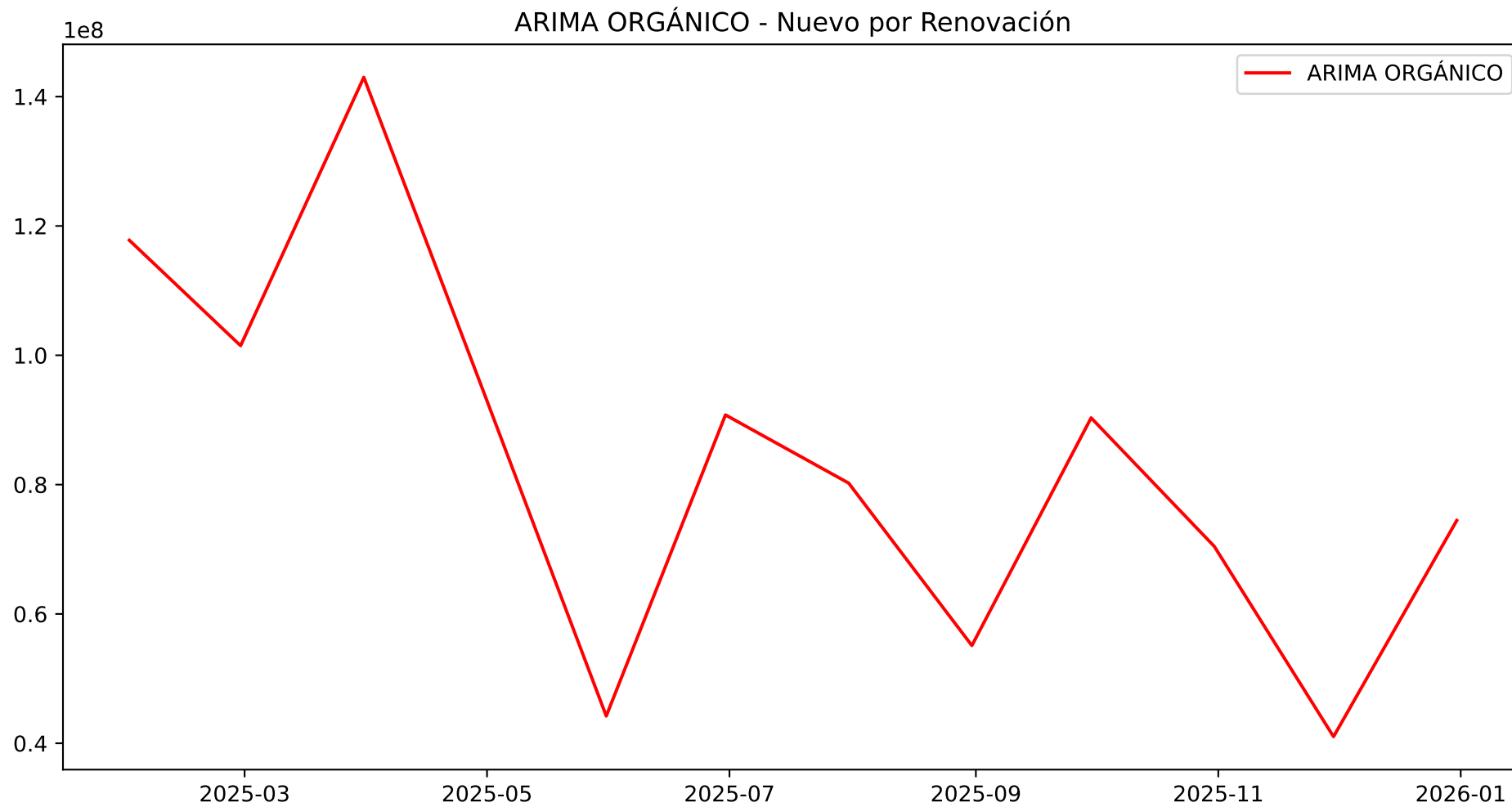
	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0	-0	nan	nan	0	0
ar.L2	0	-0	nan	nan	0	0
ma.L1	0	-0	nan	nan	0	0
ma.L2	0	-0	nan	nan	0	0
ar.S.L3	0	-0	nan	nan	0	0
ar.S.L6	0	-0	nan	nan	0	0
ma.S.L3	0	-0	nan	nan	0	0
ma.S.L6	0	-0	nan	nan	0	0
sigma2	1e-10	3.81e-10	0.262	0.793	-6.48e-10	8.48e-10

Ljung-Box (L1) (Q): nan Jarque-Bera (JB): nan  
 Prob(Q): nan Prob(JB): nan  
 Heteroskedasticity (H): nan Skew: nan  
 Prob(H) (two-sided): nan Kurtosis: nan

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number inf. Standard errors may be unstable.





# SARIMAX Results

Dep. Variable: Nuevo por Renovación No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood -515.160  
 Date: Wed, 23 Oct 2024 AIC 1048.320  
 Time: 16:22:33 BIC 1059.983  
 Sample: 01-31-2022 HQIC 1051.788  
 - 12-31-2024

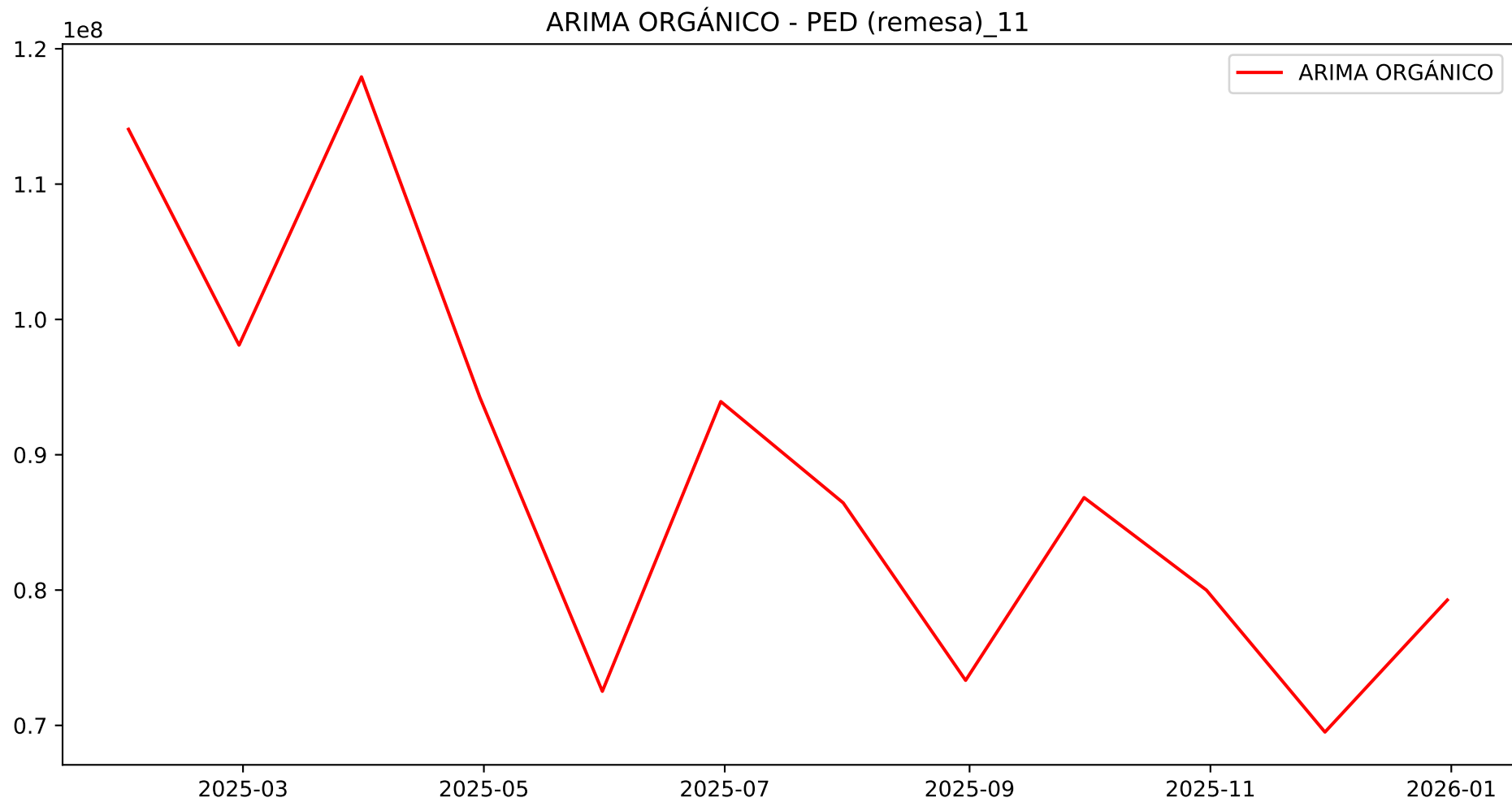
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0.5780	0.724	0.799	0.424	-0.840	1.996
ar.L2	0.3670	0.683	0.537	0.591	-0.972	1.706
ma.L1	-0.2743	0.565	-0.486	0.627	-1.381	0.832
ma.L2	-0.9750	0.313	-3.113	0.002	-1.589	-0.361
ar.S.L3	0.5238	0.585	0.896	0.370	-0.622	1.670
ar.S.L6	0.3173	0.466	0.681	0.496	-0.596	1.231
ma.S.L3	-0.9484	0.351	-2.701	0.007	-1.637	-0.260
ma.S.L6	0.4107	0.255	1.613	0.107	-0.088	0.910
sigma2	2.834e+15	nan	nan	nan	nan	nan

Ljung-Box (L1) (Q): 0.44 Jarque-Bera (JB): 6.58  
 Prob(Q): 0.51 Prob(JB): 0.04  
 Heteroskedasticity (H): 0.84 Skew: 1.07  
 Prob(H) (two-sided): 0.80 Kurtosis: 4.14

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.73e+48. Standard errors may be unstable.



# SARIMAX Results

Dep. Variable: PED (remesa)\_11 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: -511.644  
 Date: Wed, 23 Oct 2024 AIC: 1041.288  
 Time: 16:22:35 BIC: 1052.951  
 Sample: 01-31-2022 HQIC: 1044.756  
 - 12-31-2024

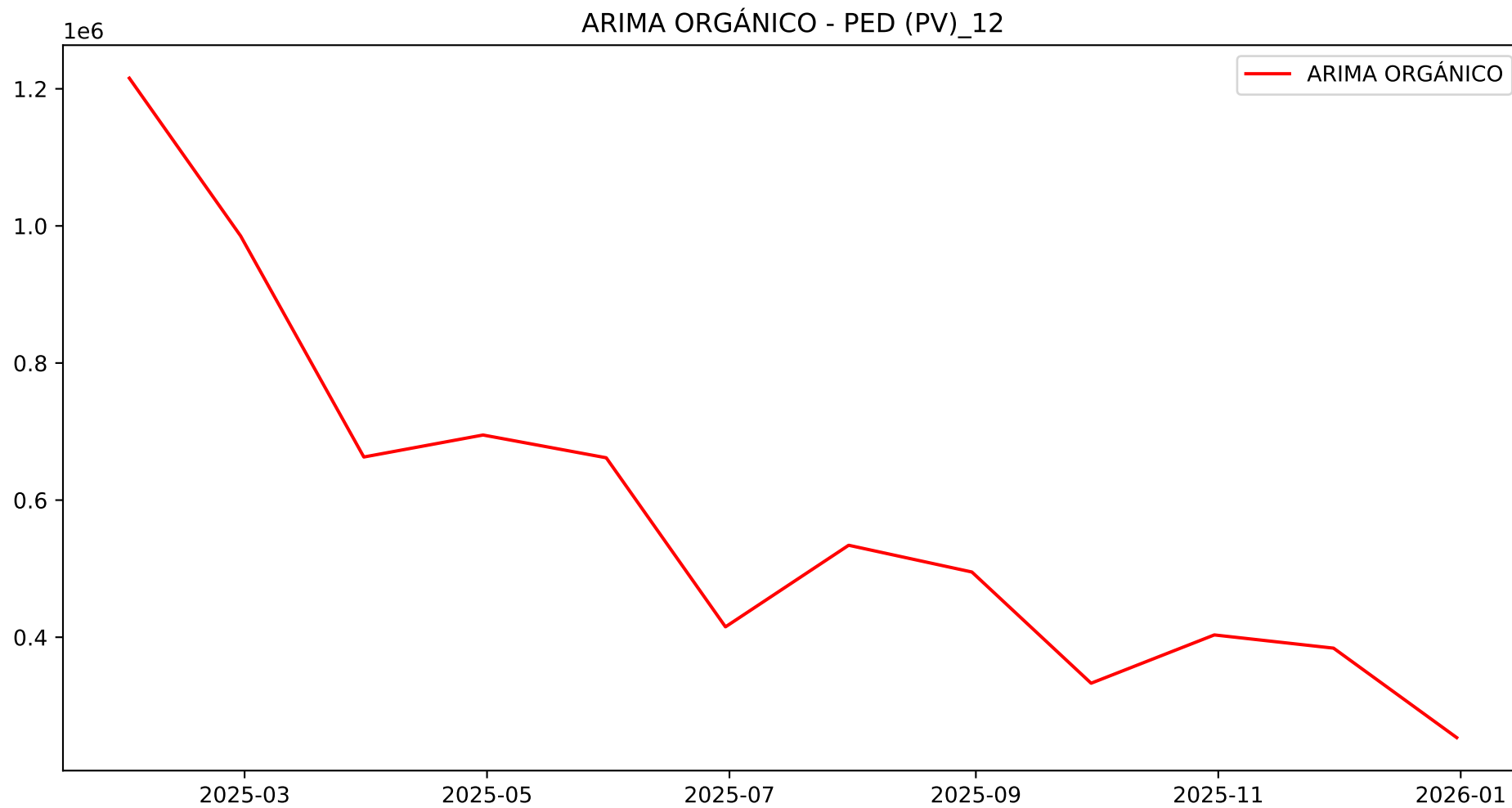
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0.5689	0.595	0.956	0.339	-0.598	1.736
ar.L2	0.3990	0.699	0.571	0.568	-0.970	1.768
ma.L1	0.0263	0.460	0.057	0.954	-0.876	0.928
ma.L2	-1.3118	0.574	-2.284	0.022	-2.438	-0.186
ar.S.L3	0.6020	0.854	0.705	0.481	-1.071	2.275
ar.S.L6	0.0933	1.117	0.083	0.933	-2.097	2.283
ma.S.L3	-0.7155	0.623	-1.149	0.251	-1.936	0.505
ma.S.L6	0.2332	0.622	0.375	0.708	-0.987	1.453
sigma2	2.682e+15	1.29e-16	2.07e+31	0.000	2.68e+15	2.68e+15

Ljung-Box (L1) (Q): 0.00 Jarque-Bera (JB): 1.34  
 Prob(Q): 0.97 Prob(JB): 0.51  
 Heteroskedasticity (H): 0.48 Skew: 0.54  
 Prob(H) (two-sided): 0.29 Kurtosis: 3.20

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 2.65e+48. Standard errors may be unstable.



# SARIMAX Results

Dep. Variable: PED (PV)\_12 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: -421.927  
 Date: Wed, 23 Oct 2024 AIC: 861.854  
 Time: 16:22:36 BIC: 873.516  
 Sample: 01-31-2022 HQIC: 865.321  
 - 12-31-2024

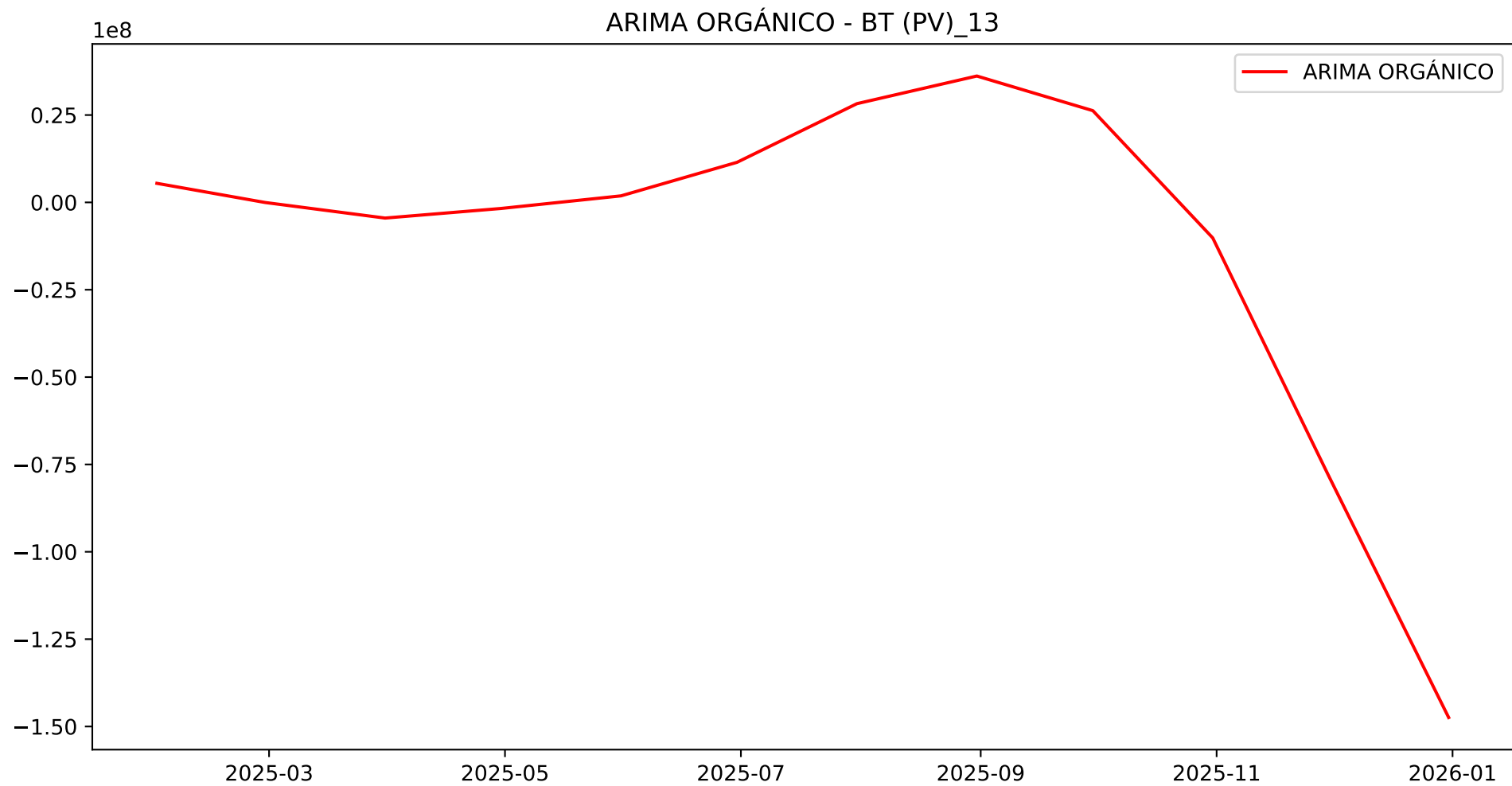
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	1.2139	1.054	1.152	0.249	-0.852	3.280
ar.L2	-0.4448	1.004	-0.443	0.658	-2.412	1.522
ma.L1	-2.0937	1.565	-1.337	0.181	-5.162	0.974
ma.L2	0.3026	3.099	0.098	0.922	-5.771	6.376
ar.S.L3	0.4106	4.692	0.088	0.930	-8.786	9.608
ar.S.L6	0.2622	2.877	0.091	0.927	-5.377	5.902
ma.S.L3	0.1113	5.019	0.022	0.982	-9.725	9.948
ma.S.L6	-0.2585	1.235	-0.209	0.834	-2.679	2.162
sigma2	1.119e+12	3.26e-11	3.43e+22	0.000	1.12e+12	1.12e+12

Ljung-Box (L1) (Q): 2.20 Jarque-Bera (JB): 0.81  
 Prob(Q): 0.14 Prob(JB): 0.67  
 Heteroskedasticity (H): 0.05 Skew: 0.42  
 Prob(H) (two-sided): 0.00 Kurtosis: 2.98

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.48e+39. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:      BT (PV)_13  No. Observations:      36
Model:             SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -469.641
Date:              Wed, 23 Oct 2024  AIC              957.283
Time:              16:22:38  BIC              968.945
Sample:            01-31-2022  HQIC             960.750
                  - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	2.1883	0.097	22.470	0.000	1.997	2.379
ar.L2	-2.0399	0.228	-8.933	0.000	-2.487	-1.592
ma.L1	-1.9645	0.276	-7.122	0.000	-2.505	-1.424
ma.L2	-0.3363	0.297	-1.133	0.257	-0.918	0.246
ar.S.L3	0.2024	0.419	0.484	0.629	-0.618	1.023
ar.S.L6	0.5913	0.321	1.844	0.065	-0.037	1.220
ma.S.L3	0.7212	0.421	1.712	0.087	-0.104	1.547
ma.S.L6	-0.0800	0.220	-0.364	0.716	-0.511	0.351
sigma2	9.482e+12	1.66e-14	5.71e+26	0.000	9.48e+12	9.48e+12

```

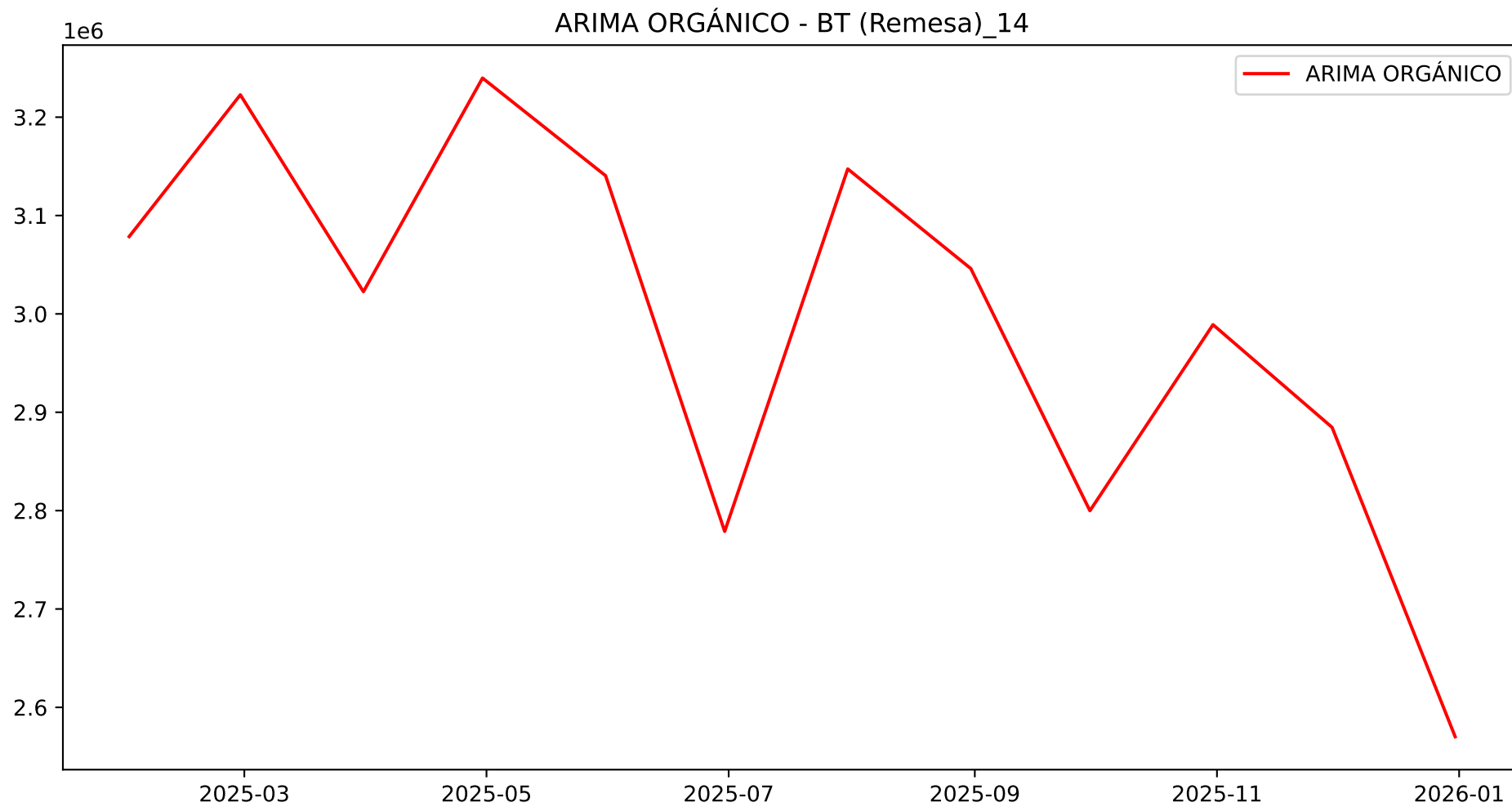
=====
Ljung-Box (L1) (Q):      0.60  Jarque-Bera (JB):      0.38
Prob(Q):                 0.44  Prob(JB):              0.83
Heteroskedasticity (H):  0.30  Skew:              0.28
Prob(H) (two-sided):     0.09  Kurtosis:          2.89
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 7.86e+42. Standard errors may be unstable.





# SARIMAX Results

Dep. Variable: BT (Remesa)\_14 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: -404.959  
 Date: Wed, 23 Oct 2024 AIC: 827.918  
 Time: 16:22:39 BIC: 839.581  
 Sample: 01-31-2022 HQIC: 831.386  
 - 12-31-2024

Covariance Type: opg

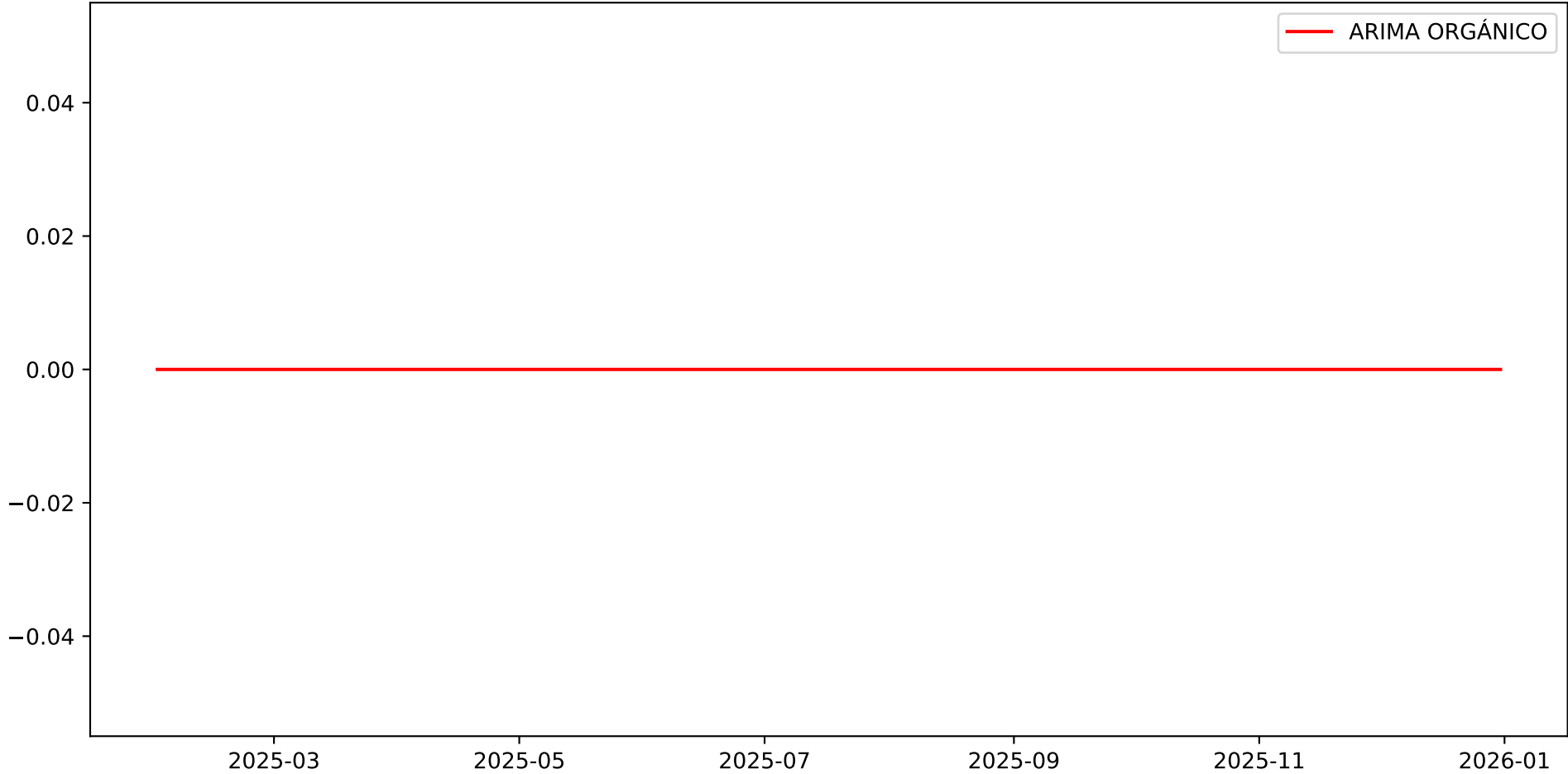
	coef	std err	z	P> z	[0.025	0.975]
ar.L1	1.0623	0.218	4.881	0.000	0.636	1.489
ar.L2	-0.1449	0.310	-0.467	0.640	-0.753	0.463
ma.L1	-0.9440	0.326	-2.892	0.004	-1.584	-0.304
ma.L2	-0.3763	0.345	-1.092	0.275	-1.052	0.299
ar.S.L3	0.1457	0.145	1.002	0.316	-0.139	0.430
ar.S.L6	0.7287	0.191	3.816	0.000	0.354	1.103
ma.S.L3	-0.1484	0.240	-0.618	0.537	-0.619	0.322
ma.S.L6	-0.6790	0.261	-2.599	0.009	-1.191	-0.167
sigma2	5.504e+11	5.48e-13	1e+24	0.000	5.5e+11	5.5e+11

Ljung-Box (L1) (Q): 0.60 Jarque-Bera (JB): 1.85  
 Prob(Q): 0.44 Prob(JB): 0.40  
 Heteroskedasticity (H): 0.24 Skew: 0.49  
 Prob(H) (two-sided): 0.05 Kurtosis: 3.82

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.41e+40. Standard errors may be unstable.

ARIMA ORGÁNICO - Trabajadores BT\_15



# SARIMAX Results

Dep. Variable: Trabajadores BT\_15 No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood: 286.038  
 Date: Wed, 23 Oct 2024 AIC: -554.075  
 Time: 16:22:41 BIC: -542.413  
 Sample: 01-31-2022 HQIC: -550.607  
 - 12-31-2024

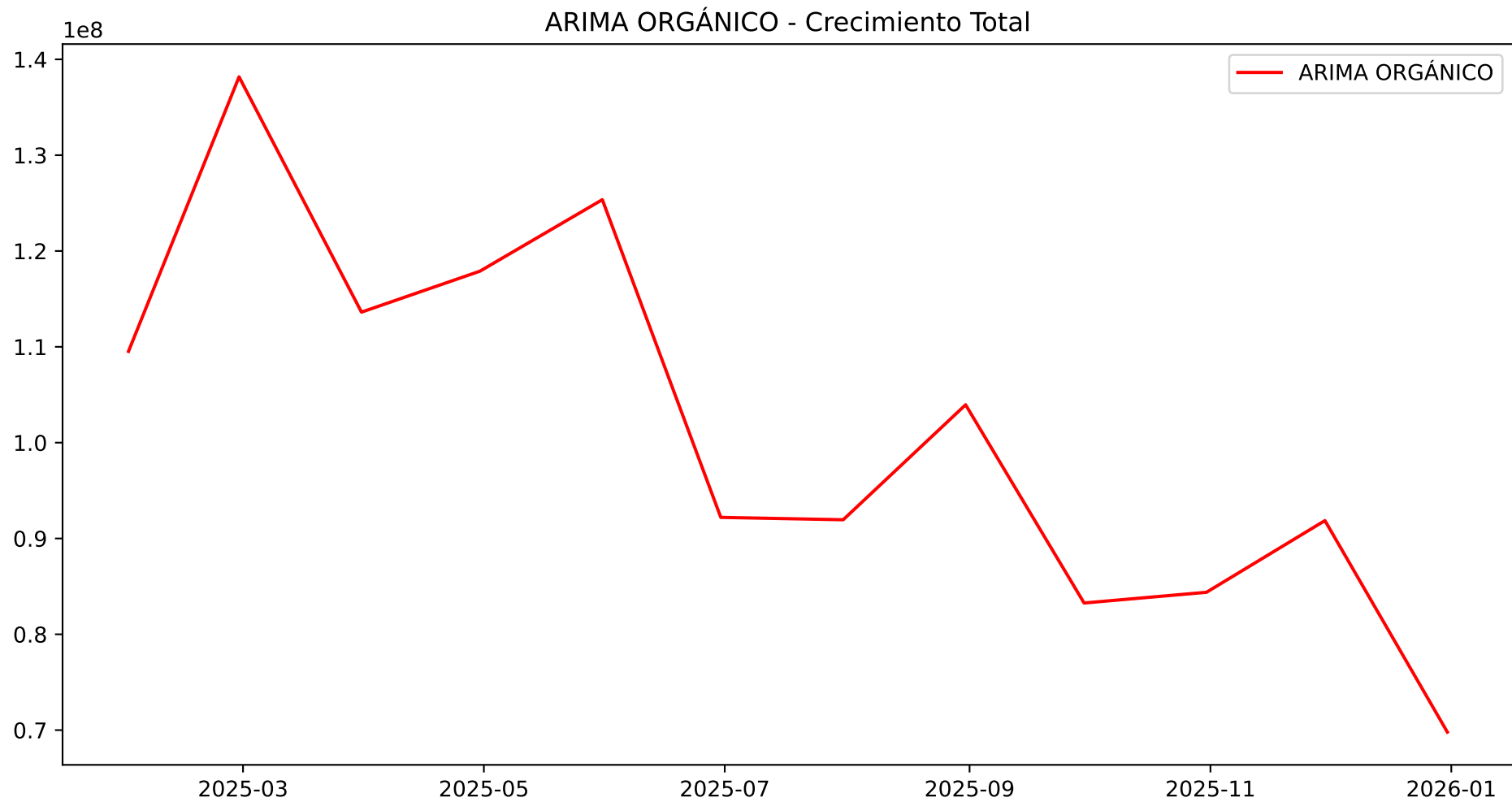
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0	-0	nan	nan	0	0
ar.L2	0	-0	nan	nan	0	0
ma.L1	0	-0	nan	nan	0	0
ma.L2	0	-0	nan	nan	0	0
ar.S.L3	0	-0	nan	nan	0	0
ar.S.L6	0	-0	nan	nan	0	0
ma.S.L3	0	-0	nan	nan	0	0
ma.S.L6	0	-0	nan	nan	0	0
sigma2	1e-10	3.81e-10	0.262	0.793	-6.48e-10	8.48e-10

Ljung-Box (L1) (Q): nan Jarque-Bera (JB): nan  
 Prob(Q): nan Prob(JB): nan  
 Heteroskedasticity (H): nan Skew: nan  
 Prob(H) (two-sided): nan Kurtosis: nan

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number inf. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:      Crecimiento Total  No. Observations:      36
Model:              SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -528.653
Date:               Wed, 23 Oct 2024  AIC          1075.306
Time:               16:22:43  BIC          1086.969
Sample:             01-31-2022  HQIC         1078.774
                   - 12-31-2024

```

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
-----						
ar.L1	0.4422	0.643	0.687	0.492	-0.819	1.703
ar.L2	0.3812	0.462	0.825	0.410	-0.525	1.287
ma.L1	0.7081	0.885	0.800	0.424	-1.027	2.443
ma.L2	-0.6214	1.013	-0.613	0.540	-2.608	1.365
ar.S.L3	0.3259	0.876	0.372	0.710	-1.390	2.042
ar.S.L6	0.4560	0.931	0.490	0.624	-1.370	2.281
ma.S.L3	-0.3819	0.946	-0.404	0.686	-2.236	1.472
ma.S.L6	-0.2230	1.047	-0.213	0.831	-2.275	1.829
sigma2	8.618e+15	2.99e-16	2.89e+31	0.000	8.62e+15	8.62e+15

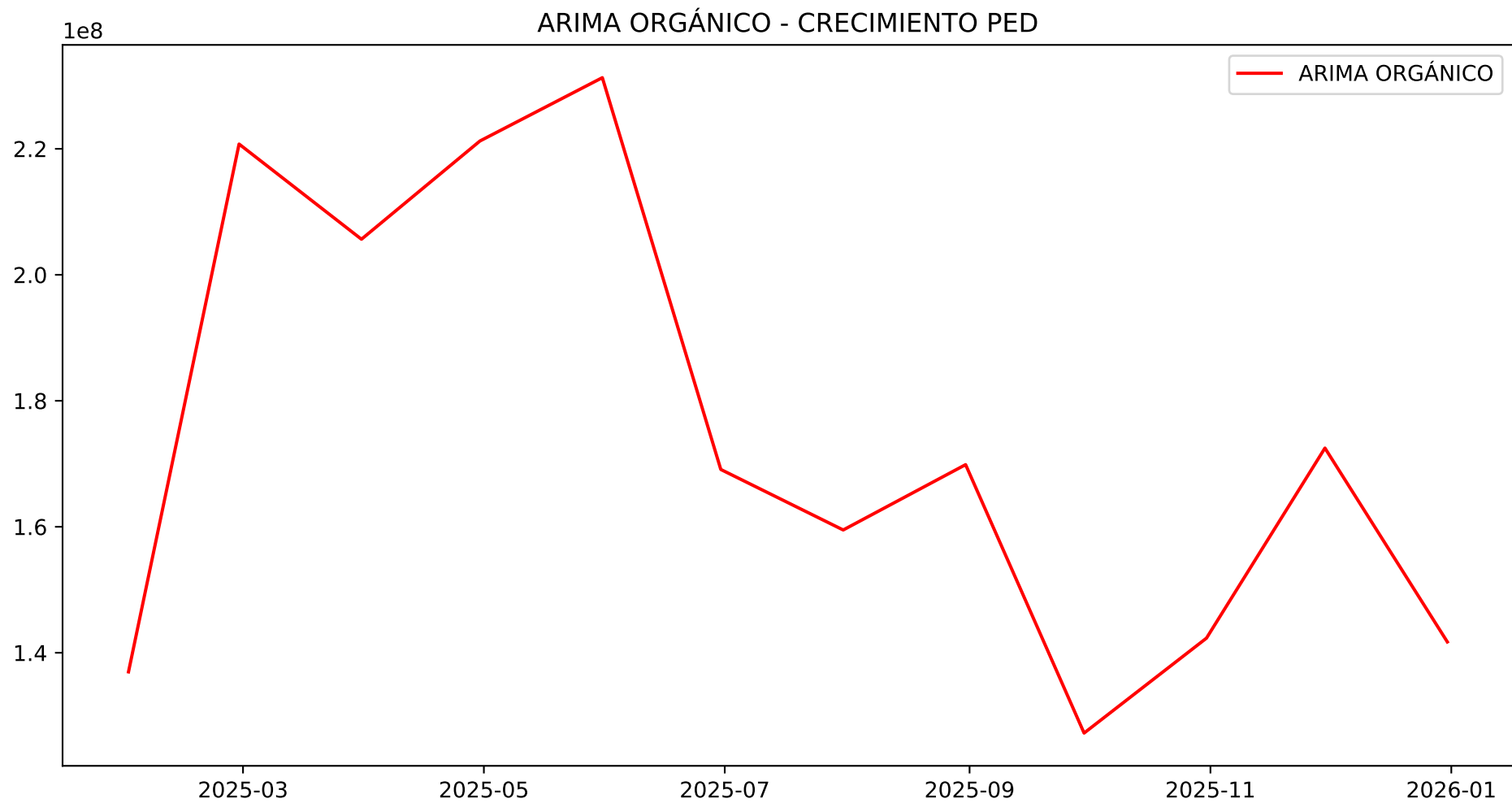
```

=====
Ljung-Box (L1) (Q):      0.67  Jarque-Bera (JB):      0.68
Prob(Q):                 0.41  Prob(JB):              0.71
Heteroskedasticity (H):   0.22  Skew:              0.38
Prob(H) (two-sided):      0.03  Kurtosis:          3.19
=====

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.02e+48. Standard errors may be unstable.



# SARIMAX Results

Dep. Variable: CRECIMIENTO PED No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood -525.053  
 Date: Wed, 23 Oct 2024 AIC 1068.105  
 Time: 16:22:45 BIC 1079.768  
 Sample: 01-31-2022 HQIC 1071.573  
 - 12-31-2024

Covariance Type: opg

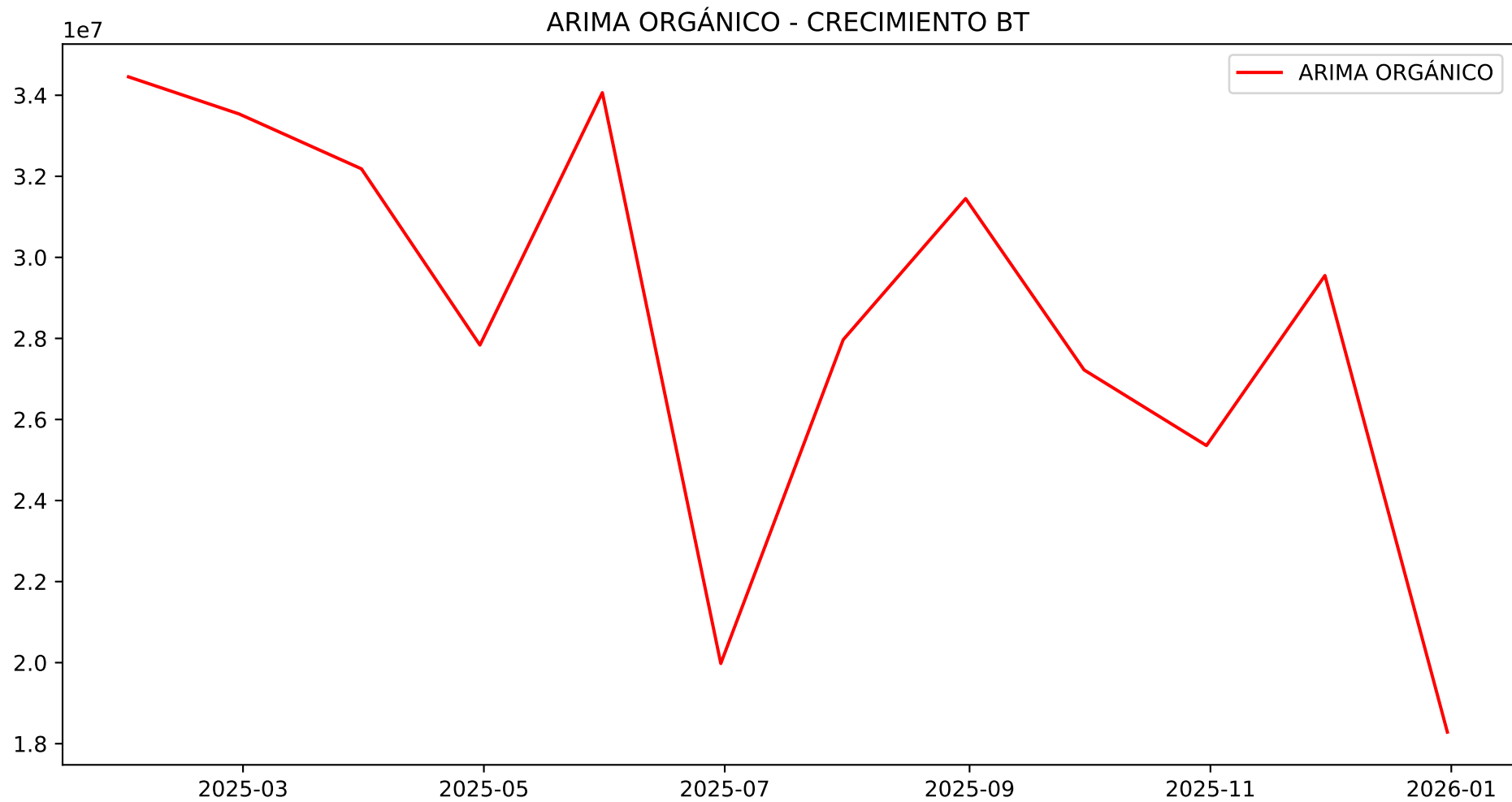
	coef	std err	z	P> z	[0.025	0.975]
ar.L1	1.3120	0.472	2.777	0.005	0.386	2.238
ar.L2	-0.6452	0.325	-1.985	0.047	-1.282	-0.008
ma.L1	-0.9839	0.298	-3.298	0.001	-1.569	-0.399
ma.L2	-0.2924	0.345	-0.848	0.397	-0.968	0.384
ar.S.L3	0.7683	1.501	0.512	0.609	-2.173	3.710
ar.S.L6	0.1942	1.522	0.128	0.899	-2.790	3.178
ma.S.L3	-0.5807	1.421	-0.409	0.683	-3.366	2.204
ma.S.L6	-0.2228	1.421	-0.157	0.875	-3.007	2.561
sigma2	5.744e+15	nan	nan	nan	nan	nan

Ljung-Box (L1) (Q): 1.84 Jarque-Bera (JB): 0.66  
 Prob(Q): 0.17 Prob(JB): 0.72  
 Heteroskedasticity (H): 0.19 Skew: -0.37  
 Prob(H) (two-sided): 0.02 Kurtosis: 3.15

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 3.73e+48. Standard errors may be unstable.





# SARIMAX Results

Dep. Variable: CRECIMIENTO BT No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood -494.076  
 Date: Wed, 23 Oct 2024 AIC 1006.153  
 Time: 16:22:46 BIC 1017.815  
 Sample: 01-31-2022 HQIC 1009.621  
 - 12-31-2024

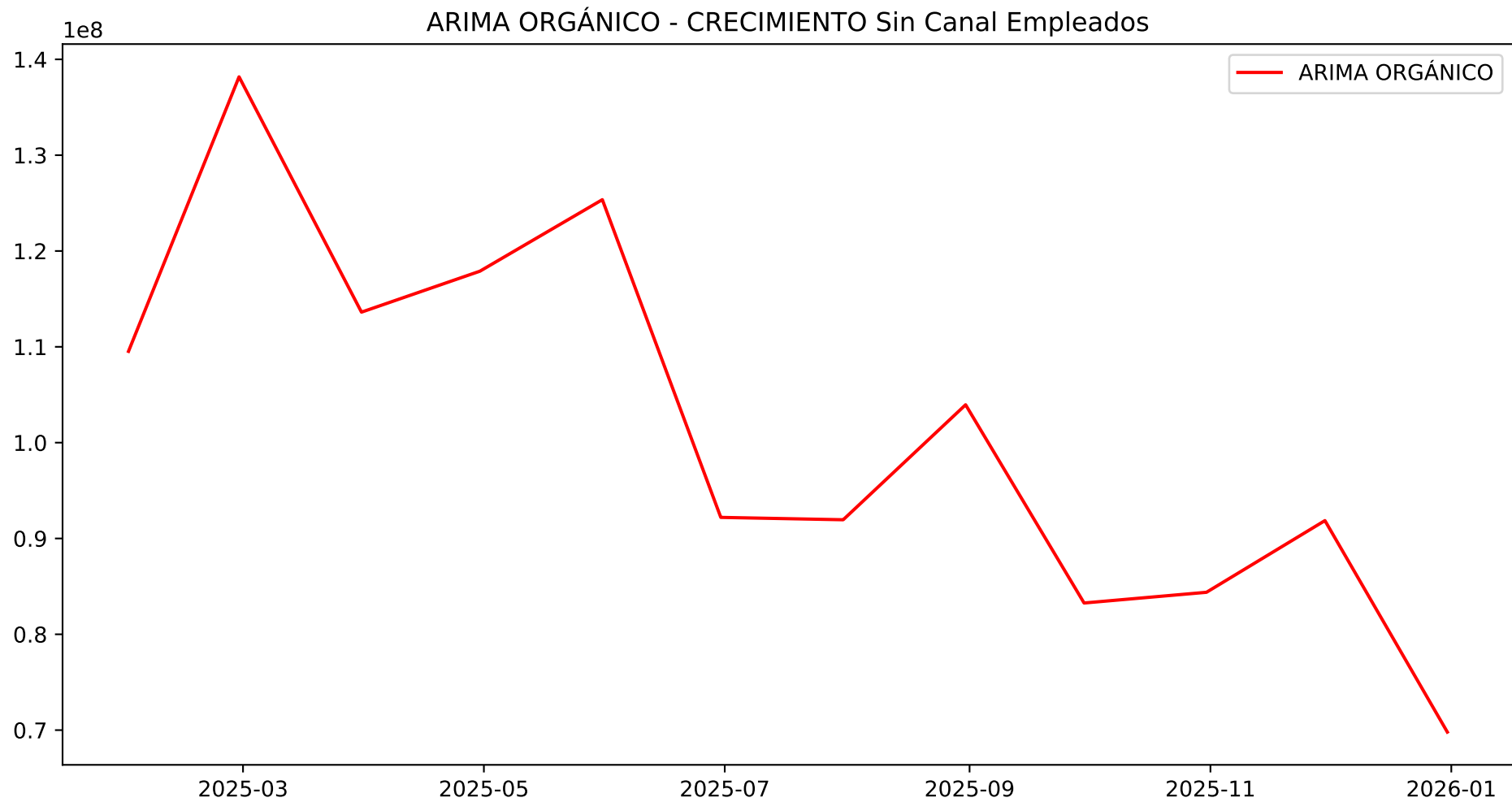
Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0.2819	0.489	0.577	0.564	-0.676	1.240
ar.L2	0.5550	0.336	1.652	0.099	-0.104	1.213
ma.L1	0.8094	0.424	1.908	0.056	-0.022	1.641
ma.L2	-0.1199	0.436	-0.275	0.783	-0.974	0.735
ar.S.L3	0.0301	0.447	0.067	0.946	-0.847	0.907
ar.S.L6	0.8283	0.409	2.026	0.043	0.027	1.630
ma.S.L3	0.0340	0.436	0.078	0.938	-0.820	0.888
ma.S.L6	-0.6301	0.489	-1.288	0.198	-1.589	0.329
sigma2	5.458e+14	nan	nan	nan	nan	nan

Ljung-Box (L1) (Q): 0.00 Jarque-Bera (JB): 1.32  
 Prob(Q): 1.00 Prob(JB): 0.52  
 Heteroskedasticity (H): 0.90 Skew: -0.12  
 Prob(H) (two-sided): 0.88 Kurtosis: 1.94

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 8.47e+46. Standard errors may be unstable.



# SARIMAX Results

```

=====
Dep. Variable:  CRECIMIENTO Sin Canal Empleados  No. Observations:      36
Model:          SARIMAX(2, 0, 2)x(2, 0, 2, 3)  Log Likelihood      -528.653
Date:           Wed, 23 Oct 2024  AIC          1075.306
Time:           16:22:48  BIC          1086.969
Sample:         01-31-2022  HQIC          1078.774
                - 12-31-2024

```

Covariance Type: opg

```

=====
              coef  std err          z      P>|z|    [0.025    0.975]
-----
ar.L1         0.4422    0.643     0.687    0.492   -0.819    1.703
ar.L2         0.3812    0.462     0.825    0.410   -0.525    1.287
ma.L1         0.7081    0.885     0.800    0.424   -1.027    2.443
ma.L2        -0.6214    1.013    -0.613    0.540   -2.608    1.365
ar.S.L3       0.3259    0.876     0.372    0.710   -1.390    2.042
ar.S.L6       0.4560    0.931     0.490    0.624   -1.370    2.281
ma.S.L3      -0.3819    0.946    -0.404    0.686   -2.236    1.472
ma.S.L6      -0.2230    1.047    -0.213    0.831   -2.275    1.829
sigma2       8.618e+15  2.99e-16  2.89e+31    0.000   8.62e+15  8.62e+15

```

```

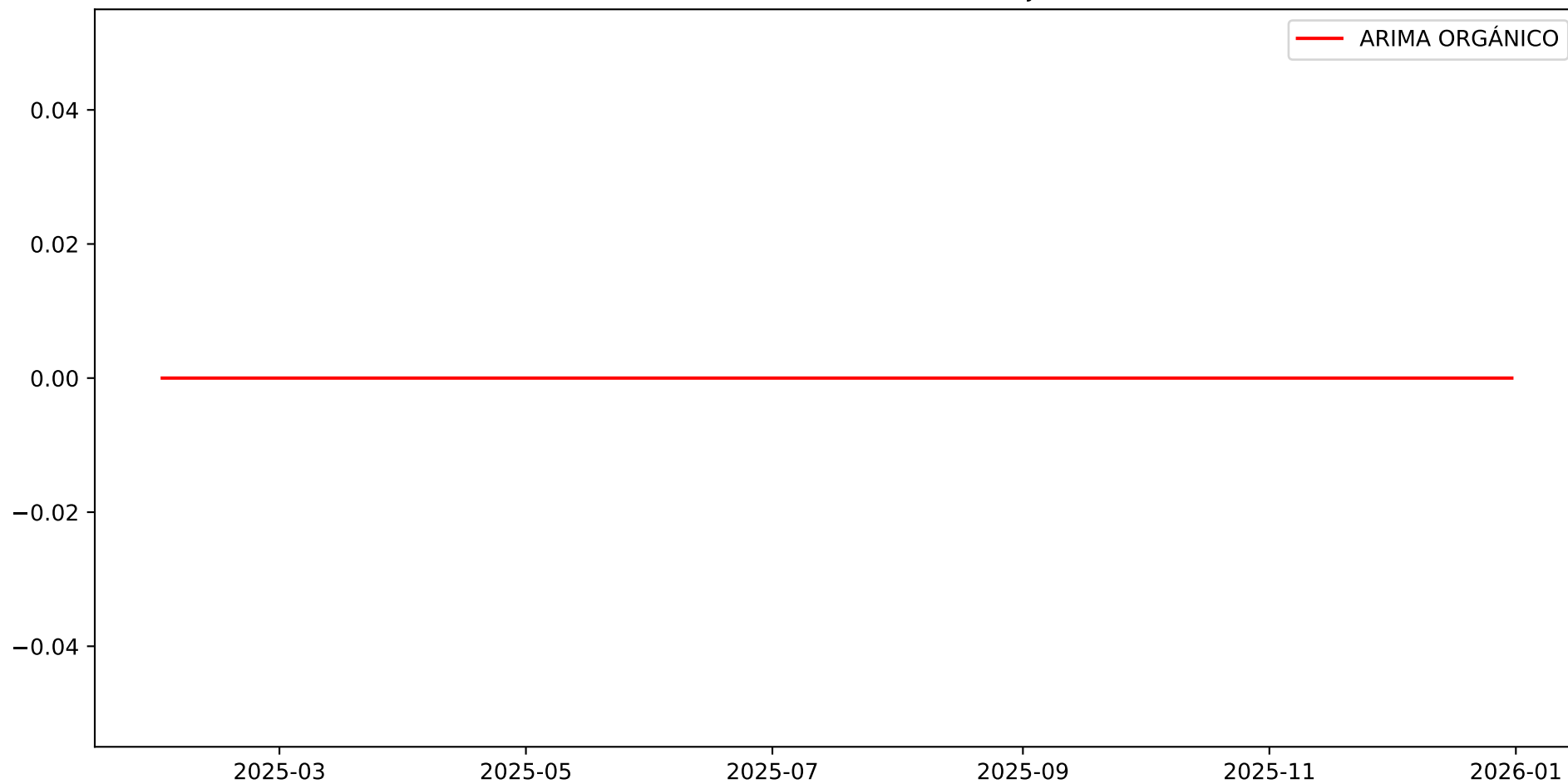
=====
Ljung-Box (L1) (Q):      0.67  Jarque-Bera (JB):      0.68
Prob(Q):                0.41  Prob(JB):              0.71
Heteroskedasticity (H):  0.22  Skew:              0.38
Prob(H) (two-sided):     0.03  Kurtosis:          3.19

```

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number 1.02e+48. Standard errors may be unstable.

ARIMA ORGÁNICO - CRECIMIENTO Tabajadores BT



# SARIMAX Results

Dep. Variable: CRECIMIENTO Tabajadores BT No. Observations: 36  
 Model: SARIMAX(2, 0, 2)x(2, 0, 2, 3) Log Likelihood 286.038  
 Date: Wed, 23 Oct 2024 AIC -554.075  
 Time: 16:22:49 BIC -542.413  
 Sample: 01-31-2022 HQIC -550.607  
 - 12-31-2024

Covariance Type: opg

	coef	std err	z	P> z	[0.025	0.975]
ar.L1	0	-0	nan	nan	0	0
ar.L2	0	-0	nan	nan	0	0
ma.L1	0	-0	nan	nan	0	0
ma.L2	0	-0	nan	nan	0	0
ar.S.L3	0	-0	nan	nan	0	0
ar.S.L6	0	-0	nan	nan	0	0
ma.S.L3	0	-0	nan	nan	0	0
ma.S.L6	0	-0	nan	nan	0	0
sigma2	1e-10	3.81e-10	0.262	0.793	-6.48e-10	8.48e-10

Ljung-Box (L1) (Q): nan Jarque-Bera (JB): nan  
 Prob(Q): nan Prob(JB): nan  
 Heteroskedasticity (H): nan Skew: nan  
 Prob(H) (two-sided): nan Kurtosis: nan

## Warnings:

- [1] Covariance matrix calculated using the outer product of gradients (complex-step).
- [2] Covariance matrix is singular or near-singular, with condition number inf. Standard errors may be unstable.