



## Analytical Summary Report

Analysis Method: 9045C

Analyst By : Jignesh

Parameter: Corrosivity

Supervisor Review By : apatel

Run Number: LB89991

Temp.: 22.4 °C

BalanceID: WC SC-4

SLOPE.: 98.1

| Calibration Standards          | Chemtech Log# |
|--------------------------------|---------------|
| PH 4 BUFFER SOLUTION           | W2183         |
| buffer solution pH 7 yellow    | W2159         |
| PH 10.01 BUFFER,COLOR CD 475ML | W2154         |
| buffer solution pH 7 yellow    | W2219         |
| pH 2.00 Buffer                 | W2079         |
| Buffer Solution, PH12 (500ml)  | W2267         |

True Value of ICV = 7.00 Control Limits[+/- 0.1].

True Value of CCV1 = 2.01 Control Limits[+/- 0.1].

True Value of CCV2 = 12.01 Control Limits[+/- 0.1].

True Value of CCV3 = 2.01 Control Limits[+/- 0.1].

True Value of CCV4 = 12.02 Control Limits[+/- 0.1].

| Seq | LabID       | DF | Matrix | Weight (gm) | Volume (ml) | Result (pH) | Anal Date  | Anal Time |
|-----|-------------|----|--------|-------------|-------------|-------------|------------|-----------|
| 1   | CAL1        | 1  | Water  |             |             | 4.01        | 09/11/2017 | 09:30     |
| 2   | CAL2        | 1  | Water  |             |             | 7.01        | 09/11/2017 | 09:31     |
| 3   | CAL3        | 1  | Water  |             |             | 10.03       | 09/11/2017 | 09:33     |
| 4   | ICV         | 1  | Water  |             |             | 7.00        | 09/11/2017 | 09:35     |
| 5   | CCV1        | 1  | Water  |             |             | 2.02        | 09/11/2017 | 09:36     |
| 6   | I5159-12    | 1  | Solid  | 20.02       | 20          | 6.13        | 09/11/2017 | 09:37     |
| 7   | I5159-12DUP | 1  | Solid  | 20.03       | 20          | 6.14        | 09/11/2017 | 09:38     |
| 8   | I5159-13    | 1  | Solid  | 20.04       | 20          | 6.33        | 09/11/2017 | 09:40     |
| 9   | I5159-14    | 1  | Solid  | 20.02       | 20          | 6.69        | 09/11/2017 | 09:41     |
| 10  | I5159-15    | 1  | Solid  | 20.01       | 20          | 5.55        | 09/11/2017 | 09:42     |
| 11  | I5159-16    | 1  | Solid  | 20.04       | 20          | 7.48        | 09/11/2017 | 09:43     |
| 12  | I5159-17    | 1  | Solid  | 20.02       | 20          | 7.07        | 09/11/2017 | 09:44     |
| 13  | I5159-18    | 1  | Solid  | 20.03       | 20          | 8.52        | 09/11/2017 | 09:45     |
| 14  | I5159-19    | 1  | Solid  | 20.02       | 20          | 7.12        | 09/11/2017 | 09:46     |
| 15  | I5159-20    | 1  | Solid  | 20.03       | 20          | 10.61       | 09/11/2017 | 09:47     |
| 16  | CCV2        | 1  | Water  |             |             | 12.01       | 09/11/2017 | 09:48     |
| 17  | I5159-21    | 1  | Solid  | 20.02       | 20          | 10.55       | 09/11/2017 | 09:50     |
| 18  | I5159-22    | 1  | Solid  | 20.03       | 20          | 9.76        | 09/11/2017 | 09:51     |
| 19  | I5160-12    | 1  | Solid  | 20.02       | 20          | 8.26        | 09/11/2017 | 09:52     |
| 20  | I5160-12DUP | 1  | Solid  | 20.04       | 20          | 8.27        | 09/11/2017 | 09:53     |

| Seq | LabID       | DF | Matrix | Weight (gm) | Volume (ml) | Result (pH) | Anal Date  | Anal Time |
|-----|-------------|----|--------|-------------|-------------|-------------|------------|-----------|
| 21  | I5160-13    | 1  | Solid  | 20.03       | 20          | 7.53        | 09/11/2017 | 10:00     |
| 22  | I5160-14    | 1  | Solid  | 20.02       | 20          | 6.36        | 09/11/2017 | 10:03     |
| 23  | I5160-15    | 1  | Solid  | 20.01       | 20          | 6.74        | 09/11/2017 | 10:06     |
| 24  | I5160-16    | 1  | Solid  | 20.02       | 20          | 5.81        | 09/11/2017 | 10:07     |
| 25  | I5160-17    | 1  | Solid  | 20.03       | 20          | 6.26        | 09/11/2017 | 10:08     |
| 26  | I5160-18    | 1  | Solid  | 20.02       | 20          | 6.87        | 09/11/2017 | 10:10     |
| 27  | CCV3        | 1  | Water  |             |             | 2.02        | 09/11/2017 | 10:13     |
| 28  | I5160-19    | 1  | Solid  | 20.01       | 20          | 7.12        | 09/11/2017 | 10:16     |
| 29  | I5160-20    | 1  | Solid  | 20.04       | 20          | 5.48        | 09/11/2017 | 10:18     |
| 30  | I5160-21    | 1  | Solid  | 20.02       | 20          | 5.73        | 09/11/2017 | 10:20     |
| 31  | I5160-22    | 1  | Solid  | 20.02       | 20          | 8.10        | 09/11/2017 | 10:21     |
| 32  | I5182-09    | 1  | Solid  | 20.04       | 20          | 7.19        | 09/11/2017 | 10:22     |
| 33  | I5182-10    | 1  | Solid  | 20.03       | 20          | 6.89        | 09/11/2017 | 10:23     |
| 34  | I5182-11    | 1  | Solid  | 20.01       | 20          | 7.42        | 09/11/2017 | 10:25     |
| 35  | I5182-12    | 1  | Solid  | 20.03       | 20          | 8.31        | 09/11/2017 | 10:27     |
| 36  | I5182-12DUP | 1  | Solid  | 20.05       | 20          | 8.32        | 09/11/2017 | 10:30     |
| 37  | CCV4        | 1  | Water  |             |             | 12.01       | 09/11/2017 | 10:31     |

# WORKLIST(Hardcopy Internal Chain)

238999.1

WorkList Name : CORROSIONITY I5159

WorkList ID : 102759

Date : 9/11/2017 9:14:35 AM

| Due Date | Matrix | Sample   | Test        | Preservative | Customer | Storage Location | Customer Sample | Collect Date | Method |
|----------|--------|----------|-------------|--------------|----------|------------------|-----------------|--------------|--------|
|          | Solid  | I5159-12 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-5-1           | 09/07/2017   | 9045C  |
|          | Solid  | I5159-13 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-5-2           | 09/07/2017   | 9045C  |
|          | Solid  | I5159-14 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-9A-2          | 09/07/2017   | 9045C  |
|          | Solid  | I5159-15 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-9A-1          | 09/07/2017   | 9045C  |
|          | Solid  | I5159-16 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-9-2           | 09/07/2017   | 9045C  |
|          | Solid  | I5159-17 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-9-1           | 09/07/2017   | 9045C  |
|          | Solid  | I5159-18 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-42-A2         | 09/07/2017   | 9045C  |
|          | Solid  | I5159-19 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-42-A1         | 09/07/2017   | 9045C  |
|          | Solid  | I5159-20 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-41-A1-0-2.5   | 09/07/2017   | 9045C  |
|          | Solid  | I5159-21 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-41-A1-2.5-5   | 09/07/2017   | 9045C  |
|          | Solid  | I5159-22 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-41-A2         | 09/07/2017   | 9045C  |
|          | Solid  | I5160-12 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-6-2           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-13 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-6-1           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-14 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8-3           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-15 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-7-1           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-16 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-7-2           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-17 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8-2           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-18 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8-1           | 09/07/2017   | 9045C  |
|          | Solid  | I5160-19 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8A-1          | 09/07/2017   | 9045C  |
|          | Solid  | I5160-20 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8B-2          | 09/07/2017   | 9045C  |
|          | Solid  | I5160-21 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-8A-2          | 09/07/2017   | 9045C  |

Date/Time 09-11-17 9:14 PM

Received by: 38

Relinquished by: 38

Date/Time 09-11-17 12:30 PM

Received by: 38

Relinquished by: 38

1389991

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : CORROSIONITY I5159

WorkList ID : 102759

Date : 9/11/2017 9:14:35 AM

| Due Date | Matrix | Sample   | Test        | Preservative | Customer | Storage Location | Customer Sample | Collect Date | Method |
|----------|--------|----------|-------------|--------------|----------|------------------|-----------------|--------------|--------|
|          | Solid  | I5160-22 | Corrosivity | Cool 4 deg C | TECT01   | D61              | G-4             | 09/07/2017   | 9045C  |
|          | Solid  | I5182-09 | Corrosivity | Cool 4 deg C | TECT01   | D42              | G-3             | 09/08/2017   | 9045C  |
|          | Solid  | I5182-10 | Corrosivity | Cool 4 deg C | TECT01   | D42              | G-2             | 09/08/2017   | 9045C  |
|          | Solid  | I5182-11 | Corrosivity | Cool 4 deg C | TECT01   | D42              | G-1             | 09/08/2017   | 9045C  |
|          | Solid  | I5182-12 | Corrosivity | Cool 4 deg C | TECT01   | D42              | G-19            | 09/08/2017   | 9045C  |

Date/Time 09-11-17 9:14 AM  
 Received by: JN  
 Relinquished by: CR

Date/Time 09-11-17 12:30 PM  
 Received by: CR  
 Relinquished by: JR