

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

| Client: LB86898 | | | SDG No.: | LB86898 | |
|--------------------------------|-----------|------|-----------|---------|------------------|
| Contract: | Lab Code: | CHEM | Case No.: | LB86898 | SAS No.: LB86898 |
| Initial Calibration Source: | | | | | |
| Continuing Calibration Source: | | | | | |

| | | Result mg/L | True Value | % | % | Acceptance | | Analysis | Analysis | Run |
|-----------|--------------|----------------|------------|----------|-----|-------------|---|------------|----------|---------|
| Sample ID | Analyte | | | Recovery | RSD | Window (%R) | М | Date | Time | Number |
| ICV1 | Ammonia as N | 0.99 | 1 | 99 | 0 | 90 - 110 | | 04/14/2017 | 14:38 | LB86898 |



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INITIAL AND CONTINUING CALIBRATION VERIFICATION

| Client: LB86898 | | | SDG No.: | LB86898 | |
|--------------------------------|-----------|------|-----------|---------|------------------|
| Contract: | Lab Code: | CHEM | Case No.: | LB86898 | SAS No.: LB86898 |
| Initial Calibration Source: | | - | | | |
| Continuing Calibration Source: | | | | | |

| | | Result mg/L | True Value | % | % | Acceptance | | Analysis | Analysis | Run |
|-----------|--------------|----------------|------------|----------|-----|-------------|---|------------|----------|---------|
| Sample ID | Analyte | | | Recovery | RSD | Window (%R) | М | Date | Time | Number |
| | | | | | | | | | | |
| CCV1 | Ammonia as N | 0.99 | 1 | 99 | 0 | 90 - 110 | | 04/14/2017 | 14:38 | LB86898 |
| CCV2 | Ammonia as N | 0.98 | 1 | 98 | 0 | 90 - 110 | | 04/14/2017 | 14:38 | LB86898 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: <u>I</u> Contract: | _B86898 | Lab Code | : CHEM | | | No.: LB86898 | SA | S No.: <u>LB</u> | 86898 |
|-------------------------------|--------------|----------------|---------------------|--------------|-----|---------------------|------------------|------------------|---------------|
| Sample ID | Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CRQL M | Analysis Date | Analysis Time | Run Number |
| ICB1 | Ammonia as N | 0.041 | +/-0.1 | J | | 0.1 | 04/14/2017 | 14:38 | LB86898 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: L | .B86898 | | | | SDO | G No.: <u>LB</u> | 86898 | | | |
|--------------|------------------------------|----------------|---------------------|--------------|-------|------------------|-------|--------------------------|------------------|--------------------|
| Contract: | | Lab Code | : <u>CHEM</u> | | . Cas | e No.: <u>LB</u> | 86898 | SA | S No.: LB | 86898 |
| Sample ID | Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CRQL | М | Analysis Date | Analysis Time | Run Number |
| CCB1 CCB2 | Ammonia as N Ammonia as N | 0.046 0.04 | +/-0.1 +/-0.1 | J J | | 0.1 | | 04/14/2017 04/14/2017 | 14:38 14:43 | LB86898 LB86898 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: L | B86898 | | | | SDG | S No.: | LB86898 | | | |
|-----------|---------|----------------|---------------------|--------------|------|--------|---------|------------------|------------------|---------------|
| Contract: | | Lab Code: | CHEM | | Case | e No.: | LB86898 | _ | SAS No.: LB | 86898 |
| Sample ID | Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CRQ | L M | Analysis Date | Analysis Time | Run Number |



Report of Analysis

| Client: | | Date Collected: | 4/11/2017 12:00:00 AM |
|-------------------|-----------------------|----------------------------|-----------------------|
| Project: | LB86898 | Date Received: | 4/12/2017 12:00:00 AM |
| Client Sample ID: | EME-BW-PLANTINGSOIL | SDG No.: | LB86898 |
| Lab Sample ID: | I2663-01 | Matrix: | Solid |
| Level (low/med): | low | % Solid: | 79.7 |
| Cas Parameter | Conc. Qua. DF MDL LOD | LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N | 35.9 | 1 2.1 | 6 | mg/Kg 04/13/2017 | 04/14/2017 SM4500-NH3 |
|--------------|------|-------|---|------------------|-----------------------|



Report of Analysis

| Client: | | Date Collected: | 4/11/2017 12:00:00 AM |
|-------------------|----------------------|------------------------------|-----------------------|
| Project: | LB86898 | Date Received: | 4/12/2017 12:00:00 AM |
| Client Sample ID: | EME-PRODUCED-4-10 | SDG No.: | LB86898 |
| Lab Sample ID: | I2666-01 | Matrix: | Solid |
| Level (low/med): | low | % Solid: | 79.5 |
| Cas Parameter | Conc. Qua. DF MDL LO | D LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N | 29.9 | 1 2.1 | 6 | mg/Kg 04/13/2017 | 04/14/2017 SM4500-NH3 |
|--------------|------|-------|---|------------------|-----------------------|



Report of Analysis

| Client: | | Date Collected: | 4/11/2017 12:00:00 AM |
|-------------------|---------------------|--------------------------------|-----------------------|
| Project: | LB86898 | Date Received: | 4/12/2017 12:00:00 AM |
| Client Sample ID: | EME-PRODUCED-4-10 | SDG No.: | LB86898 |
| Lab Sample ID: | 12666-01 | Matrix: | Solid |
| Level (low/med): | low | % Solid: | 79.5 |
| 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 | | J = Estimated Value |
| LOQ = Limit of Quantitation | | B = Analyte Found in Associated Method Blank |
| MDL = Method Detection Limit | | * = indicates the duplicate analysis is not within control limits. |
| LOD = Limit of Detection | | E = Indicates the reported value is estimated because of the presence |
| D = Dilution | | of interference. |

Q = indicates LCS control criteria did not meet requirements

OR = Over Range

N =Spiked sample recovery not within control limits



GENCHEM - 3b -PREPARATION BLANK SUMMARY

Client: LB86898

SDG No.: LB86898

Instrument: Konelab 20

| Sample ID | Analyte | Result (mg/Kg) | Acceptance Limit | Conc Qual | LOD mg/Kg | CRQL mg/Kg | М | Analysis Date | Analysis Time | Run |
|-----------|--------------|-------------------|---------------------|--------------|--------------|---------------|---|------------------|------------------|---------|
| PB98244BL | | SOLID | | Batch Nu | mber: | PB98244 | | Prep Date: | 04/13/20 |)17 |
| | Ammonia as N | 2 | <5 | J | | 5 | | 04/14/2017 | 14:38 | LB86898 |



GENCHEM - 5a -MATRIX SPIKE SUMMARY

| client: LB8 | 6898 | | lev | el: | low | | sdg no.: | LB86898 | | | |
|----------------|-------------|------------|--------|--------|---------------|----|---------------|-----------------|--------|----------------|---------|
| contract: | | | lab | o code | : <u>CHEM</u> | [| case no.: | LB86898 | sa | as no.: | LB86898 |
| matrix: | Solid | | sample | id: | I2663-01 | | client id: | EME-BW-PI | LANTIN | <u>GS</u> OILM | IS |
| Percent Solids | for Sample: | 79.7 | Spiked | ID: | I2663-01N | 4S | Percent Solid | ls for Spike Sa | mple: | 79 | .7 |
| | | Acceptance | Spiked | | Sample | | Spike | % | | | |
| Analyte | Units | Limit %R | Result | С | Result | С | Added | Recovery | Qual | Μ | |
| Ammonia as N | mg/Kg | 75 - 125 | 98.7 | | 35.9 | | 60.9 | 103 | | | |



GENCHEM - 5a -MATRIX SPIKE DUPLICATE SUMMARY

| client: LB8 | 6898 | | lev | el: | low | | sdg no.: | LB86898 | | | |
|------------------|-------------|------------|--------|--------|-----------------|-----|---------------|-----------------|-------|----------------|---------|
| contract: | | | lab | o code | : <u>CHEM</u> | [| case no.: | LB86898 | sa | as no.: | LB86898 |
| matrix: | Solid | | sample | id: | <u>I2663-01</u> | | client id: | EME-BW-PL | ANTIN | <u>GS</u> OILM | SD |
| Percent Solids f | for Sample: | 79.7 | Spiked | ID: | I2663-01N | ASD | Percent Solid | ls for Spike Sa | mple: | 79 | .7 |
| | | Acceptance | MSD | | Sample | | Spike | % | | | |
| Analyte | Units | Limit %R | Result | С | Result | С | Added | Recovery | Qual | Μ | |
| Ammonia as N | mg/Kg | 75 - 125 | 100 | | 35.9 | | 61.5 | 104 | | | |



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DUPLICATE SAMPLE SUMMARY

| Client: LB | 86898 | | Level: L(| OW | SDC | G No.: | LB86898 | | | |
|----------------|-------------|------------|-----------------|-----------|-----------|----------|--------------|--------|---------|---------|
| Contract: | | | Lab Code: | CHEM | Cas | e No.: | LB86898 | S | AS No.: | LB86898 |
| Matrix: | Solid | | Sample ID: 12 | 663-01 | Client l | D: | EME-BW-P | LANTIN | GSOILDU | JP |
| Percent Solids | for Sample: | 79.7 | Duplicate ID 12 | 663-01DUP | Percent | t Solids | for Spike Sa | ample: | 79. | 7 |
| | | Acceptance | Sample | | Duplicate | | | | | |
| Analyte | Units | Limit | Result | С | Result | С | RPD | Qual | Μ | |
| Ammonia as N | mg/Kg | 20 | 35.9 | | 36.1 | | 1 | | | |

"A control limit of +20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"



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DUPLICATE SAMPLE SUMMARY

| Client: LB8 | 36898 | | Level: LC |)W | SDG | No.: | LB86898 | | | | |
|-----------------------|-------------|------------|------------------|-----------|-----------|--------|--------------|--------|---------|---------|--|
| Contract: | | | Lab Code: | CHEM | Case | e No.: | LB86898 | S | AS No.: | LB86898 | |
| Matrix: | Solid | | Sample ID: 126 | 663-01MS | Client I | D: | EME-BW-PI | LANTIN | GSOILMS | SD | |
| Percent Solids | for Sample: | 79.7 | Duplicate ID 126 | 663-01MSD | Percent | Solids | for Spike Sa | mple: | 79. | 7 | |
| | | Acceptance | Sample | | Duplicate | | | | | | |
| Analyte | Units | Limit | Result | С | Result | С | RPD | Qual | Μ | | |
| Ammonia as N | mg/Kg | 20 | 98.7 | | 100 | | 1 | | | | |

"A control limit of +20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"



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LABORATORY CONTROL SAMPLE SUMMARY

| Client: LB868 | 98 | | | | SDG No.: | LB86898 | | |
|----------------------|-------|------------|-----------|------|---------------|--------------------|----------|---------|
| Contract: | | | Lab Code: | CHEM | Case No.: | LB86898 | SAS No.: | LB86898 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | % | Acceptar | ıce | |
| Analyte | Units | True Value | Result | С | % Recovery | Acceptar Limits | | M |
| Analyte PB98244BS | Units | True Value | Result | C | | - | | М |