

ภาคผนวก ญ
ใบรายงานผลการวิเคราะห์



คุณภาพอากาศ



มกราคม – มิถุนายน พ.ศ. 2566



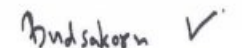
ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
SAMPLING SOURCE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732662N)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR CHATCHAWAN LUEANLONG
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : FEBRUARY 27, 2023
ANALYTICAL DATE : FEBRUARY 27-MARCH 2, 2023
REPORT NO. : 2023-U016092
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD447-0001 - T23AD447-0003

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | | | REGULATORY STANDARD |
|------------------------------|-------------------|----------------------------------|----------------------------------|---------------|---------------|---------------------|
| | | | WBNE-A-A1 : MOO 14 BAN MAB SAMOR | | | |
| | | | * | ** | *** | |
| | | | T23AD447-0001 | T23AD447-0002 | T23AD447-0003 | |
| TOTAL SUSPENDED PARTICULATE | mg/m ³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.098 | 0.122 | 0.111 | ≤ 0.33 |
| PARTICULATE MATTER (≤ 10 µm) | mg/m ³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.061 | 0.035 | 0.044 | ≤ 0.12 |
| SAMPLE CONDITION | | | COMPLETE | COMPLETE | COMPLETE | |

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
REGULATORY STANDARD : AMBIENT AIR QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.24, B.E.2547 (2004).
* : SAMPLING FROM 08:30 HOUR ON FEBRUARY 23, 2023 TO 08:30 HOUR ON FEBRUARY 24, 2023.
** : SAMPLING FROM 08:30 HOUR ON FEBRUARY 24, 2023 TO 08:30 HOUR ON FEBRUARY 25, 2023.
*** : SAMPLING FROM 08:30 HOUR ON FEBRUARY 25, 2023 TO 08:30 HOUR ON FEBRUARY 26, 2023.


(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 9, 2023



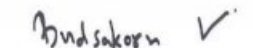
ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
SAMPLING SOURCE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731874N)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR CHATCHAWAN LUEANLONG
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : FEBRUARY 27, 2023
ANALYTICAL DATE : FEBRUARY 27-MARCH 2, 2023
REPORT NO. : 2023-U016094
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD447-0004 - T23AD447-0006

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | | | REGULATORY STANDARD |
|------------------------------|-------|----------------------------------|-----------------------------|---------------|---------------|---------------------|
| | | | WBNE-C-A3 : BAN KUT TA BONG | | | |
| | | | * | ** | *** | |
| | | | T23AD447-0004 | T23AD447-0005 | T23AD447-0006 | |
| TOTAL SUSPENDED PARTICULATE | mg/m³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.097 | 0.122 | 0.104 | ≤ 0.33 |
| PARTICULATE MATTER (≤ 10 µm) | mg/m³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.033 | 0.076 | 0.058 | ≤ 0.12 |
| SAMPLE CONDITION | | | COMPLETE | COMPLETE | COMPLETE | |

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
REGULATORY STANDARD : AMBIENT AIR QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.24, B.E.2547 (2004).
* : SAMPLING FROM 09:00 HOUR ON FEBRUARY 23, 2023 TO 09:00 HOUR ON FEBRUARY 24, 2023.
** : SAMPLING FROM 09:00 HOUR ON FEBRUARY 24, 2023 TO 09:00 HOUR ON FEBRUARY 25, 2023.
*** : SAMPLING FROM 09:00 HOUR ON FEBRUARY 25, 2023 TO 09:00 HOUR ON FEBRUARY 26, 2023.


(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 9, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016956
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2023-001349
MEASURED BY : MR WORAPHOT WONGKHAM **ANALYSIS NO.** : T23AD447-0001 - T23AD447-0003

| TIME * | RESULT (m/s) | | | | | |
|------------------|---|----------------|------------------------|----------------|------------------------|----------------|
| | WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N) | | | | | |
| | FEBRUARY 23 - 24, 2023 | | FEBRUARY 24 - 25, 2023 | | FEBRUARY 25 - 26, 2023 | |
| | T23AD447-0001 | | T23AD447-0002 | | T23AD447-0003 | |
| | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION |
| 08:00-09:00 HOUR | 2.0 | NNE | 1.7 | ENE | 2.0 | ENE |
| 09:00-10:00 HOUR | 1.8 | ESE | 2.0 | ENE | 2.8 | ENE |
| 10:00-11:00 HOUR | 2.2 | NE | 2.1 | N | 3.2 | NW |
| 11:00-12:00 HOUR | 2.2 | E | 1.4 | N | 2.3 | N |
| 12:00-13:00 HOUR | 1.9 | E | 2.0 | NW | 2.0 | NNW |
| 13:00-14:00 HOUR | 1.5 | SE | 2.1 | NW | 1.7 | N |
| 14:00-15:00 HOUR | 1.6 | NNE | 1.6 | NNE | 2.0 | NNE |
| 15:00-16:00 HOUR | 1.5 | NE | 2.4 | NNW | 1.9 | N |
| 16:00-17:00 HOUR | 2.0 | ESE | 1.5 | NNW | 2.0 | ENE |
| 17:00-18:00 HOUR | 1.5 | E | 2.0 | NE | 1.4 | NNE |
| 18:00-19:00 HOUR | 2.2 | ENE | 2.1 | N | 1.4 | NNW |
| 19:00-20:00 HOUR | 1.9 | NE | 1.7 | ENE | 1.8 | NNW |
| 20:00-21:00 HOUR | 1.5 | NNE | 1.5 | N | 1.8 | NNE |
| 21:00-22:00 HOUR | 2.0 | NNE | 1.8 | NNE | 2.3 | N |
| 22:00-23:00 HOUR | 1.7 | NNW | 1.4 | N | 2.4 | NNE |
| 23:00-00:00 HOUR | 1.9 | NNW | 1.3 | NE | 2.1 | NE |
| 00:00-01:00 HOUR | 2.1 | N | 1.1 | NNE | 1.8 | NNW |
| 01:00-02:00 HOUR | 1.9 | NNE | 1.1 | NNE | 1.8 | NNW |
| 02:00-03:00 HOUR | 1.8 | NW | 1.2 | NE | 2.6 | E |
| 03:00-04:00 HOUR | 2.4 | NNW | 0.8 | NNW | 3.4 | N |
| 04:00-05:00 HOUR | 2.2 | NE | 1.5 | NW | 3.7 | NNW |
| 05:00-06:00 HOUR | 1.8 | N | 1.4 | NNE | 3.1 | NW |
| 06:00-07:00 HOUR | 2.5 | ENE | 1.6 | N | 3.5 | WNW |
| 07:00-08:00 HOUR | 2.5 | E | 2.7 | NE | 4.0 | WNW |

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(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016958
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2023-001349
MEASURED BY : MR WORAPHOT WONGKHAM **ANALYSIS NO.** : T23AD447-0004 - T23AD447-0006

| TIME * | RESULT (m/s) | | | | | |
|------------------|--|----------------|------------------------|----------------|------------------------|----------------|
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | | | | |
| | FEBRUARY 23 - 24, 2023 | | FEBRUARY 24 - 25, 2023 | | FEBRUARY 25 - 26, 2023 | |
| | T23AD447-0004 | | T23AD447-0005 | | T23AD447-0006 | |
| | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION |
| 08:00-09:00 HOUR | 1.7 | N | 2.3 | NE | 2.1 | ENE |
| 09:00-10:00 HOUR | 1.8 | N | 1.9 | NNE | 2.2 | N |
| 10:00-11:00 HOUR | 2.6 | N | 2.4 | NNE | 2.1 | N |
| 11:00-12:00 HOUR | 2.6 | N | 3.3 | NNW | 1.6 | NNW |
| 12:00-13:00 HOUR | 2.5 | NNE | 2.4 | NW | 1.8 | NW |
| 13:00-14:00 HOUR | 2.3 | NW | 3.0 | NNE | 1.7 | NNW |
| 14:00-15:00 HOUR | 2.0 | NNW | 2.6 | E | 1.9 | N |
| 15:00-16:00 HOUR | 1.8 | NNW | 2.3 | N | 1.7 | W |
| 16:00-17:00 HOUR | 1.6 | NW | 2.0 | NNW | 1.6 | NNW |
| 17:00-18:00 HOUR | 1.5 | NW | 2.2 | NNE | 2.5 | WNW |
| 18:00-19:00 HOUR | 2.0 | N | 1.9 | NNW | 2.7 | NNW |
| 19:00-20:00 HOUR | 1.5 | NW | 3.1 | NW | 2.7 | NNW |
| 20:00-21:00 HOUR | 2.3 | NNW | 2.9 | NW | 1.9 | N |
| 21:00-22:00 HOUR | 1.9 | N | 3.1 | NNE | 2.3 | NNW |
| 22:00-23:00 HOUR | 2.3 | NW | 3.2 | NW | 2.3 | NW |
| 23:00-00:00 HOUR | 2.5 | NW | 2.5 | NNW | 1.6 | WNW |
| 00:00-01:00 HOUR | 1.5 | WNW | 2.0 | NNE | 2.3 | WNW |
| 01:00-02:00 HOUR | 1.8 | NW | 2.1 | N | 2.3 | NNE |
| 02:00-03:00 HOUR | 2.0 | NW | 2.0 | ENE | 1.5 | NNW |
| 03:00-04:00 HOUR | 2.0 | NNW | 1.6 | NNE | 1.3 | N |
| 04:00-05:00 HOUR | 2.1 | NE | 1.4 | NNE | 1.8 | NNE |
| 05:00-06:00 HOUR | 2.3 | NE | 1.9 | NNE | 1.4 | W |
| 06:00-07:00 HOUR | 2.3 | NE | 1.6 | NNE | 1.3 | WNW |
| 07:00-08:00 HOUR | 2.3 | NNE | 2.4 | NNW | 1.6 | NW |

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(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016947
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-001349
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0004 - T23AD447-0006

| TIME * | RESULT (ppm) | | |
|------------------|--|---|---|
| | NITROGEN DIOXIDE | | |
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | |
| | FEBRUARY 23 - 24, 2023 T23AD447-0004 | FEBRUARY 24 - 25, 2023 T23AD447-0005 | FEBRUARY 25 - 26, 2023 T23AD447-0006 |
| 08:00-09:00 HOUR | 0.0051 | 0.0056 | 0.0044 |
| 09:00-10:00 HOUR | 0.0051 | 0.0053 | 0.0045 |
| 10:00-11:00 HOUR | 0.0050 | 0.0049 | 0.0045 |
| 11:00-12:00 HOUR | 0.0050 | 0.0047 | 0.0047 |
| 12:00-13:00 HOUR | 0.0055 | 0.0046 | 0.0044 |
| 13:00-14:00 HOUR | 0.0056 | 0.0046 | 0.0044 |
| 14:00-15:00 HOUR | 0.0055 | 0.0049 | 0.0040 |
| 15:00-16:00 HOUR | 0.0054 | 0.0049 | 0.0043 |
| 16:00-17:00 HOUR | 0.0055 | 0.0052 | 0.0043 |
| 17:00-18:00 HOUR | 0.0057 | 0.0056 | 0.0043 |
| 18:00-19:00 HOUR | 0.0054 | 0.0060 | 0.0045 |
| 19:00-20:00 HOUR | 0.0051 | 0.0065 | 0.0046 |
| 20:00-21:00 HOUR | 0.0046 | 0.0069 | 0.0046 |
| 21:00-22:00 HOUR | 0.0046 | 0.0074 | 0.0046 |
| 22:00-23:00 HOUR | 0.0042 | 0.0069 | 0.0046 |
| 23:00-00:00 HOUR | 0.0041 | 0.0062 | 0.0047 |
| 00:00-01:00 HOUR | 0.0042 | 0.0053 | 0.0046 |
| 01:00-02:00 HOUR | 0.0044 | 0.0051 | 0.0046 |
| 02:00-03:00 HOUR | 0.0046 | 0.0049 | 0.0048 |
| 03:00-04:00 HOUR | 0.0046 | 0.0047 | 0.0049 |
| 04:00-05:00 HOUR | 0.0050 | 0.0046 | 0.0050 |
| 05:00-06:00 HOUR | 0.0055 | 0.0046 | 0.0051 |
| 06:00-07:00 HOUR | 0.0058 | 0.0045 | 0.0054 |
| 07:00-08:00 HOUR | 0.0059 | 0.0044 | 0.0061 |

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(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016948
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2023-001349
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0001 - T23AD447-0003

| TIME * | RESULT (ppm) | | |
|------------------|---|---|---|
| | SULPHUR DIOXIDE | | |
| | WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N) | | |
| | FEBRUARY 23 - 24, 2023 T23AD447-0001 | FEBRUARY 24 - 25, 2023 T23AD447-0002 | FEBRUARY 25 - 26, 2023 T23AD447-0003 |
| 08:00-09:00 HOUR | 0.0019 | 0.0016 | 0.0019 |
| 09:00-10:00 HOUR | 0.0019 | 0.0014 | 0.0020 |
| 10:00-11:00 HOUR | 0.0018 | 0.0012 | 0.0017 |
| 11:00-12:00 HOUR | 0.0019 | 0.0010 | 0.0018 |
| 12:00-13:00 HOUR | 0.0019 | 0.0010 | 0.0019 |
| 13:00-14:00 HOUR | 0.0020 | 0.0010 | 0.0020 |
| 14:00-15:00 HOUR | 0.0019 | 0.0010 | 0.0020 |
| 15:00-16:00 HOUR | 0.0019 | 0.0009 | 0.0019 |
| 16:00-17:00 HOUR | 0.0017 | 0.0008 | 0.0018 |
| 17:00-18:00 HOUR | 0.0017 | 0.0008 | 0.0016 |
| 18:00-19:00 HOUR | 0.0017 | 0.0009 | 0.0016 |
| 19:00-20:00 HOUR | 0.0018 | 0.0010 | 0.0016 |
| 20:00-21:00 HOUR | 0.0018 | 0.0012 | 0.0017 |
| 21:00-22:00 HOUR | 0.0018 | 0.0013 | 0.0019 |
| 22:00-23:00 HOUR | 0.0017 | 0.0015 | 0.0019 |
| 23:00-00:00 HOUR | 0.0016 | 0.0015 | 0.0017 |
| 00:00-01:00 HOUR | 0.0016 | 0.0017 | 0.0016 |
| 01:00-02:00 HOUR | 0.0016 | 0.0017 | 0.0017 |
| 02:00-03:00 HOUR | 0.0017 | 0.0017 | 0.0017 |
| 03:00-04:00 HOUR | 0.0017 | 0.0018 | 0.0017 |
| 04:00-05:00 HOUR | 0.0018 | 0.0019 | 0.0018 |
| 05:00-06:00 HOUR | 0.0019 | 0.0020 | 0.0019 |
| 06:00-07:00 HOUR | 0.0019 | 0.0019 | 0.0018 |
| 07:00-08:00 HOUR | 0.0018 | 0.0020 | 0.0017 |
| AVERAGE 24 HOUR | 0.0018 | 0.0014 | 0.0018 |

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(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016949
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2023-001349
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0004 - T23AD447-0006

| TIME * | RESULT (ppm) | | |
|------------------|--|---|---|
| | SULPHUR DIOXIDE | | |
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | |
| | FEBRUARY 23 - 24, 2023 T23AD447-0004 | FEBRUARY 24 - 25, 2023 T23AD447-0005 | FEBRUARY 25 - 26, 2023 T23AD447-0006 |
| 08:00-09:00 HOUR | 0.0018 | 0.0015 | 0.0018 |
| 09:00-10:00 HOUR | 0.0017 | 0.0016 | 0.0017 |
| 10:00-11:00 HOUR | 0.0017 | 0.0015 | 0.0014 |
| 11:00-12:00 HOUR | 0.0016 | 0.0015 | 0.0015 |
| 12:00-13:00 HOUR | 0.0018 | 0.0013 | 0.0014 |
| 13:00-14:00 HOUR | 0.0020 | 0.0012 | 0.0016 |
| 14:00-15:00 HOUR | 0.0020 | 0.0010 | 0.0016 |
| 15:00-16:00 HOUR | 0.0022 | 0.0010 | 0.0018 |
| 16:00-17:00 HOUR | 0.0020 | 0.0011 | 0.0017 |
| 17:00-18:00 HOUR | 0.0019 | 0.0015 | 0.0018 |
| 18:00-19:00 HOUR | 0.0016 | 0.0018 | 0.0016 |
| 19:00-20:00 HOUR | 0.0015 | 0.0020 | 0.0018 |
| 20:00-21:00 HOUR | 0.0015 | 0.0019 | 0.0020 |
| 21:00-22:00 HOUR | 0.0015 | 0.0018 | 0.0020 |
| 22:00-23:00 HOUR | 0.0014 | 0.0018 | 0.0020 |
| 23:00-00:00 HOUR | 0.0015 | 0.0018 | 0.0020 |
| 00:00-01:00 HOUR | 0.0017 | 0.0019 | 0.0020 |
| 01:00-02:00 HOUR | 0.0020 | 0.0019 | 0.0019 |
| 02:00-03:00 HOUR | 0.0021 | 0.0020 | 0.0018 |
| 03:00-04:00 HOUR | 0.0020 | 0.0020 | 0.0019 |
| 04:00-05:00 HOUR | 0.0019 | 0.0019 | 0.0019 |
| 05:00-06:00 HOUR | 0.0018 | 0.0019 | 0.0021 |
| 06:00-07:00 HOUR | 0.0017 | 0.0018 | 0.0020 |
| 07:00-08:00 HOUR | 0.0016 | 0.0019 | 0.0020 |
| AVERAGE 24 HOUR | 0.0018 | 0.0017 | 0.0018 |

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016944
MEASURING METHOD : NON-DISPERSIVE INFRARED DETECTION **WORK NO.** : 2022-006603
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0001 - T23AD447-0003

| TIME* | RESULT (ppm) | | |
|------------------|---|---------------------------------------|---------------------------------------|
| | CARBON MONOXIDE | | |
| | WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N) | | |
| | FEBRUARY 23-24, 2023 T23AD447-0001 | FEBRUARY 24-25, 2023 T23AD447-0002 | FEBRUARY 25-26, 2023 T23AD447-0003 |
| 08:00-16:00 HOUR | 1.28 | 1.30 | 1.24 |
| 16:00-00:00 HOUR | 1.36 | 1.39 | 1.14 |
| 00:00-08:00 HOUR | 1.40 | 1.43 | 1.19 |

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR


MARCH 7, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecohtai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016945
MEASURING METHOD : NON-DISPERSIVE INFRARED DETECTION **WORK NO.** : 2022-006603
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0004 - T23AD447-0006

| TIME* | RESULT (ppm) | | |
|------------------|--|----------------------|----------------------|
| | CARBON MONOXIDE | | |
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | |
| | FEBRUARY 23-24, 2023 | FEBRUARY 24-25, 2023 | FEBRUARY 25-26, 2023 |
| | T23AD447-0004 | T23AD447-0005 | T23AD447-0006 |
| 08:00-16:00 HOUR | 1.03 | 1.21 | 1.21 |
| 16:00-00:00 HOUR | 1.11 | 1.18 | 1.11 |
| 00:00-08:00 HOUR | 1.06 | 1.05 | 1.11 |


(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR


MARCH 7, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecohtai.net
MEASURING PLACE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : FEBRUARY 23-26, 2023
MEASURING DATE : FEBRUARY 23-26, 2023 **ANALYTICAL DATE** : FEBRUARY 23-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U016946
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-001349
MEASURED BY : MR CHATCHAWAN LUEANLONG **ANALYSIS NO.** : T23AD447-0001 - T23AD447-0003

| TIME * | RESULT (ppm) | | |
|------------------|---|------------------------|------------------------|
| | NITROGEN DIOXIDE | | |
| | WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 733756E 1733389N) | | |
| | FEBRUARY 23 - 24, 2023 | FEBRUARY 24 - 25, 2023 | FEBRUARY 25 - 26, 2023 |
| | T23AD447-0001 | T23AD447-0002 | T23AD447-0003 |
| 08:00-09:00 HOUR | 0.0061 | 0.0064 | 0.0073 |
| 09:00-10:00 HOUR | 0.0066 | 0.0071 | 0.0071 |
| 10:00-11:00 HOUR | 0.0073 | 0.0083 | 0.0077 |
| 11:00-12:00 HOUR | 0.0083 | 0.0093 | 0.0077 |
| 12:00-13:00 HOUR | 0.0091 | 0.0091 | 0.0079 |
| 13:00-14:00 HOUR | 0.0090 | 0.0082 | 0.0074 |
| 14:00-15:00 HOUR | 0.0088 | 0.0079 | 0.0074 |
| 15:00-16:00 HOUR | 0.0084 | 0.0076 | 0.0069 |
| 16:00-17:00 HOUR | 0.0082 | 0.0071 | 0.0074 |
| 17:00-18:00 HOUR | 0.0081 | 0.0060 | 0.0069 |
| 18:00-19:00 HOUR | 0.0080 | 0.0061 | 0.0071 |
| 19:00-20:00 HOUR | 0.0080 | 0.0063 | 0.0065 |
| 20:00-21:00 HOUR | 0.0081 | 0.0077 | 0.0063 |
| 21:00-22:00 HOUR | 0.0089 | 0.0076 | 0.0062 |
| 22:00-23:00 HOUR | 0.0095 | 0.0083 | 0.0066 |
| 23:00-00:00 HOUR | 0.0100 | 0.0081 | 0.0071 |
| 00:00-01:00 HOUR | 0.0093 | 0.0091 | 0.0072 |
| 01:00-02:00 HOUR | 0.0090 | 0.0085 | 0.0072 |
| 02:00-03:00 HOUR | 0.0083 | 0.0081 | 0.0077 |
| 03:00-04:00 HOUR | 0.0081 | 0.0072 | 0.0083 |
| 04:00-05:00 HOUR | 0.0076 | 0.0067 | 0.0084 |
| 05:00-06:00 HOUR | 0.0072 | 0.0064 | 0.0080 |
| 06:00-07:00 HOUR | 0.0067 | 0.0064 | 0.0079 |
| 07:00-08:00 HOUR | 0.0064 | 0.0066 | 0.0077 |


(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

MARCH 10, 2023



กรกฎาคม – ธันวาคม พ.ศ. 2566



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecohtai.net
SAMPLING SOURCE : WBNE-A-A1 : MOO 14 BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR UTHAI KAEWRAMOOK
ANALYZED BY : MISS JETJAN TUMSA-AT

RECEIVED DATE : OCTOBER 2, 2023
ANALYTICAL DATE : OCTOBER 2-6, 2023
REPORT NO. : 2023-U085890
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT477-0001 - T23AT477-0003

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | | | REGULATORY STANDARD |
|------------------------------|-------|----------------------------------|----------------------------------|---------------|---------------|---------------------|
| | | | WBNE-A-A1 : MOO 14 BAN MAB SAMOR | | | |
| | | | * | ** | *** | |
| | | | T23AT477-0001 | T23AT477-0002 | T23AT477-0003 | |
| TOTAL SUSPENDED PARTICULATE | mg/m³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.027 | 0.021 | 0.021 | ≤ 0.33 |
| PARTICULATE MATTER (≤ 10 µm) | mg/m³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.015 | 0.010 | 0.010 | ≤ 0.12 |
| SAMPLE CONDITION | | | COMPLETE | COMPLETE | COMPLETE | |

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
REGULATORY STANDARD(TSP, PM10) : ANNOUNCEMENT OF THE NATIONAL ENVIRONMENT BOARD BOARD NO.24, B.E.2547 (2004) ON THE SPECIFICATION OF AMBIENT AIR QUALITY STANDARDS, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 121, PART 104 D, DATED SEPTEMBER 22, 2004.
* : SAMPLING FROM 09:00 HOUR ON SEPTEMBER 27, 2023 TO 09:00 HOUR ON SEPTEMBER 28, 2023.
** : SAMPLING FROM 09:00 HOUR ON SEPTEMBER 28, 2023 TO 09:00 HOUR ON SEPTEMBER 29, 2023.
*** : SAMPLING FROM 09:00 HOUR ON SEPTEMBER 29, 2023 TO 09:00 HOUR ON SEPTEMBER 30, 2023.

Budsakorn ✓
(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

OCTOBER 9, 2023

* PROHIBITED TO PARTIALLY COPY ANALYSIS REPORT PRIOR TO WRITTEN PERMISSION BY THE LABORATORY.
* THIS ANALYSIS REPORT APPROVES ONLY FOR SUBMITTED SAMPLES.



- End of Analysis Report -

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecohtai.net
SAMPLING SOURCE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR UTHAI KAEWRAMOOK
ANALYZED BY : MISS JETJAN TUMSA-AT

RECEIVED DATE : OCTOBER 2, 2023
ANALYTICAL DATE : OCTOBER 2-6, 2023
REPORT NO. : 2023-U085891
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT477-0004 - T23AT477-0006

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | | | REGULATORY STANDARD |
|------------------------------|-------------------|----------------------------------|-----------------------------|---------------|---------------|---------------------|
| | | | WBNE-C-A3 : BAN KUT TA BONG | | | |
| | | | * | ** | *** | |
| | | | T23AT477-0004 | T23AT477-0005 | T23AT477-0006 | |
| TOTAL SUSPENDED PARTICULATE | mg/m ³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.019 | 0.017 | 0.022 | ≤ 0.33 |
| PARTICULATE MATTER (≤ 10 μm) | mg/m ³ | GRAVIMETRIC (HIGH VOLUME METHOD) | 0.008 | 0.006 | 0.011 | ≤ 0.12 |
| SAMPLE CONDITION | | | COMPLETE | COMPLETE | COMPLETE | |

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
REGULATORY STANDARD(TSP, PM10) : ANNOUNCEMENT OF THE NATIONAL ENVIRONMENT BOARD BOARD NO.24, B.E.2547 (2004) ON THE SPECIFICATION OF AMBIENT AIR QUALITY STANDARDS, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 121, PART 104 D, DATED SEPTEMBER 22, 2004.
* : SAMPLING FROM 09:30 HOUR ON SEPTEMBER 27, 2023 TO 09:30 HOUR ON SEPTEMBER 28, 2023.
** : SAMPLING FROM 09:30 HOUR ON SEPTEMBER 28, 2023 TO 09:30 HOUR ON SEPTEMBER 29, 2023.
*** : SAMPLING FROM 09:30 HOUR ON SEPTEMBER 29, 2023 TO 09:30 HOUR ON SEPTEMBER 30, 2023.

Budsakorn ✓
(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

OCTOBER 9, 2023

* PROHIBITED TO PARTIALLY COPY ANALYSIS REPORT PRIOR TO WRITTEN PERMISSION BY THE LABORATORY.
* THIS ANALYSIS REPORT APPROVES ONLY FOR SUBMITTED SAMPLES.



- End of Analysis Report -

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084809
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMMOOK **ANALYSIS NO.** : T23AT477-0001 - T23AT477-0003

| TIME * | RESULT (m/s) | | | | | |
|------------------|--|----------------|--|----------------|--|----------------|
| | WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N) | | | | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0001 | | SEPTEMBER 28-29, 2023 T23AT477-0002 | | SEPTEMBER 29-30, 2023 T23AT477-0003 | |
| | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION |
| 07:00-08:00 HOUR | 1.6 | E | 1.0 | ESE | 1.8 | S |
| 08:00-09:00 HOUR | 1.8 | E | 1.1 | E | 1.5 | SSW |
| 09:00-10:00 HOUR | 1.4 | ESE | 1.3 | ENE | 2.0 | SW |
| 10:00-11:00 HOUR | 1.3 | SSE | 1.4 | ENE | 1.2 | S |
| 11:00-12:00 HOUR | 1.6 | SSE | 1.5 | ENE | 0.9 | S |
| 12:00-13:00 HOUR | 1.6 | SSW | 2.3 | ENE | 1.0 | SSE |
| 13:00-14:00 HOUR | 1.9 | WSW | 1.9 | ENE | 0.9 | S |
| 14:00-15:00 HOUR | 1.3 | WSW | 2.3 | ENE | 1.2 | S |
| 15:00-16:00 HOUR | 1.0 | W | 2.0 | NE | 1.2 | S |
| 16:00-17:00 HOUR | 1.3 | SSW | 1.6 | NE | 1.4 | S |
| 17:00-18:00 HOUR | 1.2 | S | 1.2 | NE | 1.7 | SSW |
| 18:00-19:00 HOUR | 1.8 | SW | 1.1 | NE | 1.9 | S |
| 19:00-20:00 HOUR | 2.1 | SSW | 1.2 | SW | 2.5 | S |
| 20:00-21:00 HOUR | 2.4 | ESE | 1.9 | SSE | 1.9 | WSW |
| 21:00-22:00 HOUR | 3.3 | SE | 2.0 | WSW | 2.6 | ESE |
| 22:00-23:00 HOUR | 3.0 | WSW | 1.6 | SE | 2.0 | WNW |
| 23:00-00:00 HOUR | 1.7 | W | 1.9 | ESE | 1.8 | WSW |
| 00:00-01:00 HOUR | 1.3 | SW | 2.2 | E | 2.1 | SW |
| 01:00-02:00 HOUR | 1.2 | WSW | 1.8 | ESE | 2.4 | SSW |
| 02:00-03:00 HOUR | 0.8 | ESE | 1.6 | E | 1.6 | SE |
| 03:00-04:00 HOUR | 0.7 | ESE | 1.8 | E | 2.0 | SSW |
| 04:00-05:00 HOUR | 0.8 | SSW | 1.5 | E | 1.9 | ESE |
| 05:00-06:00 HOUR | 1.0 | SSE | 2.2 | SE | 1.6 | NE |
| 06:00-07:00 HOUR | 0.9 | SSE | 1.6 | S | 1.7 | ENE |



(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084810
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMMOOK **ANALYSIS NO.** : T23AT477-0004 - T23AT477-0006

| TIME * | RESULT (m/s) | | | | | |
|------------------|--|----------------|--|----------------|--|----------------|
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | | | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0004 | | SEPTEMBER 28-29, 2023 T23AT477-0005 | | SEPTEMBER 29-30, 2023 T23AT477-0006 | |
| | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION | WIND SPEED | WIND DIRECTION |
| 07:00-08:00 HOUR | 3.5 | SE | 1.7 | S | 1.2 | E |
| 08:00-09:00 HOUR | 2.4 | SSE | 1.3 | SW | 1.4 | E |
| 09:00-10:00 HOUR | 2.6 | S | 1.1 | SW | 0.9 | E |
| 10:00-11:00 HOUR | 3.0 | S | 0.8 | ENE | 1.3 | E |
| 11:00-12:00 HOUR | 3.4 | SSE | 0.9 | ESE | 1.2 | ESE |
| 12:00-13:00 HOUR | 2.9 | SSE | 1.1 | ENE | 1.3 | ESE |
| 13:00-14:00 HOUR | 2.3 | SE | 1.0 | ESE | 2.0 | NNW |
| 14:00-15:00 HOUR | 2.4 | SSE | 1.1 | ESE | 2.1 | NE |
| 15:00-16:00 HOUR | 3.0 | SSE | 1.6 | ESE | 2.3 | NNW |
| 16:00-17:00 HOUR | 3.1 | SE | 1.9 | SE | 2.7 | NNE |
| 17:00-18:00 HOUR | 3.0 | ESE | 2.3 | SSE | 2.0 | WNW |
| 18:00-19:00 HOUR | 2.9 | ESE | 1.6 | SSE | 3.2 | NNW |
| 19:00-20:00 HOUR | 2.7 | SE | 2.0 | SSE | 3.5 | WNW |
| 20:00-21:00 HOUR | 2.3 | E | 2.3 | SW | 2.5 | WSW |
| 21:00-22:00 HOUR | 2.2 | E | 1.9 | SSW | 2.5 | W |
| 22:00-23:00 HOUR | 2.0 | E | 3.1 | SE | 3.5 | SW |
| 23:00-00:00 HOUR | 2.0 | E | 3.0 | SSW | 3.0 | S |
| 00:00-01:00 HOUR | 1.7 | E | 3.4 | S | 3.3 | SSE |
| 01:00-02:00 HOUR | 2.4 | E | 3.2 | S | 2.7 | SSE |
| 02:00-03:00 HOUR | 1.5 | ESE | 3.1 | SSE | 2.2 | ESE |
| 03:00-04:00 HOUR | 1.8 | SSE | 2.6 | SE | 2.3 | ESE |
| 04:00-05:00 HOUR | 1.4 | SE | 2.4 | SE | 1.8 | E |
| 05:00-06:00 HOUR | 1.8 | S | 1.9 | ESE | 1.3 | E |
| 06:00-07:00 HOUR | 2.1 | SSW | 2.0 | ENE | 1.4 | ESE |



(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco-thai.net
MEASURING PLACE : WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084802
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMOOK **ANALYSIS NO.** : T23AT477-0001 - T23AT477-0003

| TIME * | RESULT (ppm) | | |
|------------------|--|--|--|
| | NITROGEN DIOXIDE | | |
| | WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N) | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0001 | SEPTEMBER 28-29, 2023 T23AT477-0002 | SEPTEMBER 29-30, 2023 T23AT477-0003 |
| 07:00-08:00 HOUR | 0.0220 | 0.0228 | 0.0211 |
| 08:00-09:00 HOUR | 0.0204 | 0.0218 | 0.0183 |
| 09:00-10:00 HOUR | 0.0158 | 0.0186 | 0.0150 |
| 10:00-11:00 HOUR | 0.0140 | 0.0171 | 0.0144 |
| 11:00-12:00 HOUR | 0.0133 | 0.0146 | 0.0133 |
| 12:00-13:00 HOUR | 0.0143 | 0.0140 | 0.0136 |
| 13:00-14:00 HOUR | 0.0162 | 0.0153 | 0.0139 |
| 14:00-15:00 HOUR | 0.0180 | 0.0179 | 0.0151 |
| 15:00-16:00 HOUR | 0.0214 | 0.0212 | 0.0168 |
| 16:00-17:00 HOUR | 0.0220 | 0.0227 | 0.0186 |
| 17:00-18:00 HOUR | 0.0226 | 0.0219 | 0.0197 |
| 18:00-19:00 HOUR | 0.0222 | 0.0226 | 0.0214 |
| 19:00-20:00 HOUR | 0.0213 | 0.0223 | 0.0241 |
| 20:00-21:00 HOUR | 0.0206 | 0.0232 | 0.0245 |
| 21:00-22:00 HOUR | 0.0192 | 0.0216 | 0.0241 |
| 22:00-23:00 HOUR | 0.0178 | 0.0215 | 0.0212 |
| 23:00-00:00 HOUR | 0.0167 | 0.0209 | 0.0215 |
| 00:00-01:00 HOUR | 0.0152 | 0.0217 | 0.0204 |
| 01:00-02:00 HOUR | 0.0142 | 0.0225 | 0.0206 |
| 02:00-03:00 HOUR | 0.0136 | 0.0221 | 0.0195 |
| 03:00-04:00 HOUR | 0.0137 | 0.0215 | 0.0180 |
| 04:00-05:00 HOUR | 0.0171 | 0.0217 | 0.0191 |
| 05:00-06:00 HOUR | 0.0209 | 0.0235 | 0.0201 |
| 06:00-07:00 HOUR | 0.0241 | 0.0244 | 0.0224 |


(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco-thai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084804
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMOOK **ANALYSIS NO.** : T23AT477-0004 - T23AT477-0006

| TIME * | RESULT (ppm) | | |
|------------------|--|--|--|
| | NITROGEN DIOXIDE | | |
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0004 | SEPTEMBER 28-29, 2023 T23AT477-0005 | SEPTEMBER 29-30, 2023 T23AT477-0006 |
| 07:00-08:00 HOUR | 0.0247 | 0.0215 | 0.0203 |
| 08:00-09:00 HOUR | 0.0215 | 0.0176 | 0.0183 |
| 09:00-10:00 HOUR | 0.0170 | 0.0137 | 0.0140 |
| 10:00-11:00 HOUR | 0.0142 | 0.0129 | 0.0133 |
| 11:00-12:00 HOUR | 0.0135 | 0.0130 | 0.0139 |
| 12:00-13:00 HOUR | 0.0140 | 0.0132 | 0.0143 |
| 13:00-14:00 HOUR | 0.0155 | 0.0159 | 0.0162 |
| 14:00-15:00 HOUR | 0.0171 | 0.0171 | 0.0172 |
| 15:00-16:00 HOUR | 0.0199 | 0.0204 | 0.0205 |
| 16:00-17:00 HOUR | 0.0204 | 0.0228 | 0.0221 |
| 17:00-18:00 HOUR | 0.0204 | 0.0248 | 0.0218 |
| 18:00-19:00 HOUR | 0.0206 | 0.0259 | 0.0208 |
| 19:00-20:00 HOUR | 0.0216 | 0.0248 | 0.0194 |
| 20:00-21:00 HOUR | 0.0215 | 0.0224 | 0.0185 |
| 21:00-22:00 HOUR | 0.0211 | 0.0194 | 0.0184 |
| 22:00-23:00 HOUR | 0.0218 | 0.0171 | 0.0197 |
| 23:00-00:00 HOUR | 0.0219 | 0.0162 | 0.0219 |
| 00:00-01:00 HOUR | 0.0223 | 0.0151 | 0.0240 |
| 01:00-02:00 HOUR | 0.0202 | 0.0151 | 0.0251 |
| 02:00-03:00 HOUR | 0.0208 | 0.0157 | 0.0252 |
| 03:00-04:00 HOUR | 0.0204 | 0.0150 | 0.0255 |
| 04:00-05:00 HOUR | 0.0227 | 0.0161 | 0.0240 |
| 05:00-06:00 HOUR | 0.0243 | 0.0178 | 0.0233 |
| 06:00-07:00 HOUR | 0.0253 | 0.0216 | 0.0228 |


(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084805
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMOOK **ANALYSIS NO.** : T23AT477-0001 - T23AT477-0003

| TIME * | RESULT (ppm) | | |
|------------------|--|--|--|
| | SULPHUR DIOXIDE | | |
| | WBNE-A-A1 : BAN MAB SAMOR (UTM WGS 84 ZONE 47P 734345E 1732632N) | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0001 | SEPTEMBER 28-29, 2023 T23AT477-0002 | SEPTEMBER 29-30, 2023 T23AT477-0003 |
| 07:00-08:00 HOUR | 0.0026 | 0.0027 | 0.0019 |
| 08:00-09:00 HOUR | 0.0024 | 0.0021 | 0.0017 |
| 09:00-10:00 HOUR | 0.0025 | 0.0017 | 0.0015 |
| 10:00-11:00 HOUR | 0.0026 | 0.0016 | 0.0017 |
| 11:00-12:00 HOUR | 0.0027 | 0.0015 | 0.0021 |
| 12:00-13:00 HOUR | 0.0027 | 0.0017 | 0.0025 |
| 13:00-14:00 HOUR | 0.0028 | 0.0019 | 0.0029 |
| 14:00-15:00 HOUR | 0.0030 | 0.0025 | 0.0029 |
| 15:00-16:00 HOUR | 0.0031 | 0.0028 | 0.0028 |
| 16:00-17:00 HOUR | 0.0032 | 0.0032 | 0.0026 |
| 17:00-18:00 HOUR | 0.0030 | 0.0030 | 0.0025 |
| 18:00-19:00 HOUR | 0.0030 | 0.0029 | 0.0026 |
| 19:00-20:00 HOUR | 0.0030 | 0.0027 | 0.0027 |
| 20:00-21:00 HOUR | 0.0029 | 0.0028 | 0.0025 |
| 21:00-22:00 HOUR | 0.0028 | 0.0029 | 0.0022 |
| 22:00-23:00 HOUR | 0.0029 | 0.0027 | 0.0018 |
| 23:00-00:00 HOUR | 0.0029 | 0.0023 | 0.0019 |
| 00:00-01:00 HOUR | 0.0028 | 0.0020 | 0.0020 |
| 01:00-02:00 HOUR | 0.0027 | 0.0021 | 0.0021 |
| 02:00-03:00 HOUR | 0.0029 | 0.0023 | 0.0022 |
| 03:00-04:00 HOUR | 0.0029 | 0.0024 | 0.0026 |
| 04:00-05:00 HOUR | 0.0030 | 0.0025 | 0.0029 |
| 05:00-06:00 HOUR | 0.0029 | 0.0024 | 0.0030 |
| 06:00-07:00 HOUR | 0.0030 | 0.0024 | 0.0029 |
| AVERAGE 24 HOUR | 0.0028 | 0.0024 | 0.0024 |

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
MEASURING PLACE : WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : SEPTEMBER 27-30, 2023
MEASURING DATE : SEPTEMBER 27-30, 2023 **ANALYTICAL DATE** : SEPTEMBER 27-30, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U084806
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2023-006317
MEASURED BY : MR UTHAI KAEWRAMOOK **ANALYSIS NO.** : T23AT477-0004 - T23AT477-0006

| TIME * | RESULT (ppm) | | |
|------------------|--|--|--|
| | SULPHUR DIOXIDE | | |
| | WBNE-C-A3 : BAN KUT TA BONG (UTM WGS 84 ZONE 47P 734939E 1731847N) | | |
| | SEPTEMBER 27-28, 2023 T23AT477-0004 | SEPTEMBER 28-29, 2023 T23AT477-0005 | SEPTEMBER 29-30, 2023 T23AT477-0006 |
| 07:00-08:00 HOUR | 0.0018 | 0.0027 | 0.0025 |
| 08:00-09:00 HOUR | 0.0018 | 0.0025 | 0.0025 |
| 09:00-10:00 HOUR | 0.0017 | 0.0022 | 0.0027 |
| 10:00-11:00 HOUR | 0.0017 | 0.0018 | 0.0028 |
| 11:00-12:00 HOUR | 0.0016 | 0.0018 | 0.0025 |
| 12:00-13:00 HOUR | 0.0020 | 0.0018 | 0.0024 |
| 13:00-14:00 HOUR | 0.0023 | 0.0022 | 0.0024 |
| 14:00-15:00 HOUR | 0.0026 | 0.0026 | 0.0029 |
| 15:00-16:00 HOUR | 0.0027 | 0.0027 | 0.0029 |
| 16:00-17:00 HOUR | 0.0028 | 0.0028 | 0.0029 |
| 17:00-18:00 HOUR | 0.0027 | 0.0027 | 0.0028 |
| 18:00-19:00 HOUR | 0.0026 | 0.0028 | 0.0029 |
| 19:00-20:00 HOUR | 0.0028 | 0.0026 | 0.0029 |
| 20:00-21:00 HOUR | 0.0029 | 0.0026 | 0.0029 |
| 21:00-22:00 HOUR | 0.0030 | 0.0026 | 0.0027 |
| 22:00-23:00 HOUR | 0.0031 | 0.0029 | 0.0026 |
| 23:00-00:00 HOUR | 0.0029 | 0.0032 | 0.0026 |
| 00:00-01:00 HOUR | 0.0030 | 0.0033 | 0.0028 |
| 01:00-02:00 HOUR | 0.0028 | 0.0032 | 0.0029 |
| 02:00-03:00 HOUR | 0.0030 | 0.0029 | 0.0028 |
| 03:00-04:00 HOUR | 0.0029 | 0.0026 | 0.0027 |
| 04:00-05:00 HOUR | 0.0032 | 0.0024 | 0.0027 |
| 05:00-06:00 HOUR | 0.0029 | 0.0024 | 0.0029 |
| 06:00-07:00 HOUR | 0.0030 | 0.0024 | 0.0030 |
| AVERAGE 24 HOUR | 0.0026 | 0.0026 | 0.0027 |

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

OCTOBER 5, 2023



[illegible]

图 5-1-1 非对称型三相异步电动机

| 時間 | 23AT477-0001 | 23AT477-0002 | 23AT477-0003 |
|-------------------|--------------|--------------|--------------|
| 07:00-10:00 HC JR | 1.59 | 1.45 | 1.44 |
| 10:00-23:00 HC JR | 1.51 | 1.57 | 1.19 |
| 23:00-07:00 HC JR | 1.57 | 1.34 | 1.36 |
| LIMIT | | ppm | |

COFFEY, L. 2003

• REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

[illegible][illegible]

| 時間 (時間) | 時間 (時間) | 時間 (時間) |
|--------------------|---------------|---------------|
| T23AT477-0004 | T23AT477-0005 | T23AT477-0006 |
| 07:05:00.00 - 0.0R | 1.12 | 1.26 |
| 16:05:20.00 - 0.0R | 1.37 | 1.39 |
| 23:05:47.00 - 0.0R | 1.51 | 1.33 |
| UNIT | ppm | |

OCTOBER = 2529

• REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

คุณภาพน้ำผิวดิน



มกราคม – มิถุนายน พ.ศ. 2566



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1 203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco-thai.net
SAMPLING SOURCE : WBNE-A-SW1 KLONG HUAI BONG (UP GRADIENT OF WBNE-A) (UTM WGS 84 ZONE 47P 735375E 1734237N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21 - MARCH 2, 2023
REPORT NO. : 2023-U016453
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD050-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW1 T23AD050-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.6 (28°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 28 | n/ | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 592 (28°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.3 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 328 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.314 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.137 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|----------------------------|------------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW1 T23AD050-0001 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.269 | ≤ 1.0 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 2.0 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| o-XYLENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| m,p-XYLENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.40 | - | 0.40 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW1 T23AD050-0001 | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | |

° : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

° : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

° : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n' : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005° : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-SW4 HUAI BONG (DOWN GRADIENT OF WBNE-A) (UTM WGS 84 ZONE 47P 731125E 1730633N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 15:00 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21 - MARCH 2, 2023
REPORT NO. : 2023-U016455
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD050-0003

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|---|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW4 T23AD050-0003 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.6 (29°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | n' | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 241 (29°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 9.5 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 96 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.108 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID) DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.005°, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID) DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID) DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.682 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID) DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW4 T23AD050-0003 | | |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.278 | ≤ 1.0 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 790 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| o-XYLENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| m,p-XYLENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.40 | - | 0.40 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | R RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW4 T23AD050-0003 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n^o : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-C-SW5 POND IN PADDY FIELD (2) NEAR WBNE-C WELL SITE (UTM WGS 84 ZONE 47P 734609E 1731320N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 13:50 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21 - MARCH 2, 2023
REPORT NO. : 2023-U016561
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD052-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|--------------------------|---------------------|-----------------|
| | | | WBNE-C-SW5 T23AD052-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.6 (30°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | n | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 152 (30°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 18.6 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 83 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.100 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.994 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|------------|--|--------------------------|---------------------|-----------------|
| | | | WBNE-C-SW5 T23AD052-0001 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.066 | ≤ 1.0 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.041 | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 6.8 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW5 T23AD052-0001 | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

° : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

° : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

° : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE


n' : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005° : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (COPPER ≥ 0.002 AND < 0.025 mg/L).


(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYO'THIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-C-SW6 KLONG HUAI PHRAI (UP GRADIENT OF WBNE-C) (UTM WGS 84 ZONE 47P 735618E 1731580N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21 - MARCH 2, 2023
REPORT NO. : 2023-U016562
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD052-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW6 T23AD052-0002 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.3 (30°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | n' | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 653 (30°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.2 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS * | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 27.9 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 342 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0009 | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.088 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.005*, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.42 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW6 T23AD052-0002 | | |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.504 | ≤ 1.0 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 110 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW6 T23AD052-0002 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n^o : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-C-SW7 KLONG HUAI PHRAI (DOWN GRADIENT OF WBNE-C) (UTM WGS 84 ZONE 47P 733621E 1728215N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 15:40 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21 - MARCH 2, 2023
REPORT NO. : 2023-U016563
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD052-0003

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW7 T23AD052-0003 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.5 (31°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 31 | n | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 383 (31°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.2 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS * | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 8.0 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 193 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0010 | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.042 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.879 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|------------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW7 T23AD052-0003 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.731 | ≤ 1.0 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 70 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-SW7 T23AD052-0003 | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 5200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

°: ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

°: ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

°: VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).


CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n' : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE


(MR. BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

| | |
|----------------------------|---|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : WBNE-A-SW2 POND IN PADDY FIELD (1) NEAR WBNE-A WELL SITE (UTM WGS 84 ZONE 47P 733661E 1733001N) |
| SAMPLE TYPE | : SURFACE WATER |
| SAMPLING DATE | : FEBRUARY 20, 2023 |
| SAMPLING TIME | : 14:10 HOUR |
| SAMPLING METHOD ° | : GRAB, GRAB AND STERILE TECHNIQUE |
| SAMPLING BY ° | : MR. PORAWORN BUNNAG |
| ANALYZED BY | : MISS ARIYA THARAROM |
| RECEIVED DATE | : FEBRUARY 21, 2023 |
| ANALYTICAL DATE | : FEBRUARY 21 - MARCH 2, 2023 |
| REPORT NO. | : 2023-U016454 |
| WORK NO. | : 2023-001349 |
| ANALYSIS NO. | : T23AD050-0002 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW2 T23AD050-0002 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.2 (31°C) | 5.0-9.0 | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 31 | n' | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 454 (31°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.2 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS * | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 14.1 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 232 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.268 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.005*, ≤ 0.05** | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.732 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW2 T23AD050-0002 | | |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.46 | ≤ 1.0 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 1.0 | 0.003 |
| MICROBIOLOGY | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 7.8 | ≤ 4,000 | 1.8 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| o-XYLENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | 0.20 |
| m,p-XYLENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.40 | - | 0.40 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-SW2 T23AD050-0002 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | 0.60 |
| SAMPLE CONDITION | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n^o : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005^o : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05^o : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (ZINC ≥ 0.003 AND < 0.025 mg/L).



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

MARCH 13, 2023

กรกฎาคม – ธันวาคม พ.ศ. 2566



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
SAMPLING SOURCE : WBNE-A-SW1 KLONG HUAI BONG (UP GRADIENT OF WBNE-A) (UTM WGS 84 ZONE 47P 735375E 1734237N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 10:20 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 5, 2023
REPORT NO. : 2023-U086677
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT196-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW1 T23AT196-0001 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.3 (29°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | n° | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 227 (29°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 131 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.114 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.111 | - | 0.005 | 0.050 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW1 T23AT196-0001 | | | |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.177 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 4.5 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW1 T23AT196-0001 | | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | | |

* : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n' : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

ANALYSIS REPORT

| | |
|----------------------------|---|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecotha.net |
| SAMPLING SOURCE | : WBNE-C-SW5 POND IN PADDY FIELD (2) NEAR WBNE-C WELL SITE (UTM WGS 84 ZONE 47P 734609E 1731320N) |
| SAMPLE TYPE | : SURFACE WATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 13:25 HOUR |
| SAMPLING METHOD ° | : GRAB, GRAB AND STERILE TECHNIQUE |
| SAMPLING BY ° | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 5, 2023 |
| REPORT NO. | : 2023-U086641 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT202-0001 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW5 T23AT202-0001 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.9 (30°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | n' | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 241 (30°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 5.7 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 130 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.088 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.005*, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.413 | - | 0.005 | 0.050 |

Benjawan V.

(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 12, 2023



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW5 T23AT202-0001 | | | |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.043 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 170 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW5 T23AT202-0001 | | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n^o : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L, ZINC ≥ 0.003 AND < 0.025 mg/L).



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 12, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-C-SW6 KLONG HUAI PHRAI (UP GRADIENT OF WBNE-C) (UTM WGS 84 ZONE 47P 735618E 1731580N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 11:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOCKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 5, 2023
REPORT NO. : 2023-U086642
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT202-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW6 T23AT202-0002 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.0 (28°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 28 | n ¹ | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 259 (28°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 155 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0005 | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.045 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.172 | - | 0.005 | 0.050 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW6 T23AT202-0002 | | | |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.026 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 430 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW6 T23AT202-0002 | | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | | |

° : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

° : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

° : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENCHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n° : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005° : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05° : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.



(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 12, 2023

ANALYSIS REPORT

| | |
|----------------------------|--|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : WBNE-C-SW7 KLONG HUAI PHRAI (DOWN GRADIENT OF WBNE-C) (UTM WGS 84 ZONE 47P 733621E 1728215N) |
| SAMPLE TYPE | : SURFACE WATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 14:50 HOUR |
| SAMPLING METHOD ° | : GRAB, GRAB AND STERILE TECHNIQUE |
| SAMPLING BY ° | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 5, 2023 |
| REPORT NO. | : 2023-U086643 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT202-0003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW7 T23AT202-0003 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H° B) | 7.6 (29°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | n° | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 206 (29°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 14.8 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 131 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0012 | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.037 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005°, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.81 | - | 0.005 | 0.050 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW7 T23AT202-0003 | | | |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.776 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 1,400 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-SW7 T23AT202-0003 | | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | BROWN/TURBID BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n' : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (ZINC ≥ 0.003 AND < 0.025 mg/L).



(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 12, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-SW2 POND IN PADDY FIELD (1) NEAR WBNE-A WELL SITE (UTM WGS 84 ZONE 47P 733661E 1733001N)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 15:50 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 5, 2023
REPORT NO. : 2023-U086678
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT196-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW2 T23AT196-0002 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.5 (30°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | n ^a | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 166 (30°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 18.6 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 105 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.053 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤0.005*, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.588 | - | 0.005 | 0.050 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW2 T23AT196-0002 | | | |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.081 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ° | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 63 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW2 T23AT196-0002 | | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID GREEN | | | |

° : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

° : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

° : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR

(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n° : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005° : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 12, 2023

ANALYSIS REPORT

| | |
|----------------------------|--|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : WBNE-A-SW4 HUAI BONG (DOWN GRADIENT OF WBNE-A) (UTM WGS 84 ZONE 47P 731125E 1730633N) |
| SAMPLE TYPE | : SURFACE WATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 14:10 HOUR |
| SAMPLING METHOD ° | : GRAB, GRAB AND STERILE TECHNIQUE |
| SAMPLING BY ° | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 5, 2023 |
| REPORT NO. | : 2023-U086679 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT196-0003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW4 T23AT196-0003 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H° B) | 7.8 (28°C) | 5.0-9.0 | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 28 | n° | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 210 (28°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| SUSPENDED SOLIDS ° | mg/L | SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 20.8 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 158 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.245 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.005°, ≤ 0.05** | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.002 | 0.025 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 2.19 | - | 0.005 | 0.050 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---------------------------------------|------------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW4 T23AT196-0003 | | | |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.05 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.600 | ≤ 1.0 | 0.002 | 0.025 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.002 | 0.0001 | 0.0005 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.1 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | - | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.003 | 0.025 |
| MICROBIOLOGY | | | | | | |
| FAECAL COLIFORM BACTERIA ^b | MPN/100 mL | MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E) | 49 | ≤ 4,000 | 1.8 | - |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | - | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-SW4 T23AT196-0003 | | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | - | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : SURFACE WATER QUALITY STANDARDS CLASS 3, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 3 : MEDIUM CLEAN FRESH SURFACE WATER RESOURCES USED FOR
(1) CONSUMPTION, BUT PASSING THROUGH ON ORDINARY TREATMENT PROCESS BEFORE USING
(2) AGRICULTURE

n¹ : NATURALLY BUT CHANGING NOT MORE THAN 3°C

≤ 0.005* : WHEN WATER HARDNESS NOT MORE THAN 100 mg/L AS CaCO₃

≤ 0.05** : WHEN WATER HARDNESS MORE THAN 100 mg/L AS CaCO₃

ND : NON-DETECTABLE

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L).



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 12, 2023

คุณภาพน้ำใต้ดิน



มกราคม – มิถุนายน พ.ศ. 2566



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : MWWBNE-A (UP GRADIENT) (UTM WGS 84 ZONE 47P 733558E 1732166N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : FEBRUARY 21, 2023
SAMPLING TIME : 09:20 HOUR
SAMPLING METHOD ° : GRAB
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 22, 2023
ANALYTICAL DATE : FEBRUARY 22 - MARCH 7, 2023
REPORT NO. : 2023-U017013
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD126-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|--------------------------------------|---------------------|-----------------|
| | | | MWWBNE-A (UP GRADIENT) T23AD126-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.4 (29°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 216 (29°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 365 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.011 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.072 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.01 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|---------|--|--------------------------------------|---------------------|-----------------|
| | | | MWWBNE-A (UP GRADIENT) T23AD126-0001 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.030 | ≤ 0.5 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|--------------------------------------|---------------------|-----------------|
| | | | MWWBNE-A (UP GRADIENT) T23AD126-0001 | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO 20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L).

Benawan V.
(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

| | | | |
|-------------------------------------|--|------------------------|-------------------------------|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. | RECEIVED DATE | : FEBRUARY 22, 2023 |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 | ANALYTICAL DATE | : FEBRUARY 22 - MARCH 7, 2023 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net | REPORT NO. | : 2023-U017016 |
| SAMPLING SOURCE | : MWWBNE-A (DOWN GRADIENT) (UTM WGS 84 ZONE 47P 733524E 1732333N) | WORK NO. | : 2023-001349 |
| SAMPLE TYPE | : GROUNDWATER | ANALYSIS NO. | : T23AD126-0002 |
| SAMPLING DATE | : FEBRUARY 21, 2023 | | |
| SAMPLING TIME | : 10:00 HOUR | | |
| SAMPLING METHOD ^c | : GRAB | | |
| SAMPLING BY ^c | : MR PORAWORN BUNNAG | | |
| ANALYZED BY | : MISS ARIYA THARAROM | | |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|----------|--|--|---------------------|-----------------|
| | | | MWWBNE-A (DOWN GRADIENT) T23AD126-0002 | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.2 (29°C) | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 240 (29°C) | - | 0.1 |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 17.8 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 355 | - | 25 |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0004 | ≤ 0.01 | 0.0003 |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.015 | - | 0.003 |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.715 | - | 0.005 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------|---------|--|--|---------------------|-----------------|
| | | | MWWBNE-A (DOWN GRADIENT) T23AD126-0002 | | |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GVV.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.277 | ≤ 0.5 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEIM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GVV.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.02 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GVV.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GVV.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|------|--|--|---------------------|-----------------|
| | | | MWWBNE-A (DOWN GRADIENT) T23AD126-0002 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD (NO 20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (NICKEL ≥ 0.005 AND < 0.050 mg/L).

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-GW2 (UTM WGS 84 ZONE 47P 734219E 1734524N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 12:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21-MARCH 3, 2023
REPORT NO. : 2023-U015943
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD051-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|---|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW2 T23AD051-0002 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.2 (29°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 955 (29°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.4 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 472 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.094 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.184 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|---------|---|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW2 T23AD051-0002 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.138 | ≤ 0.5 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW2 T23AD051-0002 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR YELLOW | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

| | | | |
|-------------------------------------|--|------------------------|-----------------------------|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. | RECEIVED DATE | : FEBRUARY 21, 2023 |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 | ANALYTICAL DATE | : FEBRUARY 21-MARCH 3, 2023 |
| CONTACT INFORMATION | : TEL : 0 2937 112-49 e-mail : anucha@ecothal.net | REPORT NO. | : 2023-U015944 |
| SAMPLING SOURCE | : WBNE-A-GW3 (UTM WGS 84 ZONE 47P 733038E 1732751N) | WORK NO. | : 2023-001349 |
| SAMPLE TYPE | : GROUNDWATER | ANALYSIS NO. | : T23AD051-0003 |
| SAMPLING DATE | : FEBRUARY 20, 2023 | | |
| SAMPLING TIME | : 14:45 HOUR | | |
| SAMPLING METHOD ^c | : GRAB | | |
| SAMPLING BY ^c | : MR PORAWORN BUNNAG | | |
| ANALYZED BY | : MISS ARIYA THARAROM | | |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW3 T23AD051-0003 | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 8.2 (33°C) | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 33 | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 1,245 (33°C) | - | 0.1 |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.5 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 5.5 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 625 | - | 25 |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.307 | - | 0.003 |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.655 | - | 0.005 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------|---------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW3 T23AD051-0003 | | |
| MANGANESE ^a | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.066 | ≤ 0.5 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|----------------------------|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW3 T23AD051-0003 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION | | | | | |
| WATER'S COLOUR/TURBID | | | YELLOW/CLEAR | | |
| SEDIMENT | | | BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)
^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)
^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.
REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO 20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.
ND : NON-DETECTABLE.
< LOQ : < LIMIT OF QUANTITATION (ZINC ≥ 0.003 AND < 0.025 mg/L).

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-GW1 (UTM WGS 84 ZONE 47P 736663E 1734353N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 13:15 HOUR
SAMPLING METHOD ° : GRAB
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21-MARCH 3, 2023
REPORT NO. : 2023-U015942
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD051-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW1 T23AD051-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.9 (29°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 1,071 (29°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.5 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 544 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0009 | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.018 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|---------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW1 T23AD051-0001 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.5 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MAS S SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MAS S SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MAS S SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-A-GW1 T23AD051-0001 | | |
| TOTAL XYLENES ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | |

° : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

° : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

° : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (IRON ≥ 0.005 AND < 0.050 mg/L, MANGANESE ≥ 0.002 AND < 0.025 mg/L).

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

| | | | |
|----------------------------|--|------------------------|-------------------------------|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. | RECEIVED DATE | : FEBRUARY 22, 2023 |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 | ANALYTICAL DATE | : FEBRUARY 22 - MARCH 7, 2023 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net | REPORT NO. | : 2023-U016931 |
| SAMPLING SOURCE | : MWVBNE-C (UP GRADIENT) (UTM WGS 84 ZONE 47P 734458E 1731297N) | WORK NO. | : 2023-001349 |
| SAMPLE TYPE | : GROUNDWATER | ANALYSIS NO. | : T23AD127-0001 |
| SAMPLING DATE | : FEBRUARY 21, 2023 | | |
| SAMPLING TIME | : 10:20 HOUR | | |
| SAMPLING METHOD ° | : SUBMERSIBLE PUMP | | |
| SAMPLING BY ° | : MR PORAWORN BUNNAG | | |
| ANALYZED BY | : MISS ARIYA THARAROM | | |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|------------------------------|---------------------|-----------------|
| | | | GROUNDWATER T23AD127-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 7.6 (28°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 28 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 719 (28°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.3 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 33.3 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 98 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.050 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW. 01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW. 01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW. 01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.93 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW. 01(NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.674 | ≤ 0.01 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------|---------|--|---------------------------|---------------------|-----------------|
| | | | GROUNDWATER T23AD127-0001 | | |
| MANGANESE ^a | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.083 | ≤ 0.5 | 0.002 |
| MERCURY ^a | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ^a | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ^a | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ^a | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^a | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|---------------------------|---------------------|-----------------|
| | | | GROUNDWATER T23AD127-0001 | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (ZINC ≥ 0.003 AND < 0.025 mg/L).

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHINI ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : MWVBNE-C (DOWN GRADIENT) (UTM WGS 84 ZONE 47P 734583E 1731113N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : FEBRUARY 21, 2023
SAMPLING TIME : 11:00 HOUR
SAMPLING METHOD ° : SUBMERSIBLE PUMP
SAMPLING BY ° : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 22, 2023
ANALYTICAL DATE : FEBRUARY 22 - MARCH 7, 2023
REPORT NO. : 2023-U016932
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD127-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT GROUNDWATER T23AD127-0002 | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|--|------------------------|--------------------|
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 7.6 (27°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 27 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 682 (27°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.3 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 7.4 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 107 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 IF AND PART 3120 B) | 0.050 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.707 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT GROUNDWATER T23AD127-0002 | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|---------|--|--|------------------------|--------------------|
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.15 | ≤ 0.5 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|---------------------------|---------------------|-----------------|
| | | | GROUNDWATER T23AD127-0002 | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

| | | | |
|-------------------------------------|--|------------------------|-----------------------------|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. | RECEIVED DATE | : FEBRUARY 21, 2023 |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 | ANALYTICAL DATE | : FEBRUARY 21-MARCH 3, 2023 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net | REPORT NO. | : 2023-U015951 |
| SAMPLING SOURCE | : WBNE-C-GW7 (UTM WGS 84 ZONE 47P 734949E 1727784N) | WORK NO. | : 2023-001349 |
| SAMPLE TYPE | : GROUNDWATER | ANALYSIS NO. | : T23AD053-0002 |
| SAMPLING DATE | : FEBRUARY 20, 2023 | | |
| SAMPLING TIME | : 16:00 HOUR | | |
| SAMPLING METHOD ^a | : GRAB | | |
| SAMPLING BY ^a | : MR PORAWORN BUNNAG | | |
| ANALYZED BY | : MISS ARIYA THARAROM | | |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|---|----------|--|--------------------------|---------------------|-----------------|
| | | | WBNE-C-GW7 T23AD053-0002 | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.8 (30°C) | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD (SM: 2510 B) | 319 (25°C) | - | 0.1 |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.4 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 198 | - | 25 |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0003 | ≤ 0.01 | 0.0003 |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.033 | - | 0.003 |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.060 | - | 0.005 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------|---------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-GW7 T23AD053-0002 | | |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.141 | ≤ 0.5 | 0.002 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-GW7 T23AD053-0002 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | COLOURLESS/CLEAR YELLOW | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOAFRD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
SAMPLING SOURCE : WBNE-C-GW6 (UTM WGS: B4 ZONE 47P 735384E 1731798N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 13:35 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR PORAWORN BUNNAG
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 21-MARCH 3, 2023
REPORT NO. : 2023-U015950
WORK NO. : 2023-001349
ANALYSIS NO. : T23AD053-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--------------------------------|----------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-GW6 T23AD053-0001 | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.3 (31°C) | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 31 | - | - |
| ELECTRICAL CONDUCTIVITY ° | µmhos/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 421 (31°C) | - | 0.1 |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.2 | - | 0.1 |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 63.2 | - | 5.0 |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 386 | - | 25 |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 |
| METALS | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.013 | - | 0.003 |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.091 | ≤ 1.0 | 0.002 |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 19.0 | - | 0.005 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.01 | 0.003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------------------|---------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-GW6 T23AD053-0001 | | |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.341 | ≤ 0.5 | 0.002 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HGM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.02 | 0.005 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 5.02 | ≤ 5.0 | 0.003 |
| VOLATILE ORGANIC COMPOUNDS | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT |
|--|------|--|-----------------------------|---------------------|-----------------|
| | | | WBNE-C-GW6 T23AD053-0001 | | |
| TOTAL XYLENES ^c | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM. PART 6200 B) | < 0.60 | ≤ 10,000 | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543)
ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535.

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L, NICKEL ≥ 0.005 AND < 0.050 mg/L).

Benjawan V.
.....
(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 13, 2023

กรกฎาคม – ธันวาคม พ.ศ. 2566



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : MWWBNE-A (UP GRADIENT) (UTM WGS 84 ZONE 47P 733558E 1732166N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 09:40 HOUR
SAMPLING METHOD ° : SUBMERSIBLE PUMP
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 6, 2023
REPORT NO. : 2023-U086683
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT194-0004

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|--------------------------------------|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-A (UP GRADIENT) T23AT194-0004 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.3 (29°C) | - | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 264 (30°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 18.2 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 138 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.034 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|---------|--|--------------------------------------|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-A (UP GRADIENT) T23AT194-0004 | | | |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.43 | - | 0.005 | 0.050 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.369 | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.034 | ≤ 0.5 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 | 0.025 |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 1.8 | ≤ 1,000 | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT MWWBNE-A (UP GRADIENT) T23AT194-0004 | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--|------|---|--|------------------------|--------------------|-----------------------------------|
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

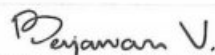
^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543)
ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 95D, DATED SEPTEMBER 15,
B.E. 2543 (2000).

ND : NON-DETECTABLE.



(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

| | |
|-------------------------------------|--|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : MWWBNE-A (DOWN GRADIENT) (UTM WGS 84 ZONE 47P 733524E 1732333N) |
| SAMPLE TYPE | : GROUNDWATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 11:00 HOUR |
| SAMPLING METHOD ^c | : SUBMERSIBLE PUMP |
| SAMPLING BY ^c | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 6, 2023 |
| REPORT NO. | : 2023-U086684 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT194-0005 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT MWWBNE-A (DOWN GRADIENT) T23AT194-0005 | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--|---------|--|--|------------------------|--------------------|-----------------------------------|
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.4 (29°C) | - | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 274 (29°C) | - | 0.1 | - |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.1 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 70.5 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 133 | - | 25 | - |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.057 | - | 0.003 | - |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|---------|--|--|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-A (DOWN GRADIENT) T23AT194-0005 | | | |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 3.12 | - | 0.005 | 0.050 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.415 | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.968 | ≤ 0.5 | 0.002 | 0.025 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 | 0.025 |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 14 | ≤ 1,000 | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|----------------------------|------|--|--|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-A (DOWN GRADIENT) T23AT194-0005 | | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID | | | YELLOW/TURBID | | | |
| SEDIMENT | | | BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)


^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 95D, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-GW2 (UTM WGS 84 ZONE 47P 734219E 1734524N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 10:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 6, 2023
REPORT NO. : 2023-U086681
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT194-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTIFICATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-------------------------------|
| | | | WBNE-A-GW2 T23AT194-0002 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.8 (29°C) | - | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 753 (29°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.4 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 460 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.053 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 1.0 | 0.002 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTIFICATION (LOQ) |
|-----------------------------------|---------|--|-----------------------------|---------------------|-----------------|-------------------------------|
| | | | WBNE-A-GW2 T23AT194-0002 | | | |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | - | 0.005 | 0.050 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.092 | ≤ 0.5 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.068 | ≤ 5.0 | 0.003 | 0.025 |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 3.7 | ≤ 1,000 | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW2 T23AT194-0002 | | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 95D, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (COPPER ≥ 0.002 AND < 0.025 mg/L, IRON ≥ 0.005 AND < 0.050 mg/L).



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

| | | | |
|-------------------------------------|--|------------------------|----------------------------------|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. | RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 | ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 6, 2023 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@eco.thai.net | REPORT NO. | : 2023-U086682 |
| SAMPLING SOURCE | : WBNE-A-GW3 (UTM WGS 84 ZONE 47P 733848E 1733827N) | WORK NO. | : 2023-006317 |
| SAMPLE TYPE | : GROUNDWATER | ANALYSIS NO. | : T23AT194-0003 |
| SAMPLING DATE | : SEPTEMBER 26, 2023 | | |
| SAMPLING TIME | : 16:30 HOUR | | |
| SAMPLING METHOD ^c | : GRAB | | |
| SAMPLING BY ^c | : MR APISIT SRIKONGKAEW | | |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM | | |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW3 T23AT194-0003 | | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.8 (27°C) | - | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 27 | - | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 1,213 (27°C) | - | 0.1 | - |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.6 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 710 | - | 25 | - |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.296 | - | 0.003 | - |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW3 T23AT194-0003 | | | |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.5 | 0.002 | 0.025 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 | 0.025 |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 2.5 | ≤ 1,000 | - | 0.20 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW3 T23AT194-0003 | | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | COLOURLESS/CLEAR YELLOW | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)


^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 950, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.



(MISS BENJAWAN VIRIYOTHAJ)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-A-GW1 (UTM WGS 84 ZONE 47P 736663E 1734353N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD ° : GRAB
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 6, 2023
REPORT NO. : 2023-U086680
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT194-0001

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW1 T23AT194-0001 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 8.2 (28°C) | - | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 28 | - | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 927 (28°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.5 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 533 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0005 | ≤ 0.01 | 0.0003 | - |
| BARIIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.016 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW1 T23AT194-0001 | | | |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.5 | 0.002 | 0.025 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 | 0.025 |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 2.1 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ° | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 6.2 | ≤ 1,000 | - | 0.20 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-A-GW1 T23AT194-0001 | | | |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR YELLOW | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

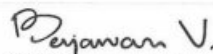
^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 950, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.



(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

| | |
|-------------------------------------|--|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : MWWBNE-C (UP GRADIENT) (UTM WGS 84 ZONE 47P 734458E 1731297N) |
| SAMPLE TYPE | : GROUNDWATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 15:00 HOUR |
| SAMPLING METHOD ^c | : SUBMERSIBLE PUMP |
| SAMPLING BY ^c | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 6, 2023 |
| REPORT NO. | : 2023-U087558 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT197-0003 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|---------|--|--|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (UP GRADIENT) T23AT197-0003 | | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.4 (29°C) | - | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 840 (29°C) | - | 0.1 | - |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.4 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 7.7 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 464 | - | 25 | - |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOXHLETT EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.018 | - | 0.003 | - |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------|---------|--|--------------------------------------|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (UP GRADIENT) T23AT197-0003 | | | |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.465 | - | 0.005 | 0.050 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.074 | ≤ 0.5 | 0.002 | 0.025 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 5.0 | 0.003 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|--------------------------------------|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (UP GRADIENT) T23AT197-0003 | | | |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | - | 0.20 |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

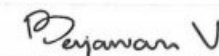
IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 95D, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L, ZINC ≥ 0.003 AND < 0.025 mg/L).



(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : MWWBNE-C (DOWN GRADIENT) (UTM WGS 84 ZONE 47P 734583E 1731113N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 13:50 HOUR
SAMPLING METHOD ° : SUBMERSIBLE PUMP
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 6, 2023
REPORT NO. : 2023-U087559
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT197-0004

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|--|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (DOWN GRADIENT) T23AT197-0004 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 7.6 (29°C) | - | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 29 | - | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 679 (29°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.3 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 25.3 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 378 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0004 | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.006 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 1.0 | 0.002 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|------------------|---------|--|--|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (DOWN GRADIENT) T23AT197-0004 | | | |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 1.61 | - | 0.005 | 0.050 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.041 | ≤ 0.5 | 0.002 | 0.025 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 5.0 | 0.003 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|---|---------------------|-----------------|-----------------------------|
| | | | MWWBNE-C (DOWN GRADIENT) T23AT197-0004 | | | |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | - | 0.20 |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23 rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 950, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L).



(MISS BENJAWAN VIRIYOTHA)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

| | |
|-------------------------------------|--|
| CUSTOMER NAME | : ECO ORIENT RESOURCES (THAILAND) LTD. |
| ADDRESS | : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900 |
| CONTACT INFORMATION | : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net |
| SAMPLING SOURCE | : WBNE-C-GW6 (UTM WGS 84 ZONE 47P 735384E 1731798N) |
| SAMPLE TYPE | : GROUNDWATER |
| SAMPLING DATE | : SEPTEMBER 26, 2023 |
| SAMPLING TIME | : 12:00 HOUR |
| SAMPLING METHOD ^c | : GRAB |
| SAMPLING BY ^c | : MR APISIT SRIKONGKAEW |
| ANALYZED BY | : MISS NAPAPORN KHUNNOKKHUM |
| RECEIVED DATE | : SEPTEMBER 27, 2023 |
| ANALYTICAL DATE | : SEPTEMBER 27 - OCTOBER 6, 2023 |
| REPORT NO. | : 2023-U087556 |
| WORK NO. | : 2023-006317 |
| ANALYSIS NO. | : T23AT197-0001 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|---|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW6 T23AT197-0001 | | | |
| pH ^c | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B) | 7.7 (30°C) | - | - | - |
| TEMPERATURE ^c | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 30 | - | - | - |
| ELECTRICAL CONDUCTIVITY ^c | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 723 (30°C) | - | 0.1 | - |
| SALINITY ^c | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.4 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ^c | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | 102 | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ^b | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 432 | - | 25 | - |
| FAT, OIL AND GREASE ^c | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ^c | mg/L | SOX-HLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ^c | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0003 | - |
| BARIUM ^c | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.015 | - | 0.003 | - |
| CADMIUM ^c | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ^c | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.126 | ≤ 1.0 | 0.002 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|-----------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW6 T23AT197-0001 | | | |
| IRON ^c | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 25.2 | - | 0.005 | 0.050 |
| LEAD ^c | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ^c | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.455 | ≤ 0.5 | 0.002 | 0.025 |
| NICKEL ^c | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | < LOQ | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ^c | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ^c | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| MERCURY ^c | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| ZINC ^c | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 7.71 | ≤ 5.0 | 0.003 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW6 T23AT197-0001 | | | |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 1,000 | - | 0.20 |
| TOTAL XYLENES ^a | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/TURBID BROWN | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 950, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (LEAD ≥ 0.003 AND < 0.100 mg/L, NICKEL ≥ 0.005 AND < 0.050 mg/L).

Benjawan V.
(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothai.net
SAMPLING SOURCE : WBNE-C-GW7 (UTM WGS 84 ZONE 47P 734949E 1727784N)
SAMPLE TYPE : GROUNDWATER
SAMPLING DATE : SEPTEMBER 26, 2023
SAMPLING TIME : 15:20 HOUR
SAMPLING METHOD ° : GRAB
SAMPLING BY ° : MR APISIT SRIKONGKAEW
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : SEPTEMBER 27, 2023
ANALYTICAL DATE : SEPTEMBER 27 - OCTOBER 6, 2023
REPORT NO. : 2023-U087557
WORK NO. : 2023-006317
ANALYSIS NO. : T23AT197-0002

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW7 T23AT197-0002 | | | |
| pH ° | - | ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H+ B) | 7.2 (27°C) | - | - | - |
| TEMPERATURE ° | °C | THERMOMETER AT SITE (SM: PART 2550 B) | 27 | - | - | - |
| ELECTRICAL CONDUCTIVITY ° | µS/cm | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2510 B) | 319 (27°C) | - | 0.1 | - |
| SALINITY ° | ppt | ELECTRICAL CONDUCTIVITY METHOD AT SITE (SM: PART 2520 B) | 0.2 | - | 0.1 | - |
| TOTAL SUSPENDED SOLIDS ° | mg/L | TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D) | ND | - | 5.0 | - |
| TOTAL DISSOLVED SOLIDS ° | mg/L | TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C) | 205 | - | 25 | - |
| FAT, OIL AND GREASE ° | mg/L | LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B) | ND | - | 3 | - |
| TOTAL PETROLEUM HYDROCARBONS ° | mg/L | SOXHLET EXTRACTION METHOD (SM: PART 5520 D AND PART 5520 F) | ND | - | 3 | - |
| METALS | | | | | | |
| ARSENIC ° | mg/L As | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | 0.0032 | ≤ 0.01 | 0.0003 | - |
| BARIUM ° | mg/L Ba | NITRIC ACID-HYDROCHLORIC ACID DIGESTION AND INDUCTIVELY COUPLED PLASMA (ICP) METHOD (SM: PART 3030 F AND PART 3120 B) | 0.064 | - | 0.003 | - |
| CADMIUM ° | mg/L Cd | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.003 | 0.002 | 0.010 |
| COPPER ° | mg/L Cu | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.130 | ≤ 1.0 | 0.002 | 0.025 |

| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|------------------|---------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW7 T23AT197-0002 | | | |
| IRON ° | mg/L Fe | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.110 | - | 0.005 | 0.050 |
| LEAD ° | mg/L Pb | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.01 | 0.003 | 0.100 |
| MANGANESE ° | mg/L Mn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.780 | ≤ 0.5 | 0.002 | 0.025 |
| NICKEL ° | mg/L Ni | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | ≤ 0.02 | 0.005 | 0.050 |
| SELENIUM ° | mg/L Se | HYDRIDE GENERATION AAS METHOD (SM: PART 3114 C) | ND | ≤ 0.01 | 0.0005 | - |
| TOTAL CHROMIUM ° | mg/L Cr | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | ND | - | 0.005 | 0.050 |
| MERCURY ° | mg/L Hg | IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B | ND | ≤ 0.001 | 0.0001 | 0.0005 |
| ZINC ° | mg/L Zn | IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B | 0.036 | ≤ 5.0 | 0.003 | 0.025 |



| PARAMETER | UNIT | METHOD OF ANALYSIS | RESULT | REGULATORY STANDARD | DETECTION LIMIT | LIMIT OF QUANTITATION (LOQ) |
|--------------------------------|------|--|-----------------------------|---------------------|-----------------|-----------------------------|
| | | | WBNE-C-GW7 T23AT197-0002 | | | |
| VOLATILE ORGANIC COMPOUNDS | | | | | | |
| BENZENE * | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 5 | - | 0.20 |
| ETHYLBENZENE * | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.20 | ≤ 700 | - | 0.20 |
| TOLUENE * | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | 4.2 | ≤ 1,000 | - | 0.20 |
| TOTAL XYLENES * | µg/L | PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM: PART 6200 B) | < 0.60 | ≤ 10,000 | - | 0.60 |
| SAMPLE CONDITION | | | | | | |
| WATER'S COLOUR/TURBID SEDIMENT | | | YELLOW/CLEAR YELLOW | | | |

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

REGULATORY STANDARD : GROUNDWATER QUALITY STANDARDS, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD NO.20 (B.E. 2543) ISSUED UNDER THE ENHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 117, SPECIAL PART 95D, DATED SEPTEMBER 15, B.E. 2543 (2000).

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

OCTOBER 16, 2023

Workplace



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco-thai.net
MEASURING PLACE : WBNE-A PRODUCTION AREA
MEASURING TYPE : WORKPLACE (HEAT STRESS)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079822
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS401-0001 - T23AS401-0002

| ANALYSIS NO. | MEASURING SITE | DURATION TIME* | RESULT (DEGREE CELSIUS) | | | | |
|---------------|--|------------------|-------------------------|------|------|------|----------|
| | | | NWB | DB | GT | WBGT | WBGT AVG |
| T23AS401-0001 | บริเวณพื้นที่สูบน้ำมัน (คุณณรงค์ สัจจะศรีรส) | 10:00-11:00 HOUR | 26.9 | 30.6 | 37.8 | 30.2 | 30.0 |
| | | 11:00-12:00 HOUR | 26.6 | 30.3 | 37.4 | 29.8 | |
| T23AS401-0002 | บริเวณเครื่องแยกสถานะ (คุณณรงค์ สัจจะศรีรส) | 13:00-14:00 HOUR | 27.0 | 31.1 | 38.8 | 30.6 | 30.4 |
| | | 14:00-15:00 HOUR | 26.8 | 30.8 | 38.3 | 30.2 | |

Nattawat
(MR NATTAWAT DANGSAWAT)

LABORATORY SUPERVISOR

SEPTEMBER 22, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco-thai.net
MEASURING PLACE : WBNE-C PRODUCTION AREA
MEASURING TYPE : WORKPLACE (HEAT STRESS)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079819
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS398-0001 - T23AS398-0002

| ANALYSIS NO. | MEASURING SITE | DURATION TIME* | RESULT (DEGREE CELSIUS) | | | | |
|---------------|---|------------------|-------------------------|------|------|------|----------|
| | | | NWB | DB | GT | WBGT | WBGT AVG |
| T23AS398-0001 | บริเวณพื้นที่สูบน้ำมัน (คุณจักรกฤษณ์ ก่อนทองคำ) | 10:05-11:05 HOUR | 27.1 | 31.6 | 40.1 | 31.0 | 29.0 |
| | | 11:05-12:05 HOUR | 25.7 | 29.3 | 30.1 | 27.0 | |
| T23AS398-0002 | บริเวณเครื่องแยกสถานะ (คุณจักรกฤษณ์ ก่อนทองคำ) | 13:05-14:05 HOUR | 27.3 | 31.7 | 40.3 | 31.2 | 29.3 |
| | | 14:05-15:05 HOUR | 26.2 | 29.6 | 30.2 | 27.4 | |

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LABORATORY SUPERVISOR

SEPTEMBER 22, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
MEASURING PLACE : WBNE-A PRODUCTION AREA
MEASURING TYPE : WORKPLACE (NOISE DOSE)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : NOISE DOSE METER
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079821
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS400-0001 - T23AS400-0002

| ANALYSIS NO. | MEASURING SITE | TIME* (HOUR) | RESULT | | | |
|---------------|--|--------------|---------------------------------|-------------------------------|---------------------------|----------|
| | | | LAVG _{12 HOUR} (dB(A)) | TWA _{8 HOUR} (dB(A)) | L _{Amax} (dB(A)) | DOSE (%) |
| T23AS400-0001 | พนักงานรักษาความปลอดภัย (คนบุ๋มมา นาสะอาน) | 07:05-19:05 | 71.3 | 73.0 | 83.6 | 6.27 |
| T23AS400-0002 | พนักงานฝ่ายผลิต (คนตรวจดี สีจะตุ๊ส) | 07:07-19:07 | 73.1 | 74.8 | 102 | 9.59 |

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ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@ecothal.net
MEASURING PLACE : WBNE-C PRODUCTION AREA
MEASURING TYPE : WORKPLACE (NOISE DOSE)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : NOISE DOSE METER
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079818
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS397-0001

| ANALYSIS NO. | MEASURING SITE | TIME* (HOUR) | RESULT | | | |
|---------------|--|--------------|---------------------------------|-------------------------------|---------------------------|----------|
| | | | LAVG _{12 HOUR} (dB(A)) | TWA _{8 HOUR} (dB(A)) | L _{Amax} (dB(A)) | DOSE (%) |
| T23AS397-0001 | พนักงานฝ่ายผลิต (คนจักรกลยนต์ ก่อนทองคำ) | 07:15-19:15 | 70.4 | 71.8 | 102 | 4.83 |

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(MR NATTAWAT DANGSAWAT)

LABORATORY SUPERVISOR

SEPTEMBER 22, 2023



ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco thai.net
MEASURING PLACE : WBNE-A PRODUCTION AREA
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079820
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS399-0001

| ANALYSIS NO. | MEASURING SITE | TIME* (HOUR) | RESULT (dB(A)) | |
|---------------|---------------------------|-----------------|---------------------------|---------------------------|
| | | | L _{avg} 12 hours | L _{max} 12 hours |
| T23AS399-0001 | พื้นที่ฐานหลุมผลิต WNBE-A | 07:10-19:10 | 69.6 | 105 |

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ANALYSIS REPORT

CUSTOMER NAME : ECO ORIENT RESOURCES (THAILAND) LTD.
ADDRESS : 555 RASA TOWER II, 12TH FLOOR, UNIT 1203 PHAHOLYOTHIN ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 0 2937 1124-9 e-mail : anucha@eco thai.net
MEASURING PLACE : WBNE-C PRODUCTION AREA
MEASURING TYPE : WORKPLACE (NOISE)
MEASURING DATE : SEPTEMBER 16, 2023
MEASURING TIME : *
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER
MEASURED BY : MISS PORNPIMOL PRACHAPAN

RECEIVED DATE : SEPTEMBER 16, 2023
ANALYTICAL DATE : SEPTEMBER 16, 2023
REPORT NO. : 2023-U079817
WORK NO. : 2023-006317
ANALYSIS NO. : T23AS396-0001

| ANALYSIS NO. | MEASURING SITE | TIME* (HOUR) | RESULT (dB(A)) | |
|---------------|---------------------------|-----------------|---------------------------|---------------------------|
| | | | L _{avg} 12 hours | L _{max} 12 hours |
| T23AS396-0001 | พื้นที่ฐานหลุมผลิต WNBE-C | 07:20-19:20 | 63.4 | 100 |

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SEPTEMBER 22, 2023

