

## Daily Analysis Runlog For Sequence/QC Batch ID # LB94647

|               |  |                                                         |  |                |  |  |
|---------------|--|---------------------------------------------------------|--|----------------|--|--|
| Review By     |  | Review On                                               |  |                |  |  |
| SubDirectory  |  | LB94647                                                 |  | Test : Cyanide |  |  |
| STD. NAME     |  | STD REF.#                                               |  |                |  |  |
| ICAL Standard |  | WP63723,WP63724,WP63725,WP63726,WP63727,WP63728,WP63729 |  |                |  |  |
| ICV Standard  |  | W1542                                                   |  |                |  |  |
| CCV Standard  |  | WP63730                                                 |  |                |  |  |
| ICSA Standard |  | N/A                                                     |  |                |  |  |
| CRI Standard  |  | N/A                                                     |  |                |  |  |
| LCS Standard  |  | WP62802                                                 |  |                |  |  |
| Chk Standard  |  | WP63732,WP59958,WP60878                                 |  |                |  |  |

| Sr# | SampleID    | ClientID        | QcType | Date           | Comment | Status |
|-----|-------------|-----------------|--------|----------------|---------|--------|
| 1   | 0.0PPBCN    | 0.0PPBCN        | CAL1   | 04/16/18 12:33 |         |        |
| 2   | 5.0PPBCN    | 5.0PPBCN        | CAL2   | 04/16/18 12:33 |         |        |
| 3   | 10PPBCN     | 10PPBCN         | CAL3   | 04/16/18 12:33 |         |        |
| 4   | 50PPBCN     | 50PPBCN         | CAL4   | 04/16/18 12:33 |         |        |
| 5   | 100PPBCN    | 100PPBCN        | CAL5   | 04/16/18 12:33 |         |        |
| 6   | 250PPBCN    | 250PPBCN        | CAL6   | 04/16/18 12:33 |         |        |
| 7   | 500PPBCN    | 500PPBCN        | CAL7   | 04/16/18 12:33 |         |        |
| 8   | ICV1        | ICV1            | ICV    | 04/16/18 13:10 |         |        |
| 9   | ICB1        | ICB1            | ICB    | 04/16/18 13:10 |         |        |
| 10  | CCV1        | CCV1            | CCV    | 04/16/18 13:10 |         |        |
| 11  | CCB1        | CCB1            | CCB    | 04/16/18 13:10 |         |        |
| 12  | PB108259BL  | PB108259BL      | MB     | 04/16/18 13:10 |         |        |
| 13  | PB108259BS  | PB108259BS      | LCS    | 04/16/18 13:10 |         |        |
| 14  | J2354-02    | WC-1-4PT-COMP   | SAM    | 04/16/18 13:10 |         |        |
| 15  | J2354-02DUP | WC-1-4PT-COMPDU | DUP    | 04/16/18 13:10 |         |        |
| 16  | J2354-02MS  | WC-1-4PT-COMPMS | MS     | 04/16/18 13:10 |         |        |
| 17  | J2354-02MSD | WC-1-4PT-COMPMS | MSD    | 04/16/18 13:17 |         |        |
| 18  | J2354-04    | WC-2-4PT-COMP   | SAM    | 04/16/18 13:17 |         |        |
| 19  | J2369-01    | RO-1-4          | SAM    | 04/16/18 13:17 |         |        |
| 20  | CCV2        | CCV2            | CCV    | 04/16/18 13:17 |         |        |
| 21  | CCB2        | CCB2            | CCB    | 04/16/18 13:17 |         |        |

## Daily Analysis Runlog For Sequence/QC Batch ID # LB94647

|               |              |                                                         |     |                |  |  |
|---------------|--------------|---------------------------------------------------------|-----|----------------|--|--|
| Review By     |              | Review On                                               |     |                |  |  |
| SubDirectory  |              | LB94647                                                 |     | Test : Cyanide |  |  |
| STD. NAME     |              | STD REF.#                                               |     |                |  |  |
| ICAL Standard |              | WP63723,WP63724,WP63725,WP63726,WP63727,WP63728,WP63729 |     |                |  |  |
| ICV Standard  |              | W1542                                                   |     |                |  |  |
| CCV Standard  |              | WP63730                                                 |     |                |  |  |
| ICSA Standard |              | N/A                                                     |     |                |  |  |
| CRI Standard  |              | N/A                                                     |     |                |  |  |
| LCS Standard  |              | WP62802                                                 |     |                |  |  |
| Chk Standard  |              | WP63732,WP59958,WP60878                                 |     |                |  |  |
| 22            | J2370-02     | CG-RO-721194                                            | SAM | 04/16/18 13:17 |  |  |
| 23            | J2370-04     | CG-RO-7211981                                           | SAM | 04/16/18 13:17 |  |  |
| 24            | J2370-05     | CG                                                      | SAM | 04/16/18 13:17 |  |  |
| 25            | J2393-01     | 3-4-DENSE-GRADE-                                        | SAM | 04/16/18 13:17 |  |  |
| 26            | J2394-01     | 1-1-2-DENSE-GRAD                                        | SAM | 04/16/18 13:17 |  |  |
| 27            | J2395-01     | 2-1-2-DENSE-GRAD                                        | SAM | 04/16/18 13:17 |  |  |
| 28            | PB108261BL   | PB108261BL                                              | MB  | 04/16/18 13:25 |  |  |
| 29            | PB108261BS   | PB108261BS                                              | LCS | 04/16/18 13:25 |  |  |
| 30            | J2387-10     | 20180238-FIELD-BL                                       | SAM | 04/16/18 13:25 |  |  |
| 31            | J2387-10DUP  | 20180238-FIELD-BL                                       | DUP | 04/16/18 13:25 |  |  |
| 32            | CCV3         | CCV3                                                    | CCV | 04/16/18 13:25 |  |  |
| 33            | CCB3         | CCB3                                                    | CCB | 04/16/18 13:25 |  |  |
| 34            | J2387-10MS   | 20180238-FIELD-BL                                       | MS  | 04/16/18 13:25 |  |  |
| 35            | J2387-10MSD  | 20180238-FIELD-BL                                       | MSD | 04/16/18 13:25 |  |  |
| 36            | LOWPB108259  | LOWPB108259                                             | SAM | 04/16/18 13:51 |  |  |
| 37            | HIGHPB108259 | HIGHPB108259                                            | SAM | 04/16/18 13:51 |  |  |
| 38            | CCV4         | CCV4                                                    | CCV | 04/16/18 13:52 |  |  |
| 39            | CCB4         | CCB4                                                    | CCB | 04/16/18 13:52 |  |  |



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## Report of Analysis

|                   |              |                 |         |
|-------------------|--------------|-----------------|---------|
| Client:           |              | Date Collected: |         |
| Project:          | LB94647      | Date Received:  |         |
| Client Sample ID: | HIGHPB108259 | SDG No.:        | LB94647 |
| Lab Sample ID:    | HIGHPB108259 | Matrix:         | WATER   |
| Level (low/med):  | low          | % Solid:        | 0       |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|-----------|------------|----------|
| 57-12-5 | Cyanide   | 0.49  |      | 1  | 0.003 |     | 0.005      | mg/L  |           | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |               |                 |                       |
|-------------------|---------------|-----------------|-----------------------|
| Client:           |               | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647       | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | WC-1-4PT-COMP | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2354-02      | Matrix:         | Solid                 |
| Level (low/med):  | low           | % Solid:        | 86                    |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.074 | J    | 1  | 0.038 |     | 0.28       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |               |                 |                       |
|-------------------|---------------|-----------------|-----------------------|
| Client:           |               | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647       | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | WC-2-4PT-COMP | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2354-04      | Matrix:         | Solid                 |
| Level (low/med):  | low           | % Solid:        | 80.3                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.063 | J    | 1  | 0.041 |     | 0.31       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |          |                 |                       |
|-------------------|----------|-----------------|-----------------------|
| Client:           |          | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647  | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | RO-1-4   | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2369-01 | Matrix:         | Solid                 |
| Level (low/med):  | low      | % Solid:        | 72.8                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.18  | J    | 1  | 0.045 |     | 0.34       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |              |                 |                       |
|-------------------|--------------|-----------------|-----------------------|
| Client:           |              | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647      | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | CG-RO-721194 | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2370-02     | Matrix:         | Solid                 |
| Level (low/med):  | low          | % Solid:        | 100                   |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 2.2   |      | 1  | 0.032 |     | 0.24       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |               |                 |                       |
|-------------------|---------------|-----------------|-----------------------|
| Client:           |               | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647       | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | CG-RO-7211981 | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2370-04      | Matrix:         | Solid                 |
| Level (low/med):  | low           | % Solid:        | 100                   |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.84  |      | 1  | 0.032 |     | 0.24       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |          |                 |                       |
|-------------------|----------|-----------------|-----------------------|
| Client:           |          | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647  | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | CG       | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2370-05 | Matrix:         | Solid                 |
| Level (low/med):  | low      | % Solid:        | 89.8                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 3.5   |      | 1  | 0.037 |     | 0.28       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |                      |                 |                       |
|-------------------|----------------------|-----------------|-----------------------|
| Client:           |                      | Date Collected: | 4/11/2018 12:00:00 AM |
| Project:          | LB94647              | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | 20180238-FIELD-BLANK | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2387-10             | Matrix:         | WATER                 |
| Level (low/med):  | low                  | % Solid:        | 0                     |

| Cas     | Parameter | Conc.   | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|---------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.00042 | U    | 1  | 0.003 |     | 0.005      | mg/L  | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |                         |                 |                       |
|-------------------|-------------------------|-----------------|-----------------------|
| Client:           |                         | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647                 | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | 3-4-DENSE-GRADE-AGG-RCA | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2393-01                | Matrix:         | Solid                 |
| Level (low/med):  | low                     | % Solid:        | 87.1                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.58  |      | 1  | 0.037 |     | 0.28       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |                           |                 |                       |
|-------------------|---------------------------|-----------------|-----------------------|
| Client:           |                           | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647                   | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | 1-1-2-DENSE-GRADE-AGG-RCA | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2394-01                  | Matrix:         | Solid                 |
| Level (low/med):  | low                       | % Solid:        | 89.1                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.21  | J    | 1  | 0.037 |     | 0.28       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |                           |                 |                       |
|-------------------|---------------------------|-----------------|-----------------------|
| Client:           |                           | Date Collected: | 4/13/2018 12:00:00 AM |
| Project:          | LB94647                   | Date Received:  | 4/13/2018 12:00:00 AM |
| Client Sample ID: | 2-1-2-DENSE-GRADE-AGG-RCA | SDG No.:        | LB94647               |
| Lab Sample ID:    | J2395-01                  | Matrix:         | Solid                 |
| Level (low/med):  | low                       | % Solid:        | 91.7                  |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date  | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|------------|------------|----------|
| 57-12-5 | Cyanide   | 0.5   |      | 1  | 0.034 |     | 0.26       | mg/Kg | 04/16/2018 | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |             |                 |         |
|-------------------|-------------|-----------------|---------|
| Client:           |             | Date Collected: |         |
| Project:          | LB94647     | Date Received:  |         |
| Client Sample ID: | LOWPB108259 | SDG No.:        | LB94647 |
| Lab Sample ID:    | LOWPB108259 | Matrix:         | WATER   |
| Level (low/med):  | low         | % Solid:        | 0       |

| Cas     | Parameter | Conc. | Qua. | DF | MDL   | LOD | LOQ / CRQL | Units | Prep Date | Date Ana.  | Ana Met. |
|---------|-----------|-------|------|----|-------|-----|------------|-------|-----------|------------|----------|
| 57-12-5 | Cyanide   | 0.01  |      | 1  | 0.003 |     | 0.005      | mg/L  |           | 04/16/2018 | 9012B    |



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## Report of Analysis

|                   |             |                 |         |
|-------------------|-------------|-----------------|---------|
| Client:           |             | Date Collected: |         |
| Project:          | LB94647     | Date Received:  |         |
| Client Sample ID: | LOWPB108259 | SDG No.:        | LB94647 |
| Lab Sample ID:    | LOWPB108259 | Matrix:         | WATER   |
| Level (low/med):  | low         | % Solid:        | 0       |

| 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: LB94647

SDG No.: LB94647

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

Case No.: LB94647

SAS No.: LB94647

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      | Cyanide | 0.24           | 0.25       | 96            |      | 90 - 110                  |   | 04/16/2018       | 13:10            | LB94647       |
| CCV2      | Cyanide | 0.24           | 0.25       | 96            |      | 90 - 110                  |   | 04/16/2018       | 13:17            | LB94647       |
| CCV3      | Cyanide | 0.24           | 0.25       | 96            |      | 90 - 110                  |   | 04/16/2018       | 13:25            | LB94647       |
| CCV4      | Cyanide | 0.25           | 0.25       | 100           |      | 90 - 110                  |   | 04/16/2018       | 13:52            | LB94647       |



**GENCHEM**

- 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** LB94647

SDG No.: LB94647

**Contract:**

Lab Code: CHEM

**Case No.:** LB94647

**SAS No.:** LB94647

| 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      | Cyanide | 0.00087        | +/-0.005            | U            |     | 0.005 |   | 04/16/2018       | 13:10            | LB94647       |

| 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      | Cyanide | 0.00039        | +/-0.005            | U            |     | 0.005 |   | 04/16/2018       | 13:10            | LB94647       |
| CCB2      | Cyanide | 0.00054        | +/-0.005            | U            |     | 0.005 |   | 04/16/2018       | 13:17            | LB94647       |
| CCB3      | Cyanide | 0.00062        | +/-0.005            | U            |     | 0.005 |   | 04/16/2018       | 13:25            | LB94647       |
| CCB4      | Cyanide | 0.00094        | +/-0.005            | U            |     | 0.005 |   | 04/16/2018       | 13:52            | LB94647       |



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:

LB94647

SDG No.:

LB94647

Contract:

Lab Code:

CHEM

Case No.:

LB94647

SAS No.:

LB94647

| 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:** LB94647

**SDG No.:** LB94647

**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     |
|------------|---------|-------------------|---------------------|---------------|--------------|---------------|---|------------------|------------------|---------|
| PB108259BL | Cyanide | SOLID             |                     | Batch Number: |              | PB108259      |   | Prep Date:       | 04/16/2018       |         |
|            |         | 0.03              | <0.24               | U             |              | 0.24          |   | 04/16/2018       | 13:10            | LB94647 |
| Sample ID  | Analyte | Result<br>(mg/L)  | Acceptance<br>Limit | Conc<br>Qual  | LOD<br>mg/L  | CRQL<br>mg/L  | M | Analysis<br>Date | Analysis<br>Time | Run     |
| PB108261BL | Cyanide | WATER             |                     | Batch Number: |              | PB108261      |   | Prep Date:       | 04/16/2018       |         |
|            |         | -0.00025          | <0.005              | U             |              | 0.005         |   | 04/16/2018       | 13:25            | LB94647 |



GENCHEM  
- 5a -  
MATRIX SPIKE SUMMARY

client: LB94647 level: low sdg no.: LB94647  
contract: lab code: CHEM case no.: LB94647 sas no.: LB94647  
matrix: Solid sample id: J2354-02 client id: WC-1-4PT-COMPMS  
Percent Solids for Sample: 86 Spiked ID: J2354-02MS Percent Solids for Spike Sample: 86

| Analyte | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|---------|-------|------------------------|------------------|---|------------------|---|----------------|---------------|------|---|
| Cyanide | mg/Kg | 75 - 125               | 1.9              |   | 0.074            | J | 2.3            | 79            |      |   |

GENCHEM  
- 5a -  
MATRIX SPIKE DUPLICATE SUMMARY

client: LB94647 level: low sdg no.: LB94647  
contract: lab code: CHEM case no.: LB94647 sas no.: LB94647  
matrix: Solid sample id: J2354-02 client id: WC-1-4PT-COMPMSD  
Percent Solids for Sample: 86 Spiked ID: J2354-02MSD Percent Solids for Spike Sample: 86

| Analyte | Units | Acceptance<br>Limit %R | MSD<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|---------|-------|------------------------|---------------|---|------------------|---|----------------|---------------|------|---|
| Cyanide | mg/Kg | 75 - 125               | 1.9           |   | 0.074            | J | 2.3            | 79            |      |   |



GENCHEM  
- 5a -  
MATRIX SPIKE SUMMARY

client: LB94647 level: low sdg no.: LB94647  
contract: lab code: CHEM case no.: LB94647 sas no.: LB94647  
matrix: WATER sample id: J2387-10 client id: 20180238-FIELD-BLANKMS  
Percent Solids for Sample: 0 Spiked ID: J2387-10MS Percent Solids for Spike Sample: 0

| Analyte | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|---------|-------|------------------------|------------------|---|------------------|---|----------------|---------------|------|---|
| Cyanide | mg/L  | 75 - 125               | 0.032            |   | 0.003            | U | 0.04           | 80            |      |   |



GENCHEM  
- 5a -  
MATRIX SPIKE DUPLICATE SUMMARY

client: LB94647 level: low sdg no.: LB94647  
contract: lab code: CHEM case no.: LB94647 sas no.: LB94647  
matrix: WATER sample id: J2387-10 client id: 20180238-FIELD-BLANKMSD  
Percent Solids for Sample: 0 Spiked ID: J2387-10MSD Percent Solids for Spike Sample: 0

| Analyte | Units | Acceptance<br>Limit %R | MSD<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|---------|-------|------------------------|---------------|---|------------------|---|----------------|---------------|------|---|
| Cyanide | mg/L  | 75 - 125               | 0.032         |   | 0.003            | U | 0.04           | 80            |      |   |

# GENCHEM

- 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** LB94647      **Level:** LOW      **SDG No.:** LB94647  
**Contract:**                           **Lab Code:** CHEM      **Case No.:** LB94647      **SAS No.:** LB94647  
**Matrix:** Solid      **Sample ID:** J2354-02      **Client ID:** WC-1-4PT-COMPDUP  
**Percent Solids for Sample:** 86      **Duplicate ID** J2354-02DUP      **Percent Solids for Spike Sample:** 86

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M |
|---------|-------|---------------------|------------------|---|---------------------|---|-----|------|---|
| Cyanide | mg/Kg | 20                  | 0.074            | J | 0.042               | J | 55  | *    |   |

# GENCHEM

- 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** LB94647      **Level:** LOW      **SDG No.:** LB94647  
**Contract:**                           **Lab Code:** CHEM      **Case No.:** LB94647      **SAS No.:** LB94647  
**Matrix:** Solid      **Sample ID:** J2354-02MS      **Client ID:** WC-1-4PT-COMPMSD  
**Percent Solids for Sample:** 86      **Duplicate ID** J2354-02MSD      **Percent Solids for Spike Sample:** 86

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M |
|---------|-------|---------------------|------------------|---|---------------------|---|-----|------|---|
| Cyanide | mg/Kg | 20                  | 1.9              |   | 1.9                 |   | 0   |      |   |

# GENCHEM

- 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** LB94647      **Level:** LOW      **SDG No.:** LB94647  
**Contract:**                           **Lab Code:** CHEM      **Case No.:** LB94647      **SAS No.:** LB94647  
**Matrix:** WATER      **Sample ID:** J2387-10      **Client ID:** 20180238-FIELD-BLANKDUP  
**Percent Solids for Sample:** 0      **Duplicate ID** J2387-10DUP      **Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M |
|---------|-------|---------------------|------------------|---|---------------------|---|-----|------|---|
| Cyanide | mg/L  | 20                  | 0.003            | U | 0.00053             | U |     |      |   |

# GENCHEM

- 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** LB94647      **Level:** LOW      **SDG No.:** LB94647  
**Contract:**                           **Lab Code:** CHEM      **Case No.:** LB94647      **SAS No.:** LB94647  
**Matrix:** WATER      **Sample ID:** J2387-10MS      **Client ID:** 20180238-FIELD-BLANKMSD  
**Percent Solids for Sample:** 0      **Duplicate ID** J2387-10MSD      **Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---------|-------|------------------|---------------|---|------------------|---|-----|------|---|
| Cyanide | mg/L  | 20               | 0.032         |   | 0.032            |   | 0   |      |   |



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB94647

SDG No.: LB94647

Contract:

Lab Code: CHEM

Case No.: LB94647

SAS No.: LB94647

| Analyte               | Units | True Value | Result | C | %<br>Recovery | Acceptance<br>Limits | M |
|-----------------------|-------|------------|--------|---|---------------|----------------------|---|
| PB108259BS<br>Cyanide | mg/Kg | 5          | 4.9    |   | 98            | 85 - 115             |   |



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB94647

SDG No.: LB94647

Contract:

Lab Code: CHEM

Case No.: LB94647

SAS No.: LB94647

| Analyte               | Units | True Value | Result | C | %<br>Recovery | Acceptance<br>Limits | M |
|-----------------------|-------|------------|--------|---|---------------|----------------------|---|
| PB108261BS<br>Cyanide | mg/L  | 0.1        | 0.095  |   | 95            | 85 - 115             |   |