

## Daily Analysis Runlog For Sequence/QC Batch ID # LB96218

Review By

Review On

SubDirectory

LB96218

Test :

Reactive Cyanide

| STD. NAME     | STD REF.#                                               |
|---------------|---------------------------------------------------------|
| ICAL Standard | WP65503,WP65504,WP65505,WP65506,WP65507,WP65508,WP65509 |
| ICV Standard  | WP65511                                                 |
| CCV Standard  | WP65510                                                 |
| ICSA Standard | N/A                                                     |
| CRI Standard  | N/A                                                     |
| LCS Standard  | N/A                                                     |
| Chk Standard  | WP64695,WP64696,WP65512                                 |

| Sr# | SampleID    | ClientID            | QcType | Date           | Comment | Status |
|-----|-------------|---------------------|--------|----------------|---------|--------|
| 1   | 0.0PPBCN    | 0.0PPBCN            | CAL1   | 06/22/18 09:03 |         | OK     |
| 2   | 5.0PPBCN    | 5.0PPBCN            | CAL2   | 06/22/18 09:03 |         | OK     |
| 3   | 10PPBCN     | 10PPBCN             | CAL3   | 06/22/18 09:03 |         | OK     |
| 4   | 50PPBCN     | 50PPBCN             | CAL4   | 06/22/18 09:03 |         | OK     |
| 5   | 100PPBCN    | 100PPBCN            | CAL5   | 06/22/18 09:03 |         | OK     |
| 6   | 250PPBCN    | 250PPBCN            | CAL6   | 06/22/18 09:03 |         | OK     |
| 7   | 500PPBCN    | 500PPBCN            | CAL7   | 06/22/18 09:03 |         | OK     |
| 8   | ICV1        | ICV1                | ICV    | 06/22/18 12:34 |         | OK     |
| 9   | ICB1        | ICB1                | ICB    | 06/22/18 12:34 |         | OK     |
| 10  | CCV1        | CCV1                | CCV    | 06/22/18 12:34 |         | OK     |
| 11  | CCB1        | CCB1                | CCB    | 06/22/18 12:34 |         | OK     |
| 12  | J3252-04    | TR-05-062118        | SAM    | 06/22/18 12:34 |         | OK     |
| 13  | J3252-04DUP | TR-05-062118DUP     | DUP    | 06/22/18 12:34 |         | OK     |
| 14  | J3635-01    | EPE-113-1(35-52)-CO | SAM    | 06/22/18 12:34 |         | OK     |
| 15  | J3636-01    | EPE-F-3A(35-72)-CO  | SAM    | 06/22/18 12:34 |         | OK     |
| 16  | J3637-01    | EPE-MX-5A(75-92)    | SAM    | 06/22/18 12:34 |         | OK     |
| 17  | J3642-04    | TEST-PIT-1          | SAM    | 06/22/18 12:34 |         | OK     |
| 18  | J3642-08    | TEST-PIT-2          | SAM    | 06/22/18 12:40 |         | OK     |
| 19  | J3645-01    | EPE-105-5(0-47)-CO  | SAM    | 06/22/18 12:40 |         | OK     |
| 20  | J3646-01    | EPE-106-7(3-72)-CO  | SAM    | 06/22/18 12:40 |         | OK     |
| 21  | CCV2        | CCV2                | CCV    | 06/22/18 12:40 |         | OK     |

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

**Daily Analysis Runlog For Sequence/QC Batch ID # LB96218**

|                  |                                                         |                         |     |                |  |    |
|------------------|---------------------------------------------------------|-------------------------|-----|----------------|--|----|
| Review By        |                                                         | Review On               |     |                |  |    |
| SubDirectory     |                                                         | Test : Reactive Cyanide |     |                |  |    |
| LB96218          |                                                         |                         |     |                |  |    |
| <b>STD. NAME</b> | <b>STD REF.#</b>                                        |                         |     |                |  |    |
| ICAL Standard    | WP65503,WP65504,WP65505,WP65506,WP65507,WP65508,WP65509 |                         |     |                |  |    |
| ICV Standard     | WP65511                                                 |                         |     |                |  |    |
| CCV Standard     | WP65510                                                 |                         |     |                |  |    |
| ICSA Standard    | N/A                                                     |                         |     |                |  |    |
| CRI Standard     | N/A                                                     |                         |     |                |  |    |
| LCS Standard     | N/A                                                     |                         |     |                |  |    |
| Chk Standard     | WP64695,WP64696,WP65512                                 |                         |     |                |  |    |
| 22               | CCB2                                                    | CCB2                    | CCB | 06/22/18 12:40 |  | OK |
| 23               | J3647-01                                                | EPE-105-4(3-67)-CO      | SAM | 06/22/18 12:40 |  | OK |
| 24               | PB110523BL                                              | PB110523BL              | MB  | 06/22/18 13:04 |  | OK |
| 25               | CCV3                                                    | CCV3                    | CCV | 06/22/18 13:04 |  | OK |
| 26               | CCB3                                                    | CCB3                    | CCB | 06/22/18 13:04 |  | OK |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |              |                 |                       |
|-------------------|--------------|-----------------|-----------------------|
| Client:           |              | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218      | Date Received:  | 6/21/2018 12:00:00 AM |
| Client Sample ID: | TR-05-062118 | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3252-04     | Matrix:         | Solid                 |
| Level (low/med):  | low          | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0011 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                       |                 |                       |
|-------------------|-----------------------|-----------------|-----------------------|
| Client:           |                       | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218               | Date Received:  | 5/24/2018 12:00:00 AM |
| Client Sample ID: | EPE-113-1(35-52)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3635-01              | Matrix:         | Solid                 |
| Level (low/med):  | low                   | % Solid:        | 100                   |

| Cas | Parameter        | Conc.   | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|---------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.00046 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218              | Date Received:  | 5/23/2018 12:00:00 AM |
| Client Sample ID: | EPE-F-3A(35-72)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3636-01             | Matrix:         | Solid                 |
| Level (low/med):  | low                  | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0027 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                  |                 |                       |
|-------------------|------------------|-----------------|-----------------------|
| Client:           |                  | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218          | Date Received:  | 5/10/2018 12:00:00 AM |
| Client Sample ID: | EPE-MX-5A(75-92) | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3637-01         | Matrix:         | Solid                 |
| Level (low/med):  | low              | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0036 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |            |                 |                       |
|-------------------|------------|-----------------|-----------------------|
| Client:           |            | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218    | Date Received:  | 6/21/2018 12:00:00 AM |
| Client Sample ID: | TEST-PIT-1 | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3642-04   | Matrix:         | Solid                 |
| Level (low/med):  | low        | % Solid:        | 84.6                  |

| Cas | Parameter        | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | -0    | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |            |                 |                       |
|-------------------|------------|-----------------|-----------------------|
| Client:           |            | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218    | Date Received:  | 6/21/2018 12:00:00 AM |
| Client Sample ID: | TEST-PIT-2 | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3642-08   | Matrix:         | Solid                 |
| Level (low/med):  | low        | % Solid:        | 83                    |

| Cas | Parameter        | Conc.   | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|---------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | -0.0025 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218              | Date Received:  | 6/12/2018 12:00:00 AM |
| Client Sample ID: | EPE-105-5(0-47)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3645-01             | Matrix:         | Solid                 |
| Level (low/med):  | low                  | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0056 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218              | Date Received:  | 6/14/2018 12:00:00 AM |
| Client Sample ID: | EPE-106-7(3-72)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3646-01             | Matrix:         | Solid                 |
| Level (low/med):  | low                  | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0034 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218              | Date Received:  | 6/20/2018 12:00:00 AM |
| Client Sample ID: | EPE-105-4(3-67)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3647-01             | Matrix:         | Solid                 |
| Level (low/med):  | low                  | % Solid:        | 100                   |

| Cas | Parameter        | Conc.  | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|-----|------------------|--------|------|----|-------|-----|------------|-------|------------|------------|----------|
|     | Reactive Cyanide | 0.0032 | U    | 1  | 0.025 |     | 0.05       | mg/Kg | 06/22/2018 | 06/22/2018 | 9012B    |



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 6/21/2018 12:00:00 AM |
| Project:          | LB96218              | Date Received:  | 6/20/2018 12:00:00 AM |
| Client Sample ID: | EPE-105-4(3-67)-COMP | SDG No.:        | LB96218               |
| Lab Sample ID:    | J3647-01             | Matrix:         | Solid                 |
| Level (low/med):  | low                  | % Solid:        | 100                   |

| Cas | Parameter | Conc. | Qua. | DF | MDL | LOD | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----|-----------|-------|------|----|-----|-----|------------|-------|-----------|-----------|----------|
|-----|-----------|-------|------|----|-----|-----|------------|-------|-----------|-----------|----------|

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits



## GENCHEM

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB96218

SDG No.: LB96218

Contract: \_\_\_\_\_ Lab Code: CHEM

Case No.: LB96218

SAS No.: LB96218

Initial Calibration Source: \_\_\_\_\_

Continuing Calibration Source: \_\_\_\_\_

---

| Sample ID | Analyte          | Result<br>mg/L | True Value | %<br>Recovery | Qual | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|------------------|----------------|------------|---------------|------|---------------------------|---|------------------|------------------|---------------|
| ICV1      | Reactive Cyanide | 0.096          | 0.099      | 97            |      | 85 - 115                  |   | 06/22/2018       | 12:34            | LB96218       |

---



## GENCHEM

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB96218

SDG No.: LB96218

Contract: \_\_\_\_\_ Lab Code: CHEM

Case No.: LB96218

SAS No.: LB96218

Initial Calibration Source: \_\_\_\_\_

Continuing Calibration Source: \_\_\_\_\_

| Sample ID | Analyte          | Result<br>mg/L | True Value | %<br>Recovery | Qual | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|------------------|----------------|------------|---------------|------|---------------------------|---|------------------|------------------|---------------|
| CCV1      | Reactive Cyanide | 0.25           | 0.25       | 100           |      | 90 - 110                  |   | 06/22/2018       | 12:34            | LB96218       |
| CCV2      | Reactive Cyanide | 0.25           | 0.25       | 100           |      | 90 - 110                  |   | 06/22/2018       | 12:40            | LB96218       |
| CCV3      | Reactive Cyanide | 0.26           | 0.25       | 104           |      | 90 - 110                  |   | 06/22/2018       | 13:04            | LB96218       |



**GENCHEM**

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** LB96218

SDG No.: LB96218

**Contract:**

Lab Code: CHEM

**Case No.:** LB96218

**SAS No.:** LB96218

| Sample ID | Analyte          | Result<br>mg/L | Acceptance<br>Limit | Conc<br>Qual | LOD | CRQL  | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|------------------|----------------|---------------------|--------------|-----|-------|---|------------------|------------------|---------------|
| ICB1      | Reactive Cyanide | 0.00087        | +/-0.005            | U            |     | 0.005 |   | 06/22/2018       | 12:34            | LB96218       |



**GENCHEM**

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** LB96218

SDG No.: LB96218

**Contract:**

Lab Code: CHEM

**Case No.:** LB96218

**SAS No.:** LB96218

| Sample ID | Analyte          | Result<br>mg/L | Acceptance<br>Limit | Conc<br>Qual | LOD | CRQL  | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|------------------|----------------|---------------------|--------------|-----|-------|---|------------------|------------------|---------------|
| CCB1      | Reactive Cyanide | 0.00054        | +/-0.005            | U            |     | 0.005 |   | 06/22/2018       | 12:34            | LB96218       |
| CCB2      | Reactive Cyanide | 0.00054        | +/-0.005            | U            |     | 0.005 |   | 06/22/2018       | 12:40            | LB96218       |
| CCB3      | Reactive Cyanide | 0.00016        | +/-0.005            | U            |     | 0.005 |   | 06/22/2018       | 13:04            | LB96218       |



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

|           |         |           |         |           |         |          |         |
|-----------|---------|-----------|---------|-----------|---------|----------|---------|
| Client:   | LB96218 | SDG No.:  | LB96218 |           |         |          |         |
| Contract: |         | Lab Code: | CHEM    | Case No.: | LB96218 | SAS No.: | LB96218 |

| Sample ID | Analyte | Result<br>mg/L | Acceptance<br>Limit | Conc<br>Qual | LOD | CRQL | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|---------|----------------|---------------------|--------------|-----|------|---|------------------|------------------|---------------|
|-----------|---------|----------------|---------------------|--------------|-----|------|---|------------------|------------------|---------------|



GENCHEM  
- 3b -  
PREPARATION BLANK SUMMARY

Client: LB96218

SDG No.: LB96218

Instrument: Konelab 20

| Sample ID  | Analyte          | Result<br>(mg/Kg) | Acceptance<br>Limit | Conc<br>Qual       | LOD<br>mg/Kg | CRQL<br>mg/Kg    | M | Analysis<br>Date         | Analysis<br>Time    | Run     |
|------------|------------------|-------------------|---------------------|--------------------|--------------|------------------|---|--------------------------|---------------------|---------|
| PB110523BL | Reactive Cyanide | SOLID<br>-0.0057  | <0.05               | Batch Number:<br>U |              | PB110523<br>0.05 |   | Prep Date:<br>06/22/2018 | 06/22/2018<br>13:04 | LB96218 |

# GENCHEM

- 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** LB96218      **Level:** LOW      **SDG No.:** LB96218  
**Contract:**                           **Lab Code:** CHEM      **Case No.:** LB96218      **SAS No.:** LB96218  
**Matrix:** Solid      **Sample ID:** J3252-04      **Client ID:** TR-05-062118DUP  
**Percent Solids for Sample:** 100      **Duplicate ID** J3252-04DUP      **Percent Solids for Spike Sample:** 100

| Analyte          | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M |
|------------------|-------|---------------------|------------------|---|---------------------|---|-----|------|---|
| Reactive Cyanide | mg/Kg | 20                  | 0.025            | U | 0.0024              | U |     |      |   |