

**BOD5 LOG****Analysis Date:** 06/13/2019**QC BATCH ID:** LB103410**ANALYST:** ARIEL**BOD Water:** WP75447**SUPERVISOR:** apatel**Starch:** w2379**MANGANOUS SULFATE SOLUTION:** W2520**Conc Sulfuric Acid:** W2482**Alkaline Iodide Azide:** W2472**POLYSEED:** WP75449**Sodium Thiosulfate, 0.025N:** WP74519**GGA:** WP75448**NaOH, 0.25N:** WP66873**Chlorine Strips:** W2429**IncubatorID:** Incubator-3**pH Strips:** W2350**Zero DO:** WP754450

| Lab SampleID | Client ID | Bottle No. | VOL. ML | Initial Reading (ML) | Final Reading (ML) | Difference | Average |
|--------------|-----------|------------|---------|----------------------|--------------------|------------|---------|
| WINKLER 1    | WINKLER 1 | 1          | 300     | 0.0                  | 8.8                | 8.8        | 8.6     |
| WINKLER 2    | WINKLER 2 | 2          | 300     | 8.8                  | 17.2               | 8.4        | 8.6     |

Meter Calibration1 : 8.6Zero DO Reading1 : 0.02 mg/L (<=0.2 Criteria)**After Incubation**Meter Calibration2 : 8.6Zero DO Reading2 : 0.02 mg/L (<=0.2 Criteria)

QC BATCH ID: LB103410

INCUBATOR TEMP IN(C): 20.8

INCUBATOR TEMP OUT(C): 20.8

TIME IN: 15:30

TIME OUT: 11:30

DATE IN: 06/13/2019

DATE OUT: 06/18/2019

| Lab SampleID | Bottle No. | Check CL | Initial PH | Final PH | Temp °C | Sam Vol. (mL) | D.O.1 Initial | D.O.2 Final | Depletion | BOD Result (mg/L) | Avg Result (mg/L) | Comment |
|--------------|------------|----------|------------|----------|---------|---------------|---------------|-------------|-----------|-------------------|-------------------|---------|
| LB103410BL   | 1          | No       | 6.0        | N/A      | 20.10   | 300           | 8.59          | 8.58        | 0.01      | 0.01              | 0.01              |         |
| POLYSEED     | 1          |          |            |          |         | 10            | 8.52          | 2.74        | 5.78      | 1.16              | 1                 |         |
| POLYSEED     | 2          |          |            |          |         | 15            | 8.49          | 2.19        | 6.3       | 0.84              |                   |         |
| POLYSEED     | 3          |          |            |          |         | 20            | 8.43          | 0.38        | -         | 0                 |                   |         |
| GGA          | 1          |          |            |          |         | 6             | 8.52          | 4.02        | 4.5       | 175               | 175               |         |
| GGA          | 2          |          |            |          |         | 6             | 8.49          | 3.61        | 4.88      | 194               | 194               |         |
| GGA          | 3          |          |            |          |         | 6             | 8.49          | 3.99        | 4.5       | 175               | 175               |         |
| K3336-01     | 1          | No       | 6.8        | N/A      | 19.20   | 5             | 5.42          | 2.31        | 3.11      | 126.6             | 126.6             |         |
| K3336-01     | 2          |          |            |          |         | 20            | 8.13          | 0.07        | -         | 0                 |                   |         |
| K3336-01     | 3          |          |            |          |         | 50            | 7.49          | 0.03        | -         | 0                 |                   |         |
| K3336-01     | 4          |          |            |          |         | 100           | 6.12          | 0.03        | -         | 0                 |                   |         |
| K3348-01     | 1          | No       | 7.2        | N/A      | 18.90   | 1             | 8.57          | 7.81        | -         | 0                 | 52.95             |         |
| K3348-01     | 2          |          |            |          |         | 5             | 8.57          | 6.61        | -         | 0                 |                   |         |
| K3348-01     | 3          |          |            |          |         | 20            | 8.56          | 4.03        | 4.53      | 52.95             |                   |         |
| K3348-01     | 4          |          |            |          |         | 50            | 8.49          | 0.39        | -         | 0                 |                   |         |
| K3348-02     | 1          | No       | 6.4        | N/A      | 19.60   | 5             | 8.58          | 8.18        | -         | 0                 |                   |         |
| K3348-02     | 2          |          |            |          |         | 20            | 8.55          | 7.72        | -         | 0                 |                   |         |
| K3348-02     | 3          |          |            |          |         | 50            | 8.47          | 7.54        | -         | 0                 |                   |         |
| K3348-02     | 4          |          |            |          |         | 150           | 8.13          | 6.24        | -         | 0                 |                   |         |
| K3348-03     | 1          | No       | 6.0        | N/A      | 18.50   | 5             | 8.53          | 7.70        | -         | 0                 | 6.42              |         |
| K3348-03     | 2          |          |            |          |         | 20            | 8.57          | 7.45        | -         | 0                 |                   |         |
| K3348-03     | 3          |          |            |          |         | 50            | 8.66          | 6.59        | 2.07      | 6.42              |                   |         |
| K3348-03     | 4          |          |            |          |         | 150           | 8.18          | 7.34        | -         | 0                 |                   |         |
| K3369-01     | 1          | No       | 7.0        | N/A      | 19.00   | 5             | 8.57          | 8.03        | -         | 0                 |                   |         |
| K3369-01     | 2          |          |            |          |         | 20            | 8.56          | 8.19        | -         | 0                 |                   |         |
| K3369-01     | 3          |          |            |          |         | 50            | 8.64          | 8.18        | -         | 0                 |                   |         |
| K3369-01     | 4          |          |            |          |         | 150           | 9.01          | 8.33        | -         | 0                 |                   |         |
| K3372-01     | 1          | No       | 6.8        | N/A      | 18.70   | 1             | 8.54          | 6.98        | -         | 0                 |                   |         |
| K3372-01     | 2          |          |            |          |         | 5             | 8.46          | 6.66        | -         | 0                 |                   |         |
| K3372-01     | 3          |          |            |          |         | 20            | 8.67          | 7.22        | -         | 0                 |                   |         |
| K3372-01     | 4          |          |            |          |         | 50            | 7.28          | 7.16        | -         | 0                 |                   |         |
| K3372-01DUP  | 1          | No       | 6.8        | N/A      | 18.70   | 1             | 7.80          | 6.88        | -         | 0                 |                   |         |
| K3372-01DUP  | 2          |          |            |          |         | 5             | 8.46          | 6.70        | -         | 0                 |                   |         |
| K3372-01DUP  | 3          |          |            |          |         | 20            | 8.28          | 7.10        | -         | 0                 |                   |         |
| K3372-01DUP  | 4          |          |            |          |         | 50            | 7.80          | 7.20        | -         | 0                 |                   |         |

NOTE: 2ml POLYSEED added to GGA and all the Samples, but not in Blank.

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : BOD061319-1

WorkList ID : 127372

Date : 06-13-2019 09:19:40

LB10 3410

| Due Date   | Matrix | Sample   | Test | Preservative | Customer | Storage Location | Customer Sample          | Collect Date | Method   |
|------------|--------|----------|------|--------------|----------|------------------|--------------------------|--------------|----------|
| 06/14/2019 | Water  | K3336-01 | BOD5 | Cool 4 deg C | TULL01   | H42              | 001M-WILLETS-PT-BLVD(JUI | 06/12/2019   | SM5210 B |
| 06/14/2019 | Water  | K3348-01 | BOD5 | Cool 4 deg C | ENVI77   | H52              | TANKA_190612             | 06/12/2019   | SM5210 B |
| 06/14/2019 | Water  | K3348-02 | BOD5 | Cool 4 deg C | ENVI77   | H52              | TANKB_190612             | 06/12/2019   | SM5210 B |
| 06/14/2019 | Water  | K3348-03 | BOD5 | Cool 4 deg C | ENVI77   | H52              | TANKC_190612             | 06/12/2019   | SM5210 B |
| 06/15/2019 | Water  | K3369-01 | BOD5 | Cool 4 deg C | PSEG01   | O31              | FRAC-TANK-COMP           | 06/13/2019   | SM5210 B |
| 06/14/2019 | Water  | K3372-01 | BOD5 | Cool 4 deg C | AREC01   | H11              | EFFL-B2-79               | 06/13/2019   | SM5210 B |

Date/Time 6/14/19 1330  
 Received by: AB  
 Relinquished by: AB

Date/Time 6/14/19 14:00  
 Received by: AB  
 Relinquished by: AB