

# 西德有機化學藥品(股)公司

We Certify that the above analysis is true and correct and the results conformed to In-house specifications.

檢體批號	規格	結果	判定
P58234	氟化鈉(NaF)規格應 介於 0.2%±10% 相當氟離子(F) 904ppm ± 10%	919	符合
P58244		905	符合
P58254		886	符合
P58264		855	符合
P58274		853	符合
P58284		881	符合
P58294		862	符合
P58304		872	符合
P58314		861	符合
P58324		866	符合
P58334		878	符合
P58344		859	符合
P58354		895	符合
P58364		881	符合
P58374		885	符合
P58384		885	符合
P58394		890	符合
P58404		890	符合
P58414		888	符合

Compiled By/Date: yihui Lee / 2024.07.26 Approved By/Date: Cindy deng / 2024.07.26



# 漱口水之氟含量檢驗程序與紀錄

## 1. 檢測方法

含氟漱口水主要成分「氟離子濃度」係以氟電極棒 pHoenis Co. Fluoride and sodium ion selective electrodes(ISE) with EUTECH ION 2700/pH/mV/Temp meter 檢測。

## 2 檢測步驟

### 2.1 儀器電極校正

#### 2.1.1 氟離子標準液

(1) 1000ppm 氟離子標準液

(2) 100ppm 氟離子標準液取 1000 ppm 氟離子標準液 10ml 加水定量至 100ml。

(3) 10ppm 氟離子標準液取 100 ppm 氟離子標準液(F00AS02)10ml 加水定量至 100ml。

#### 2.1.2 檢量線校正

(1)以 10ppm、100ppm、1000ppm 各 2.5ml 及各加 2.5ml Fluoride ISA Tisabl 溶液進行電極校正。

(2)再以 10ppm、100ppm、1000ppm 各 2.5ml 及各加 2.5ml Fluoride ISA Tisabl(F00IS01)溶液，分別測量 10、100、1000ppm 三點之 ppm 值。

### (3) 試藥資訊

試藥名稱	有效期限
1000ppm 氟離子標準液(223045047)	2025.05.12
Fluoride ISA Tisabl(F00IS01)	2025.12.30

### (4) 氟離子標準液測量結果

10ppm	100ppm	1000ppm
10.1	102	1000

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## 2.2 漱口水檢品檢測

每瓶送檢漱口水各取 2.5mL，加入 2.5mL Fluoride ISA Tisabl，攪拌均勻並測其 ppm，結果如下表:(三重覆)

檢體批號	ppm			平均值(ppm)
P58234	927	920	909	919
P58244	902	909	905	905
P58254	884	884	891	886
P58264	856	853	856	855
P58274	849	853	856	853
P58284	880	884	880	881
P58294	856	866	863	862
P58304	856	880	880	872
P58314	860	863	860	861
P58324	866	866	866	866
P58334	873	880	880	878
P58344	853	860	863	859
P58354	894	898	894	895
P58364	873	884	887	881
P58374	884	887	884	885
P58384	884	884	887	885
P58394	891	894	884	890
P58404	884	894	891	890
P58414	887	891	887	888

以上檢品之產品氟化鈉(NaF)規格應介於 0.2%±10%

相當氟離子(F) 904ppm ± 10%

檢測者/日期: 林素鈴  
2024.07.26

# 漱口水之氟含量檢驗程序與紀錄

原始數據黏貼處:

-----  
ThermoFisher Scientific  
-----

Meter Model : ION 2700  
Serial No : 2721131  
Operator ID : \_\_\_\_\_

Signature : \_\_\_\_\_

-----  
pH Calibration Data  
-----

Not Calibrated .

-----  
mV Calibration Data  
-----

Not Calibrated .

-----  
Ion Calibration Data  
-----

Last Cal Date&Time:  
26-Jul-24 , 10:13:16

Ion Values	Slope
10	-58.9 mV
100	-57.8 mV
1000	

-----  
Measurement Data  
-----

- 1) 26-Jul-24 , 10:20:53  
Mode-Ion, Sample ID: 0  
10.1 ppm, -72.6 mV  
22.2 C ATC
- 2) 26-Jul-24 , 10:22:48  
Mode-Ion, Sample ID: 0  
102 ppm, -131.6 mV  
22.3 C ATC
- 3) 26-Jul-24 , 10:26:27  
Mode-Ion, Sample ID: 0  
1000 ppm, -189.0 mV  
22.4 C ATC

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P58-234

- 4) 26-Jul-24 , 11:11:58  
Mode-Ion, Sample ID: 0  
927 ppm, -187.1 mV  
22.4 C ATC
- 5) 26-Jul-24 , 11:14:25  
Mode-Ion, Sample ID: 0  
920 ppm, -186.9 mV  
22.4 C ATC
- 6) 26-Jul-24 , 11:17:11  
Mode-Ion, Sample ID: 0  
909 ppm, -186.6 mV  
22.4 C ATC
- 7) 26-Jul-24 , 11:19:13  
Mode-Ion, Sample ID: 0  
902 ppm, -186.4 mV  
22.4 C ATC
- 8) 26-Jul-24 , 11:20:27  
Mode-Ion, Sample ID: 0  
909 ppm, -186.6 mV  
22.4 C ATC
- 9) 26-Jul-24 , 11:22:51  
Mode-Ion, Sample ID: 0  
905 ppm, -186.5 mV  
22.4 C ATC
- 10) 26-Jul-24 , 11:24:23  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 11) 26-Jul-24 , 11:26:54  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 12) 26-Jul-24 , 11:34:31  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
22.3 C ATC
- 13) 26-Jul-24 , 11:35:47  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC
- 14) 26-Jul-24 , 11:36:37  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.4 C ATC
- 15) 26-Jul-24 , 11:37:39  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC

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P58-274

- 16) 26-Jul-24 , 11:39:31  
Mode-Ion, Sample ID: 0  
849 ppm, -184.9 mV  
22.4 C ATC
- 17) 26-Jul-24 , 11:40:41  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.4 C ATC
- 18) 26-Jul-24 , 11:41:51  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC
- 19) 26-Jul-24 , 11:43:20  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.4 C ATC
- 20) 26-Jul-24 , 11:44:23  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 21) 26-Jul-24 , 11:46:11  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 22) 26-Jul-24 , 11:48:05  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.3 C ATC
- 23) 26-Jul-24 , 11:49:54  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.3 C ATC
- 24) 26-Jul-24 , 11:51:39  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.3 C ATC
- 25) 26-Jul-24 , 11:53:37  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.3 C ATC
- 26) 26-Jul-24 , 11:54:46  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.3 C ATC
- 27) 26-Jul-24 , 11:56:11  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.3 C ATC

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# 漱口水之氟含量檢驗程序與紀錄

原始數據黏貼處：

P58-314

- 28) 26-Jul-24 , 11:58:04  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.3 C ATC
- 29) 26-Jul-24 , 11:59:20  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.3 C ATC
- 30) 26-Jul-24 , 12:01:00  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.3 C ATC
- 31) 26-Jul-24 , 12:02:37  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 32) 26-Jul-24 , 12:03:52  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 33) 26-Jul-24 , 12:04:17  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 34) 26-Jul-24 , 12:05:31  
Mode-Ion, Sample ID: 0  
873 ppm, -185.6 mV  
22.2 C ATC
- 35) 26-Jul-24 , 12:06:06  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 36) 26-Jul-24 , 12:08:02  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 37) 26-Jul-24 , 12:09:13  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.1 C ATC
- 38) 26-Jul-24 , 12:10:37  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.1 C ATC
- 39) 26-Jul-24 , 12:11:30  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.1 C ATC

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P58-354

- 40) 26-Jul-24 , 13:17:01  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.9 C ATC
- 41) 26-Jul-24 , 13:18:47  
Mode-Ion, Sample ID: 0  
898 ppm, -186.3 mV  
21.9 C ATC
- 42) 26-Jul-24 , 13:19:40  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
22.0 C ATC
- 43) 26-Jul-24 , 13:21:30  
Mode-Ion, Sample ID: 0  
873 ppm, -185.6 mV  
21.9 C ATC
- 44) 26-Jul-24 , 13:22:07  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.9 C ATC
- 45) 26-Jul-24 , 13:23:27  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.8 C ATC
- 46) 26-Jul-24 , 13:26:22  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 47) 26-Jul-24 , 13:27:59  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC
- 48) 26-Jul-24 , 13:29:03  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 49) 26-Jul-24 , 13:30:53  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 50) 26-Jul-24 , 13:31:48  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 51) 26-Jul-24 , 13:32:47  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC

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P58-394

- 52) 26-Jul-24 , 13:34:08  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.7 C ATC
- 53) 26-Jul-24 , 13:35:41  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.7 C ATC
- 54) 26-Jul-24 , 13:37:46  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 55) 26-Jul-24 , 13:39:18  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 56) 26-Jul-24 , 13:40:32  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.8 C ATC
- 57) 26-Jul-24 , 13:42:27  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.8 C ATC
- 58) 26-Jul-24 , 13:43:44  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.9 C ATC
- 59) 26-Jul-24 , 13:45:07  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.7 C ATC
- 60) 26-Jul-24 , 13:47:43  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC

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# 漱口水之氟含量檢驗程序與紀錄

原始數據黏貼處:

-----  
ThermoFisher Scientific  
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Meter Model : ION 2700  
Serial No : 2721131  
Operator ID : \_\_\_\_\_

Signature : \_\_\_\_\_

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pH Calibration Data  
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Not Calibrated .

-----  
mV Calibration Data  
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Not Calibrated .

-----  
Ion Calibration Data  
-----

Last Cal Date&Time:  
26-Jul-24 , 10:13:16

Ion Values	Slope
10	-58.9 mV
100	-57.8 mV
1000	

-----  
Measurement Data  
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- 1) 26-Jul-24 , 10:20:53  
Mode-Ion, Sample ID: 0  
10.1 ppm, -72.6 mV  
22.2 C ATC
- 2) 26-Jul-24 , 10:22:48  
Mode-Ion, Sample ID: 0  
102 ppm, -131.6 mV  
22.3 C ATC
- 3) 26-Jul-24 , 10:26:27  
Mode-Ion, Sample ID: 0  
1000 ppm, -189.0 mV  
22.4 C ATC

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*p58-234*

- 4) 26-Jul-24 , 11:11:58  
Mode-Ion, Sample ID: 0  
927 ppm, -187.1 mV  
22.4 C ATC
- 5) 26-Jul-24 , 11:14:25  
Mode-Ion, Sample ID: 0  
920 ppm, -186.9 mV  
22.4 C ATC
- 6) 26-Jul-24 , 11:17:11  
Mode-Ion, Sample ID: 0  
909 ppm, -186.6 mV  
22.4 C ATC
- 7) 26-Jul-24 , 11:19:13  
Mode-Ion, Sample ID: 0  
902 ppm, -186.4 mV  
22.4 C ATC
- 8) 26-Jul-24 , 11:20:27  
Mode-Ion, Sample ID: 0  
909 ppm, -186.6 mV  
22.4 C ATC
- 9) 26-Jul-24 , 11:22:51  
Mode-Ion, Sample ID: 0  
905 ppm, -186.5 mV  
22.4 C ATC
- 10) 26-Jul-24 , 11:24:23  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 11) 26-Jul-24 , 11:26:54  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 12) 26-Jul-24 , 11:34:31  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
22.3 C ATC
- 13) 26-Jul-24 , 11:35:47  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC
- 14) 26-Jul-24 , 11:36:37  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.4 C ATC
- 15) 26-Jul-24 , 11:37:39  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC

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*p58-274*

- 16) 26-Jul-24 , 11:39:31  
Mode-Ion, Sample ID: 0  
849 ppm, -184.9 mV  
22.4 C ATC
- 17) 26-Jul-24 , 11:40:41  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.4 C ATC
- 18) 26-Jul-24 , 11:41:51  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.4 C ATC
- 19) 26-Jul-24 , 11:43:20  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.4 C ATC
- 20) 26-Jul-24 , 11:44:23  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
22.3 C ATC
- 21) 26-Jul-24 , 11:46:11  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 22) 26-Jul-24 , 11:48:05  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.3 C ATC
- 23) 26-Jul-24 , 11:49:54  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.3 C ATC
- 24) 26-Jul-24 , 11:51:39  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.3 C ATC
- 25) 26-Jul-24 , 11:53:37  
Mode-Ion, Sample ID: 0  
856 ppm, -185.1 mV  
22.3 C ATC
- 26) 26-Jul-24 , 11:54:46  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.3 C ATC
- 27) 26-Jul-24 , 11:56:11  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.3 C ATC

*Lin 2024 07 26*

# 漱口水之氟含量檢驗程序與紀錄

原始數據黏貼處:

P58-314

- 28) 26-Jul-24 , 11:58:04  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.3 C ATC
- 29) 26-Jul-24 , 11:59:20  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.3 C ATC
- 30) 26-Jul-24 , 12:01:00  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.3 C ATC
- 31) 26-Jul-24 , 12:02:37  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 32) 26-Jul-24 , 12:03:52  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 33) 26-Jul-24 , 12:04:17  
Mode-Ion, Sample ID: 0  
866 ppm, -185.4 mV  
22.2 C ATC
- 34) 26-Jul-24 , 12:05:31  
Mode-Ion, Sample ID: 0  
873 ppm, -185.6 mV  
22.2 C ATC
- 35) 26-Jul-24 , 12:06:06  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 36) 26-Jul-24 , 12:08:02  
Mode-Ion, Sample ID: 0  
880 ppm, -185.8 mV  
22.2 C ATC
- 37) 26-Jul-24 , 12:09:13  
Mode-Ion, Sample ID: 0  
853 ppm, -185.0 mV  
22.1 C ATC
- 38) 26-Jul-24 , 12:10:37  
Mode-Ion, Sample ID: 0  
860 ppm, -185.2 mV  
22.1 C ATC
- 39) 26-Jul-24 , 12:11:30  
Mode-Ion, Sample ID: 0  
863 ppm, -185.3 mV  
22.1 C ATC

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P58-354

- 40) 26-Jul-24 , 13:17:01  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.9 C ATC
- 41) 26-Jul-24 , 13:18:47  
Mode-Ion, Sample ID: 0  
898 ppm, -186.3 mV  
21.9 C ATC
- 42) 26-Jul-24 , 13:19:40  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
22.0 C ATC
- 43) 26-Jul-24 , 13:21:30  
Mode-Ion, Sample ID: 0  
873 ppm, -185.6 mV  
21.9 C ATC
- 44) 26-Jul-24 , 13:22:07  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.9 C ATC
- 45) 26-Jul-24 , 13:23:27  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.8 C ATC
- 46) 26-Jul-24 , 13:26:22  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 47) 26-Jul-24 , 13:27:59  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC
- 48) 26-Jul-24 , 13:29:03  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 49) 26-Jul-24 , 13:30:53  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 50) 26-Jul-24 , 13:31:48  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 51) 26-Jul-24 , 13:32:47  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC

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P58-394

- 52) 26-Jul-24 , 13:34:08  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.7 C ATC
- 53) 26-Jul-24 , 13:35:41  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.7 C ATC
- 54) 26-Jul-24 , 13:37:46  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.7 C ATC
- 55) 26-Jul-24 , 13:39:18  
Mode-Ion, Sample ID: 0  
884 ppm, -185.9 mV  
21.8 C ATC
- 56) 26-Jul-24 , 13:40:32  
Mode-Ion, Sample ID: 0  
894 ppm, -186.2 mV  
21.8 C ATC
- 57) 26-Jul-24 , 13:42:27  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.8 C ATC
- 58) 26-Jul-24 , 13:43:44  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.9 C ATC
- 59) 26-Jul-24 , 13:45:07  
Mode-Ion, Sample ID: 0  
891 ppm, -186.1 mV  
21.7 C ATC
- 60) 26-Jul-24 , 13:47:43  
Mode-Ion, Sample ID: 0  
887 ppm, -186.0 mV  
21.7 C ATC

Lin 2024.09.26