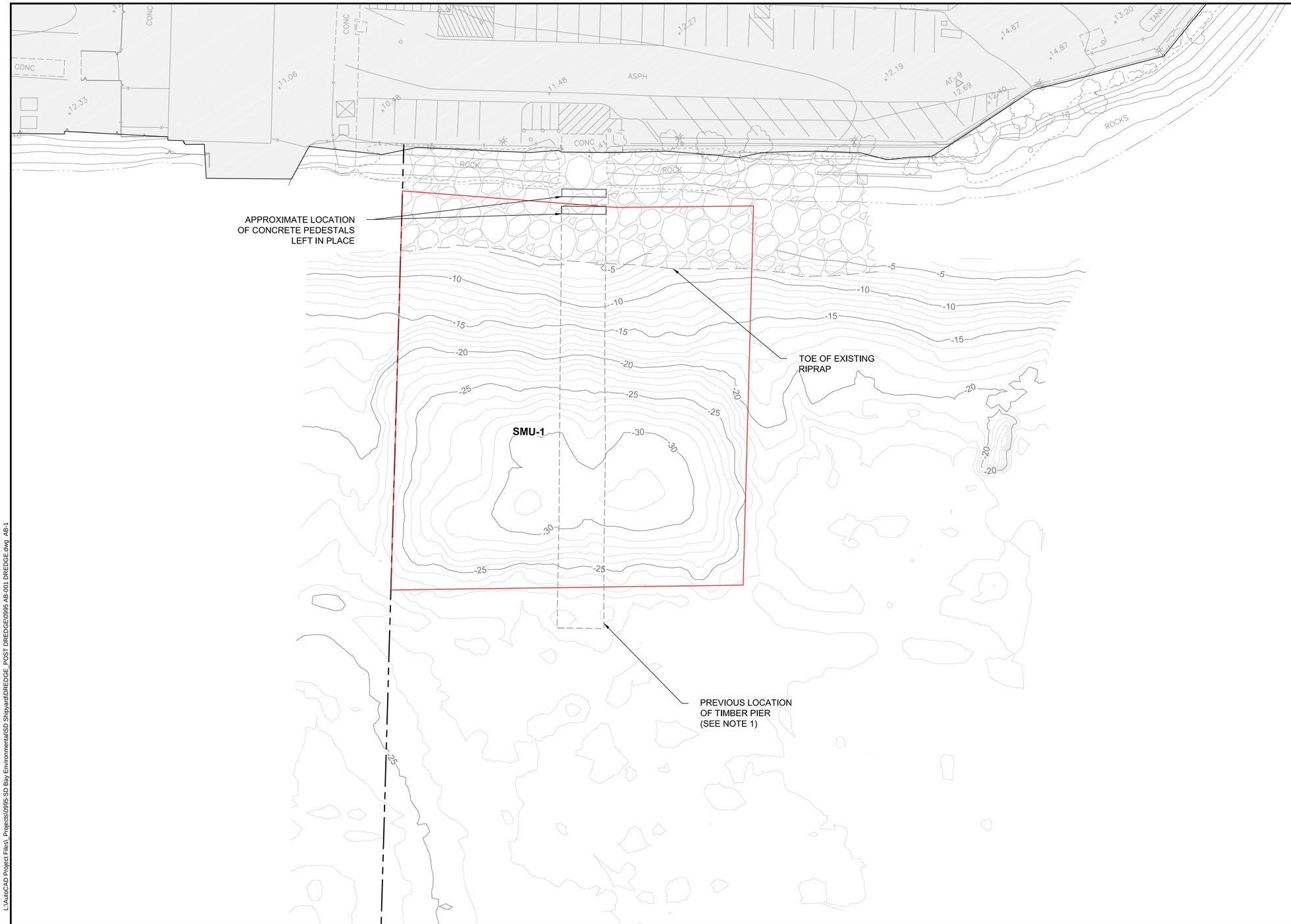
APPENDIX A
AS-BUILT DRAWINGS



NOTES:

1. TIMBER PIER DEMOLISHED FOR REMEDIAL DREDGING ACCESS.
2. BATHYMETRY FROM SURVEY PERFORMED BY GAHAGAN & BRYANT ASSOCIATES, INC., ON MARCH 25, 2014.

LEGEND:

- SMU BOUNDARY
- -40 EXISTING MAJOR CONTOUR (5' INTERVAL)
- -38 EXISTING MINOR CONTOUR (1' INTERVAL)
- LEASE HOLD LINE
- EXISTING RIPRAP (APPROXIMATE LIMITS)

NORTH

0 20 40
SCALE IN FEET

PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

ANCHOR QEA

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DRAWN BY: M PRATSCHNER
CHECKED BY: M WHELAN
APPROVED BY: J VERDUIN
SCALE: AS INDICATED
DATE: APRIL 15, 2014

SEDIMENT REMEDIAL ACTION AT SOUTH SHIPYARD

AS-BUILT CONDITIONS (1)

AB-1

SHEET NO. 1 OF 4

L:\AutoCAD Project Files_Projects\0995-SD Bay Environmental\SD Shipyard\DREDGE_POST DREDGE\0995 AB-001 DREDGE.dwg AB-1

May 20, 2014 4:35pm mpratschner

NOTE:

1. BATHYMETRY FROM SURVEYS PERFORMED BY GAHAGAN & BRYANT ASSOCIATES, INC., ON FEBRUARY 27 AND MARCH 25, 2014.

LEGEND:

- SMU BOUNDARY
- -40 EXISTING MAJOR CONTOUR (5' INTERVAL)
- -38 EXISTING MINOR CONTOUR (1' INTERVAL)
- RELOCATED UNDERWATER PIPE
- MARINE STRUCTURE
- EXISTING RIPRAP (APPROXIMATE LIMITS)

NORTH

0 30 60

SCALE IN FEET

PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

L:\AutoCAD Project Files_Projects\0995-SD Bay Environmental\SD Shipyard\DREDGE_POST DREDGE\0995 AB-001 DREDGE.dwg AB-2

Apr 24, 2014 12:20pm mpratschner

ANCHOR QEA

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

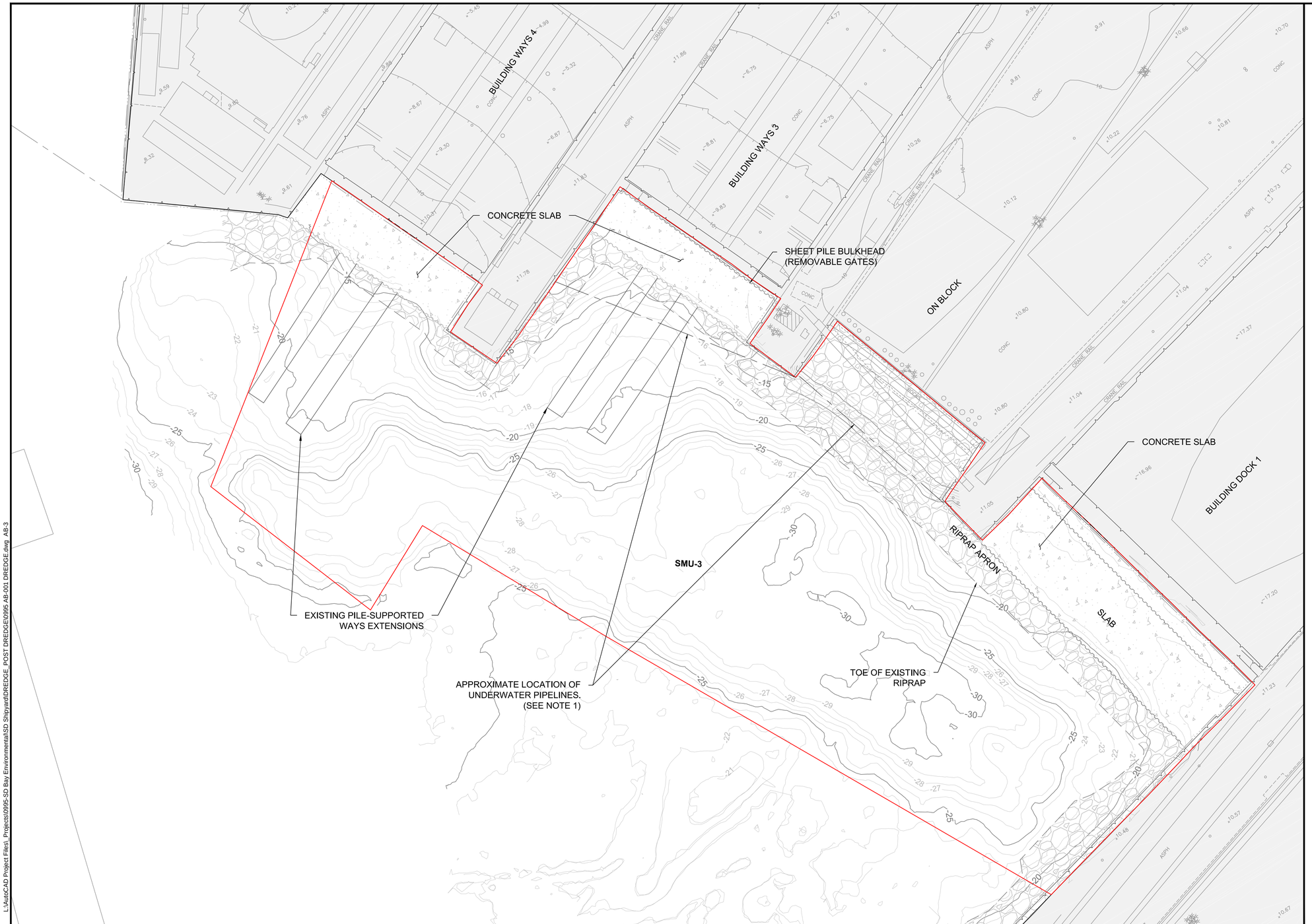
DRAWN BY: M PRATSCHNER
CHECKED BY: M WHELAN
APPROVED BY: J VERDUIN
SCALE: AS INDICATED
DATE: APRIL 15, 2014

SEDIMENT REMEDIAL ACTION AT SOUTH SHIPYARD

AS-BUILT CONDITIONS (2)

AB-2

SHEET NO. 2 OF 4



NOTES:

1. RELOCATION OF UNDERWATER PIPELINE IN SMU-3 WAS NOT REQUIRED FOR REMEDIAL DREDGING.
2. BATHYMETRY FROM SURVEY PERFORMED BY GAHAGAN & BRYANT ASSOCIATES, INC., ON MARCH 24, 2014.

LEGEND:

- SMU BOUNDARY
- -40 EXISTING MAJOR CONTOUR (5' INTERVAL)
- -38 EXISTING MINOR CONTOUR (1' INTERVAL)
- EXISTING UNDERWATER PIPE
- EXISTING RIPRAP (APPROXIMATE LIMITS)

NORTH

0 30 60

SCALE IN FEET

PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

L:\AutoCAD Project Files_Projects\0995-SD Bay Environmental\SD Shipyard\DREDGE_POST DREDGE\0995 AB-001 DREDGE.dwg AB-3

Apr 24, 2014 12:30pm mpratschner

ANCHOR QEA

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DRAWN BY: M PRATSCHNER
CHECKED BY: M WHELAN
APPROVED BY: J VERDUIN
SCALE: AS INDICATED
DATE: APRIL 15, 2014

SEDIMENT REMEDIAL ACTION AT SOUTH SHIPYARD

AS-BUILT CONDITIONS (3)

AB-3

SHEET NO. 3 OF 4

NOTE:

1. BATHYMETRY FROM SURVEY PERFORMED BY GAHAGAN & BRYANT ASSOCIATES, INC., ON FEBRUARY 20, 2014.

LEGEND:

- SMU BOUNDARY
- -40 EXISTING MAJOR CONTOUR (5' INTERVAL)
- -38 EXISTING MINOR CONTOUR (1' INTERVAL)
- EXISTING RIPRAP (APPROXIMATE LIMITS)

NORTH

0 30 60

SCALE IN FEET

PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

L:\AutoCAD Project Files_Projects\0995-SD Bay Environmental\SD Shipyard\DREDGE_POST DREDGE\0995 AB-001 DREDGE.dwg AB-4

Apr 24, 2014 12:32pm mpratschner

ANCHOR QEA

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DRAWN BY: M PRATSCHNER
CHECKED BY: M WHELAN
APPROVED BY: J VERDUIN
SCALE: AS INDICATED
DATE: APRIL 15, 2014

SEDIMENT REMEDIAL ACTION AT SOUTH SHIPYARD

AS-BUILT CONDITIONS (4)

AB-4

SHEET NO. 4 OF 4

APPENDIX B
POST-DREDGE CONFIRMATORY SAMPLING CORE LOGS

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KB/KG
Sample Type: Vibracore
Date: 12/13/2013 **Time:** 10:55

Latitude: 32°41.398
Longitude: -117°08.562
Project Depth (ft MLLW): -31.5 to -32.0
Mudline Elevation (ft MLLW): -31.5

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0–10		Sandy Silt	Very Dark Greenish-gray	Gley I 10Y 3/1	Strong Hydrocarbon	Shell hash Core is mostly unconsolidated
10–80		Silty Sand with Clay Fine grained Sand	Olive Brown	2.5Y 4/3	Less Hydrocarbon None	Core is more consolidated
80						Refusal at 80cm

Water Depth (ft): 33.1
Tide (ft): 1.56
Target Penetration (cm): 35.0
Actual Penetration (cm): 80.0
Recovered Core Length (cm): 80.0

Log of Station ID: SD-S-C-SMU1A-D-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (corners of land), depth verified using leadline.

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/KB
Sample Type: Vibracore
Date: 12/13/2013 **Time:** 11:35

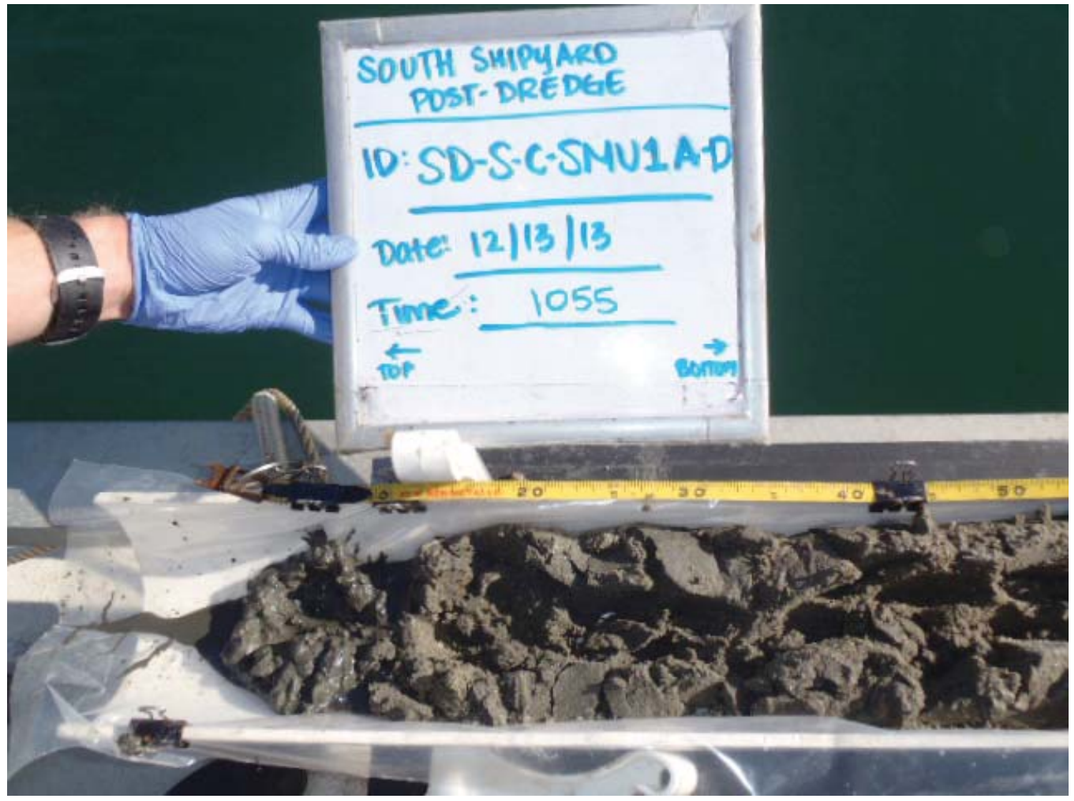
Latitude: 32°41.391
Longitude: -117°08.5616
Project Depth (ft MLLW): -31.5 to 32.0'
Mudline Elevation (ft MLLW): -32.5

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0–80		Fine grained Sand	Olive Brown	2.5Y 4/3	None	Core is consolidated Looks clean/native No odors
80						Refusal at 80cm

Water Depth (ft): 33.3
Tide (ft): 0.74
Target Penetration (cm): 35.0
Actual Penetration (cm): 80.0
Recovered Core Length (cm): 80.0

Log of Station ID: SD-S-C-SMU1B-D-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (corners of land), depth verified using leadline.



Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1A-D
Core Length: 0 - 50 cm.
Sample Date & Time: 12/13/2013 1055

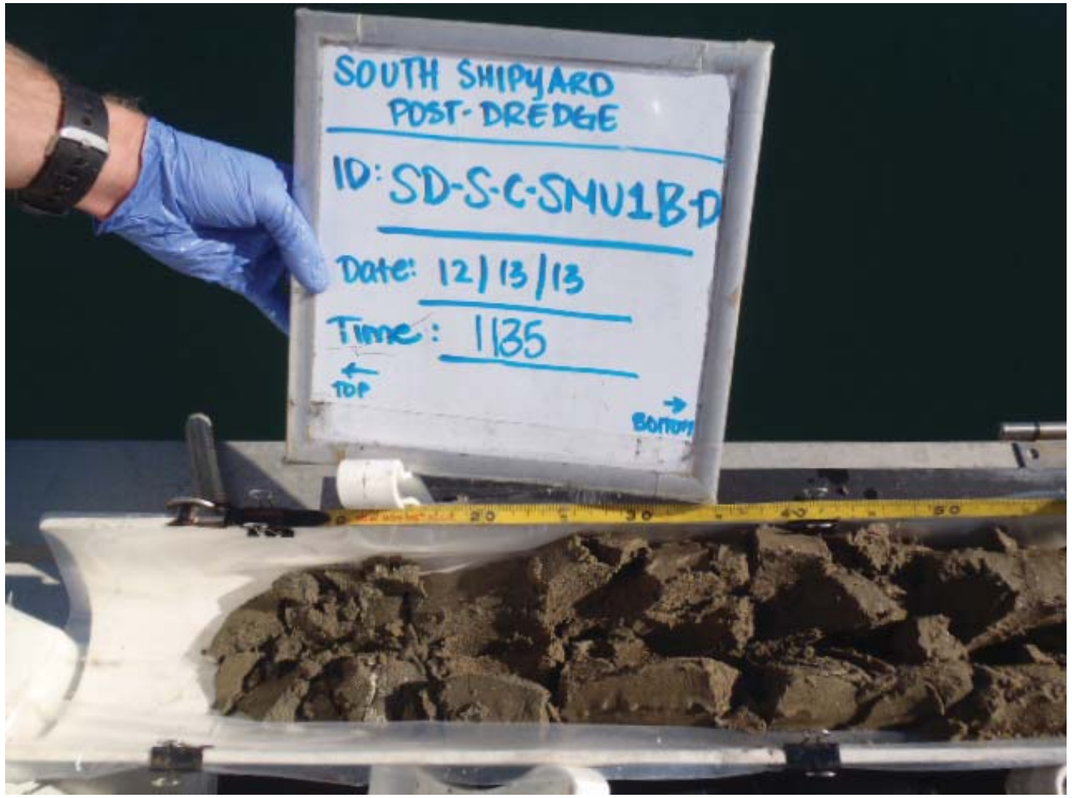
Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1A-D
Core Length: 20 - 80 cm.
Sample Date & Time: 12/13/2013 1055

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1A-D
Core Length: Plug
Sample Date & Time: 12/13/2013 1055

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1A-D
Core Length: Plug Closeup
Sample Date & Time: 12/13/2013 1055

South Shipyard Sediment Study
AMEC Project No. 1315100800
December 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU1A_D12-2.ai



Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1B-D
Core Length: 0 - 50 cm.
Sample Date & Time: 12/13/2013 1135

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1B-D
Core Length: 20 - 80 cm.
Sample Date & Time: 12/13/2013 1135

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1B-D
Core Length: Plug
Sample Date & Time: 12/13/2013 1135

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU1B-D
Core Length: Plug Closeup
Sample Date & Time: 12/13/2013 1135

South Shipyard Sediment Study
AMEC Project No. 1315100800
December 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU1B_D12-1.ai

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/BL
Sample Type: Vibracore
Date: 1/25/2014 **Time:** 11:40

Latitude: 32°41.412
Longitude: -117°08.379
Project Depth (ft MLLW): -29.5 to -31.0
Mudline Elevation (ft MLLW): -30.7

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Sand	Olive Brown	2.5Y 4/3	None	Shell hash to 50cm Core in unconsolidated from 0 to 10cm
5						
10						
15						
20						
25						
30						
35						
40						
45						
50		Very fine grained Sand	Brown	10YR 4/3		Very uniform, clean native
55						
60						Refusal at 60cm
65						
70						
75						
80						
85						
90						
95						
100						

Water Depth (ft): 31.3
Tide (ft): -0.6
Target Penetration (cm): 35.0
Actual Penetration (cm): 60.0
Recovered Core Length (cm): 60.0

Log of Station ID: SD-S-C-SMU2A-D-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (Corners of land), depth verified using leadline; sample composited with SMU2B; sample appeared clean throughout.

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/BL
Sample Type: Vibracore
Date: 1/25/2014 **Time:** 12:45

Latitude: 32°41.402
Longitude: -117°08.373
Project Depth (ft MLLW): -46.5 to -47.5
Mudline Elevation (ft MLLW): -47.5

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0–30		Silty Sand with Shell Hash	Very Dark Greenish-gray	Gley 1 5GY 3/1	Slight Hydrocarbon	Sheen Core is less consolidated
30–55		Sand with Shell Hash	Olive Brown	2.5Y 4/3	None	Large (5cm) shell
55–65		Clay with very fine grained Sand				Native, core is hard/consolidated, mottled with clay
65						Refusal at 65cm

Water Depth (ft): 48.3
Tide (ft): -0.8
Target Penetration (cm): 35.0
Actual Penetration (cm): 65.0
Recovered Core Length (cm): 65.0

Log of Station ID: SD-S-C-SMU2B-D-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (Corners of land), depth verified using leadline; sample composited with SMU2A; sample had trash in core barrel and hydrocarbon odor at surface.

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2A
Core Length: 0 - 60 cm.
Sample Date & Time: 01/25/2014 1140

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2A
Core Length: Plug
Sample Date & Time: 01/25/2014 1140

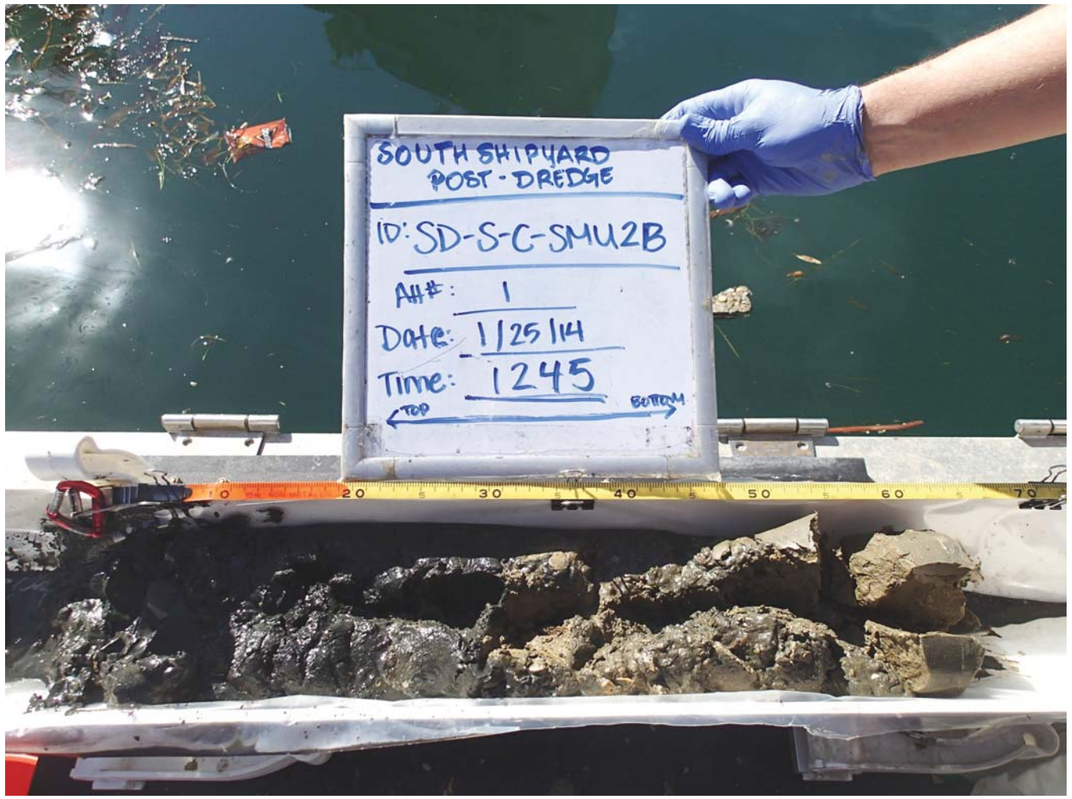
South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2A_1.ai

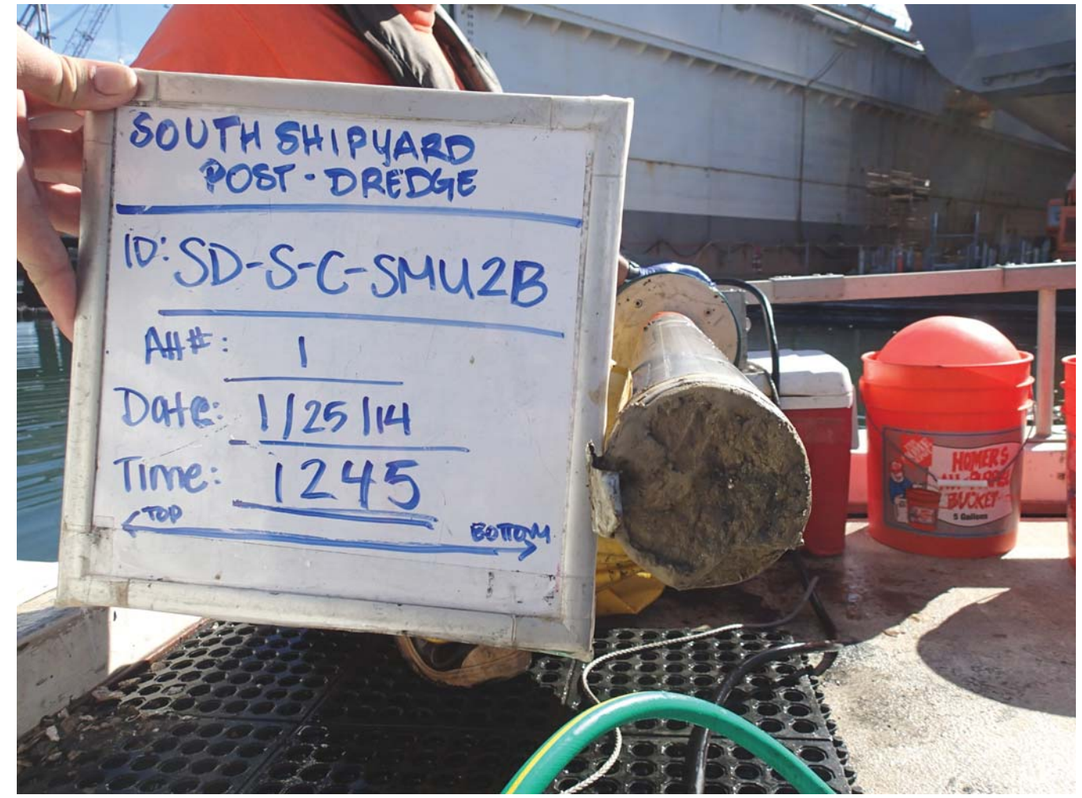
Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2A
Core Length: Plug Closeup
Sample Date & Time: 01/25/2014 1140

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2A_2.ai



Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2B
Core Length: 0 - 65 cm.
Sample Date & Time: 01/25/2014 1245



Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2B
Core Length: Plug
Sample Date & Time: 01/25/2014 1245

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2B_1.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2B
Core Length: Plug Closeup
Sample Date & Time: 01/25/2014 1245

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2B_2.ai

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/CCS
Sample Type: Vibracore
Date: 1/8/2014 **Time:** 11:25

Latitude: 32°41.388
Longitude: -117°08.326
Project Depth (ft MLLW): -22.2 to -23.2
Mudline Elevation (ft MLLW): -23.3

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Medium grained Sand	Olive Brown	2.5Y 4/3	None	With minor 2cm gravel
5						
10						
15						
20						
25		Fine grained Sand				Sand fines below 25cm appears clean/native throughout
30						
35						
40						
45						
50		Fine grained Sand with Clay				
55		Fine grained Sand				
60						
65						
70						
75						
80						
85						
90						Refusal at 90cm
95						
100						

Water Depth (ft): 24.8
Tide (ft): -1.5
Target Penetration (cm): 35.0
Actual Penetration (cm): 90.0
Recovered Core Length (cm): 90.0

Log of Station ID: SD-S-C-SMU2C-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (corners of land), depth verified using leadline.

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/CCS
Sample Type: Vibracore
Date: 1/8/2014 **Time:** 13:10

Latitude: 32°41.388
Longitude: -117°08.347
Project Depth (ft MLLW): -46.0 to -47.5
Mudline Elevation (ft MLLW): -47.2

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Fine grained Sand	Olive Brown	2.5Y 4/3	None	Core is unconsolidated to approximately 10cm With shell hash Appears clean/native
5						
10						
15						
20						
25						
30						
35						
40						
45						Proportion of shell hash increases at 45cm
50						
55						
60						
65						Shell hash disappears at 65cm
70						
75						
80						
85						Refusal at 85cm Core becomes very hard at 85cm
90						
95						
100						

Water Depth (ft): 49.2
Tide (ft): -2.0
Target Penetration (cm): 35.0
Actual Penetration (cm): 85.0
Recovered Core Length (cm): 85.0

Log of Station ID: SD-S-C-SMU2D-Attempt 1

Additional Notes: GPS signal bouncing due to interference with dry dock. Ensured proper depths & location within footprint on GPS. Visual confirmation to achieve sampling location based on CAD file map with land features. Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (corners of land), depth verified using leadline.

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2C
Core Length: 0 - 50 cm.
Sample Date & Time: 1/8/2014 1125

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2C
Core Length: 50 - 90 cm.
Sample Date & Time: 1/8/2014 1125

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2C_1.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2C
Core Length: Plug
Sample Date & Time: 1/8/2014 1125

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2C
Core Length: Plug Closeup
Sample Date & Time: 1/8/2014 1125

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2C_2.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2D
Core Length: 0 - 30 cm.
Sample Date & Time: 1/8/2014 1310

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2D
Core Length: 30 - 85 cm.
Sample Date & Time: 1/8/2014 1310

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2D_1.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2D
Core Length: Plug
Sample Date & Time: 1/8/2014 1310

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU2D
Core Length: Plug Closeup
Sample Date & Time: 1/8/2014 1310

South Shipyard Sediment Study
AMEC Project No. 1315100800
January 2014

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU2D_2.ai

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG
Sample Type: Vibracore
Date: 11/21/2013 **Time:** 12:10

Latitude: 32°41.3222
Longitude: -117°08.331
Project Depth (ft MLLW): -29.5 to -30.5
Mudline Elevation (ft MLLW): 29.9

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0–27		Sandy Silt	Very Dark Greenish-gray	Gley 1 10Y 3/1	None	Bottom very hard, vibracore bouncing
27–35		Clay	Dark Grayish-brown	2.5Y 4/2		
35–60		Fine grained Sand	Brown	7.5YR 4/4		Looks like clean/native material
60						Refusal at 60cm

Water Depth (ft): 34.7
Tide (ft): 4.8
Target Penetration (cm): 35.0
Actual Penetration (cm): 60.0
Recovered Core Length (cm): 60.0

Log of Station ID: SD-S-C-SMU3A-D-Attempt 1

Additional Notes: Inside toe line verified with most recent shapefiles & real time monitoring, GPS precalibrated to points on shore (corners of land), depth verified using leadline.

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG
Sample Type: Vibracore
Date: 11/21/2013 **Time:** 13:15

Latitude: 32°41.308
Longitude: -117°08.296
Project Depth (ft MLLW): -28.0 to -29.0
Mudline Elevation (ft MLLW): 29.6

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Sandy Silt	Very Dark Greenish-gray	Gley I 10Y 3/1	Organic Odor	Very unconsolidated to 5cm
5		Silt				Rock at surface Density increases, core holds form
10						
15						
20						
25						
30						
35		Very Fine grained Sand	Brown	7.5YR 4/4	None	Looks clean/native
40						
45						Refusal at 43cm
50						
55						
60						
65						
70						
75						
80						
85						
90						
95						
100						

Water Depth (ft): 33.4
Tide (ft): 3.8
Target Penetration (cm): 35.0
Actual Penetration (cm): 45.0
Recovered Core Length (cm): 43.0

Log of Station ID: SD-S-C-SMU3B-D-Attempt 1

Additional Notes: Same positioning as SMU3A protocol performed

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG
Sample Type: Vibracore
Date: 11/21/2013 **Time:** 14:15

Latitude: 32°41.302
Longitude: -117°08.301
Project Depth (ft MLLW): -28.9 to -30.1
Mudline Elevation (ft MLLW): 29.6

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Medium grained Sand	Dark Grayish-brown	2.5Y 4/2	None	Core very homogeneous
5						
10						
15						
20						
25						
30						
35						
40						
45						
50						
55						
60						
65						
70		Clay	Brown	10YR 4/3		Sand on outside of clay, but distinct native plug
75						
80						
85						Refusal at 83cm
90						
95						
100						

Water Depth (ft): 32.3
Tide (ft): 2.7
Target Penetration (cm): 35.0
Actual Penetration (cm): 90.0
Recovered Core Length (cm): 82.0

Log of Station ID: SD-S-C-SMU3C-D-Attempt 1

Additional Notes: Positioning determined with same methods as SMU3A.

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG
Sample Type: Vibracore
Date: 11/21/2013 **Time:** 14:55

Latitude: 32°41.273
Longitude: -117°08.285
Project Depth (ft MLLW): -30.5 to -31.5
Mudline Elevation (ft MLLW): 30.6

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0–10		Sandy Silt	Very Dark Greenish-gray	Gley I 10Y 3/1	None	With Shell hash, mostly unconsolidated/liquidy
10–95		Medium grained Sand	Dark Grayish-brown	2.5Y 4/2		Some shell hash at 10cm Surface layer is mixed with layer below to 20cm
95						Refusal at 95cm

Water Depth (ft): 34.4
Tide (ft): 3.8
Target Penetration (cm): 35.0
Actual Penetration (cm): 95.0
Recovered Core Length (cm): 95.0

Log of Station ID: SD-S-C-SMU3D-D-Attempt 1

Additional Notes: Positioning determined with same methods as SMU3A.

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3A-D
Attempt #: 1
Core Length: 0 - 50 cm.
Sample Date & Time: 11/21/2013 1210

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3A-D
Attempt #: 1
Core Length: 15 - 60 cm.
Sample Date & Time: 11/21/2013 1210

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU3A_D21_1.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3A-D
Attempt #: 1
Core Length: Plug
Sample Date & Time: 11/21/2013 1210

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3A-D
Attempt #: 1
Core Length: Plug Closeup
Sample Date & Time: 11/21/2013 1210

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU3A_D21_2.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3B-D
Attempt #: 1
Core Length: 0 - 43 cm.
Sample Date & Time: 11/21/2013 1315

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3B-D
Attempt #: 1
Core Length: 0 - 43 cm. Closeup
Sample Date & Time: 11/21/2013 1315

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU3B_D21_1.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3B-D
Attempt #: 1
Core Length: Plug
Sample Date & Time: 11/21/2013 1315

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3B-D
Attempt #: 1
Core Length: Plug Closeup
Sample Date & Time: 11/21/2013 1315

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

Graphics/AquaticSciences/SouthShipyard/SD_S_C_SMU3B_D21_2.ai

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3C-D
Attempt #: 1
Core Length: 0 - 55 cm.
Sample Date & Time: 11/21/2013 1415

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3C-D
Attempt #: 1
Core Length: 30 - 82 cm.
Sample Date & Time: 11/21/2013 1415

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3C-D
Attempt #: 1
Core Length: Plug
Sample Date & Time: 11/21/2013 1415

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3C-D
Attempt #: 1
Core Length: Plug Closeup
Sample Date & Time: 11/21/2013 1415

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3D-D
Attempt #: 1
Core Length: 0 - 65 cm.
Sample Date & Time: 11/21/2013 1455

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3D-D
Attempt #: 1
Core Length: 30 - 95 cm.
Sample Date & Time: 11/21/2013 1455

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3D-D
Attempt #: 1
Core Length: Plug
Sample Date & Time: 11/21/2013 1455

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU3D-D
Attempt #: 1
Core Length: 0 - 20 cm. Sample Closeup
Sample Date & Time: 11/21/2013 1455

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

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Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/BL
Sample Type: Vibracore
Date: 10/25/2013 **Time:** 13:15-15:00

Latitude: 32°41.2516
Longitude: -117°08.3390
Project Depth (ft MLLW): N/A
Mudline Elevation (ft MLLW): 34.0

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0						No Recovery
5						
10						
15						
20						
25						
30						
35						
40						
45						
50						
55						
60						
65						
70						
75						
80						
85						
90						
95						
100						

Water Depth (ft): 38.5
Tide (ft): 4.5
Target Penetration (cm): N/A
Actual Penetration (cm): N/A
Recovered Core Length (cm): 0.0

Log of Station ID: SD-S-C-SMU4A-D-Attempt 1-3

Additional Notes: 3 attempts - no recovery

Project Number: 1315100800
Project Manager: Barry Snyder
Logged and Sampled By: KG/TH
Sample Type: Vibracore
Date: 11/18/2013 **Time:** 08:35

Latitude: 32°41.250
Longitude: -117°08.367
Project Depth (ft MLLW): N/A
Mudline Elevation (ft MLLW): 32.1

Depth (CM)	Lithology	Sediment Description	Color	Munsell Color Notation	Odor	Remarks
0		Silt	Very Dark Greenish-gray	Gley 1 10Y 3/1	None	Some small gravel & shell hash at surface
5						
10		Silt with Sand				Very sticky, unconsolidated
15						
20						
25		Fine grained Sand with Silt	Brown	10YR 4/3		Native material, very consolidated
30						
35						Refusal at 35cm
40						
45						
50						
55						
60						
65						
70						
75						
80						
85						
90						
95						
100						

Water Depth (ft): 38.1
Tide (ft): 6.0
Target Penetration (cm): 35.0
Actual Penetration (cm): 45.0
Recovered Core Length (cm): 45.0

Log of Station ID: SD-S-C-SMU4B-D-Attempt 1

Additional Notes: Sub sampled 0 - 5cm set aside/homogenized for (A) archive - 8oz jar, 5 - 35cm sampled & homogenized - 16oz jar (A) & set aside for SMU overall composite

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU4B-D
Attempt #: 1
Core Length: 0 - 45 cm.
Sample Date & Time: 11/18/2013 0835

Location: South Shipyard - San Diego Bay
Sample ID: SD-S-C-SMU4B-D
Attempt #: 1
Core Length: Plug
Sample Date & Time: 11/18/2013 0835

South Shipyard Sediment Study
AMEC Project No. 1315100800
November 2013

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APPENDIX C
POST-DREDGE CONFIRMATORY SAMPLING ANALYTICAL RESULTS

Table 1
San Diego Shipyard Sediment Report for SMU-1

		Location ID	SMU-1
		Sample ID	SD-S-C-SMU1-C-0535_20131213
		Sample Type	Sediment
		Date	12/13/2013
		Lattitude	32.68996, 32.68985
		Longitude	-117.1427,-117.14269
	Post Remedial Dredge Area Concentration	120 Percent of Post Remedial Dredge Area Concentration	
HPAHs (ug/kg)			
BENZO(A)ANTHRACENE	--	--	**13**
BENZO(A)PYRENE	--	--	**8.2 J**
CHRYSENE	--	--	**13**
DIBENZ(A,H)ANTHRACENE	--	--	13 U
FLUORANTHENE	--	--	**58**
PERYLENE	--	--	13 U
Total HPAHs	663	796	**118.2**
METALS (mg/kg)			
COPPER	121	145	**5.91**
MERCURY	0.57	0.68	**0.0303**
PCBs (ug/kg)			
PCB-018	--	--	0.64 U
PCB-028	--	--	0.64 U
PCB-037	--	--	0.64 U
PCB-044	--	--	0.64 U
PCB-049	--	--	0.64 U
PCB-052	--	--	0.64 U
PCB-066	--	--	0.64 U
PCB-070	--	--	0.64 U
PCB-074	--	--	0.64 U
PCB-077	--	--	0.64 U
PCB-081	--	--	0.64 U
PCB-087	--	--	0.64 U
PCB-099	--	--	0.64 U
PCB-101	--	--	0.64 U
PCB-105	--	--	0.64 U
PCB-110	--	--	0.64 U
PCB-114	--	--	0.64 U
PCB-118	--	--	0.64 U
PCB-119	--	--	0.64 U
PCB-123	--	--	0.64 U
PCB-126	--	--	0.64 U
PCB-128	--	--	0.64 U
PCB-138/158	--	--	1.3 U
PCB-149	--	--	0.64 U
PCB-151	--	--	0.64 U
PCB-153	--	--	0.64 U
PCB-156	--	--	0.64 U
PCB-157	--	--	0.64 U
PCB-167	--	--	0.64 U
PCB-168	--	--	0.64 U
PCB-169	--	--	0.64 U
PCB-170	--	--	0.64 U
PCB-177	--	--	0.64 U
PCB-180	--	--	0.64 U
PCB-183	--	--	0.64 U
PCB-187	--	--	0.64 U
PCB-189	--	--	0.64 U
PCB-194	--	--	0.64 U
PCB-201	--	--	0.64 U
PCB-206	--	--	0.64 U
Total PCBs	84	101	**26.26**
TRIBUTYL TIN (ug/kg)			
TRIBUTYL TIN	22	26	3.8 U

	Detected concentration is greater than Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Detected concentration is greater than 120 Percent of Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Non-detected concentration is above one or more identified screening levels
Bold	Detected Result
J	Estimated value
U	Compound analyzed, but not detected above detection limit
ug/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
HPAHs	high-molecular weight polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
Total HPAHs	sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
Total PCBs	sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Table 1
San Diego Shipyard Sediment Report For SMU-2 North

		Location ID	SMU2A/B
		Sample ID	SD-S-C-SMU2A/B-C-0535
		Sample Type	Sediment
		Date	1/25/2014
		Lattitude	32.69020, 32.69003
		Longitude	-117.13965,-117.13955
	Post Remedial Dredge Area Concentration	120 Percent of Post Remedial Dredge Area Concentration	
HPAHs (ug/kg)			
Benzo(a)anthracene	--	--	**150**
Benzo(a)pyrene	--	--	**280**
Chrysene	--	--	**160**
Dibenzo(a,h)anthracene	--	--	**42**
Fluoranthene	--	--	**360**
Perylene	--	--	**53**
Total HPAHs	663	796	**1045**
METALS (mg/kg)			
Copper	121	145	**134**
Mercury	0.57	0.68	**0.566**
PCBs (ug/kg)			
PCB-018	--	--	0.72 U
PCB-028	--	--	0.72 U
PCB-037	--	--	0.72 U
PCB-044	--	--	0.72 U
PCB-049	--	--	0.72 U
PCB-052	--	--	0.72 U
PCB-066	--	--	0.72 U
PCB-070	--	--	0.72 U
PCB-074	--	--	0.72 U
PCB-077	--	--	0.72 U
PCB-081	--	--	0.72 U
PCB-087	--	--	0.72 U
PCB-099	--	--	0.72 U
PCB-101	--	--	0.72 U
PCB-105	--	--	0.72 U
PCB-110	--	--	0.72 U
PCB-114	--	--	0.72 U
PCB-118	--	--	0.72 U
PCB-119	--	--	0.72 U
PCB-123	--	--	0.72 U
PCB-126	--	--	0.72 U
PCB-128	--	--	0.72 U
PCB-138/158	--	--	1.4 U
PCB-149	--	--	0.72 U
PCB-151	--	--	0.72 U
PCB-153	--	--	0.72 U
PCB-156	--	--	0.72 U
PCB-157	--	--	0.72 U
PCB-167	--	--	0.72 U
PCB-168	--	--	0.72 U
PCB-169	--	--	0.72 U
PCB-170	--	--	0.72 U
PCB-177	--	--	0.72 U
PCB-180	--	--	0.72 U
PCB-183	--	--	0.72 U
PCB-187	--	--	0.72 U
PCB-189	--	--	0.72 U
PCB-194	--	--	0.72 U
PCB-201	--	--	0.72 U
PCB-206	--	--	0.72 U
Total PCBs	84	101	**29.48**
TRIBUTYL TIN (ug/kg)			
Tributyltin	22	26	**5.4**

	Detected concentration is greater than Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Detected concentration is greater than 120 Percent of Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Non-detected concentration is above one or more identified screening levels
Bold	Detected Result
J	Estimated value
U	Compound analyzed, but not detected above detection limit
ug/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
HPAHs	high-molecular weight polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
Total HPAHs	sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
Total PCBs	sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Project No. 131003-01-02

February 2014

Table 1
San Diego Shipyard Sediemnt Report For SMU-2

		Location ID	SMU2C/D
		Sample ID	SD-S-C-SMU2-C1D-C-0535
		Sample Type	Sediment
		Date	1/8/2014
		Lattitude	32.68980, 32.68980
		Longitude	-117.13876,-117.13912
	Post Remedial Dredge Area Concentration	120 Percent of Post Remedial Dredge Area Concentration	
HPAHs (ug/kg)			
BENZO(A)ANTHRACENE	--	--	**8.8 J**
BENZO(A)PYRENE	--	--	**28**
CHRYSENE	--	--	**11 J**
DIBENZ(A,H)ANTHRACENE	--	--	**3.2 J**
FLUORANTHENE	--	--	**24**
PERYLENE	--	--	13 U
Total HPAHs	663	796	**88**
METALS (mg/kg)			
COPPER	121	145	**12.5**
MERCURY	0.57	0.68	**0.0245 J**
PCBs (ug/kg)			
PCB-018	--	--	**0.63**
PCB-028	--	--	**0.65 B**
PCB-037	--	--	0.63 U
PCB-044	--	--	**1**
PCB-049	--	--	**0.77**
PCB-052	--	--	**1.3**
PCB-066	--	--	**0.98**
PCB-070	--	--	**0.91**
PCB-074	--	--	**0.37 J**
PCB-077	--	--	**0.42 J**
PCB-081	--	--	0.63 U
PCB-087	--	--	**0.45 J**
PCB-099	--	--	**0.62 J**
PCB-101	--	--	**1.6**
PCB-105	--	--	**0.8**
PCB-110	--	--	**1**
PCB-114	--	--	0.63 U
PCB-118	--	--	**1.4 B**
PCB-119	--	--	0.63 U
PCB-123	--	--	0.63 U
PCB-126	--	--	**0.48 J**
PCB-128	--	--	**0.51 J**
PCB-138/158	--	--	**1.2 J**
PCB-149	--	--	**0.67**
PCB-151	--	--	**0.16 J**
PCB-153	--	--	**1.3 B**
PCB-156	--	--	0.63 U
PCB-157	--	--	0.63 U
PCB-167	--	--	0.63 U
PCB-168	--	--	0.63 U
PCB-169	--	--	0.63 U
PCB-170	--	--	**0.68**
PCB-177	--	--	0.63 U
PCB-180	--	--	**0.76**
PCB-183	--	--	0.63 U
PCB-187	--	--	**0.56 J**
PCB-189	--	--	0.63 U
PCB-194	--	--	0.63 U
PCB-201	--	--	**0.31 J**
PCB-206	--	--	**0.47 J**
Total PCBs	84	101	**28.82**
TRIBUTYL TIN (ug/kg)			
TRIBUTYL TIN	22	26	3.8 U

	Detected concentration is greater than Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Detected concentration is greater than 120 Percent of Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))
	Non-detected concentration is above one or more identified screening levels
Bold	Detected Result
J	Estimated value
U	Compound analyzed, but not detected above detection limit
ug/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
HPAHs	high-molecular weight polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
Total HPAHs	sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
Total PCBs	sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Table 2
San Diego Shipyard Sediment Report for SMU-3

		Location ID	SMU-3A	SMU-3B/C	SMU-3D
		Sample ID	SD-S-C-SMU3A-D-0535	SD-S-C-SMU3B/C-C-0535	SD-S-C-SMU3D-D-0535
		Sample Type	Discrete	Composite	Discrete
		Date	11/21/2013	11/21/2013	11/21/2013
		Latitude	32.68870	32.68846, 32.68836	32.68788
		Longitude	-117.13885	-117.13826, -117.13845	-117.1380833
	Post Remedial Dredge Area Concentration	120 Percent of post Remedial Dredge Area Concentration			
HPAHs (ug/kg)					
BENZO(A)ANTHRACENE	--	--	**25**	**20**	13 U
BENZO(A)PYRENE	--	--	**74**	**88**	**20**
CHRYSENE	--	--	**32**	**21**	13 U
DIBENZ(A,H)ANTHRACENE	--	--	17 U	15 U	13 U
FLUORANTHENE	--	--	**33**	**26**	13 U
PERYLENE	--	--	17 U	15 U	13 U
Total HPAHs	663	796	**198**	**185**	**85**
METALS (mg/kg)					
COPPER	121	145	**128**	**49.2**	**56.3**
MERCURY	0.57	0.68	**0.478**	**0.636**	**0.0808**
TRIBUTYL TIN (ug/kg)					
TRIBUTYL TIN	22	26	**25**	4.4 U	**26**
PCBs (ug/kg)					
PCB-018	--	--	**1.2**	**1.9**	0.41 J
PCB-028	--	--	**1.4**	**1.7**	0.6 J
PCB-037	--	--	0.84 U	0.73 U	0.63 U
PCB-044	--	--	**2.7**	**5.2**	**0.99**
PCB-049	--	--	**2.7**	**4**	**1.1**
PCB-052	--	--	**4.5**	**11**	**2.3**
PCB-066	--	--	**2.5**	**3.1**	**0.92**
PCB-070	--	--	**2.9**	**7.3**	**1.2**
PCB-074	--	--	**1.2**	**2.2**	0.52 J
PCB-077	--	--	0.84 U	**0.87**	0.63 U
PCB-081	--	--	0.84 U	0.73 U	0.63 U
PCB-087	--	--	**2**	**6.5**	**0.92**
PCB-099	--	--	**2.3**	**5.9**	**1.2**
PCB-101	--	--	**5.7**	**16**	**2.7**
PCB-105	--	--	**2.1**	**5.6**	**0.93**
PCB-110	--	--	**4.7**	**14**	**2.1**
PCB-114	--	--	0.84 U	0.73 U	0.63 U
PCB-118	--	--	**4.9**	**14**	**2.2**
PCB-119	--	--	**0.16 J**	0.73 U	0.63 U
PCB-123	--	--	0.84 U	0.73 U	0.63 U
PCB-126	--	--	0.84 U	0.73 U	0.63 U
PCB-128	--	--	**0.99**	**2.9**	**0.54 J**
PCB-138/158	--	--	**5.1**	**15**	**2.3**
PCB-149	--	--	**3.1**	**8.6**	**1.3**
PCB-151	--	--	**0.84 J**	**2.2**	**0.34 J**
PCB-153	--	--	**5.2**	**13**	**2.3**
PCB-156	--	--	**0.54 J**	**2**	**0.29 J**
PCB-157	--	--	**0.4 J**	**0.96**	**0.25 J**
PCB-167	--	--	**0.18 J**	**0.61 J**	0.63 U
PCB-168	--	--	0.84 U	**0.73 U**	0.63 U
PCB-169	--	--	0.84 U	**0.57 J**	0.63 U
PCB-170	--	--	**1.4**	**3.3**	**0.59 J**
PCB-177	--	--	**0.56 J**	**1.1**	**0.16 J**
PCB-180	--	--	**2.2**	**5.2**	**0.89**
PCB-183	--	--	**0.58 J**	**1.4**	**0.2 J**
PCB-187	--	--	**1.4**	**2.7**	**0.48 J**
PCB-189	--	--	0.84 U	**0.15 J**	0.63 U
PCB-194	--	--	**0.52 J**	**1.1**	0.63 U
PCB-201	--	--	0.84 U	**0.17 J**	0.63 U
PCB-206	--	--	**0.52 J**	**0.58 J**	0.63 U
Total PCBs	84	101	**72.89**	**165.92**	**36.55**

Notes:

Detected concentration is greater than Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))

Detected concentration is greater than 120 Percent of post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))

Non-detected concentration is above one or more identified screening levels

Bold	Detected result
J	Estimated value
U	Compound analyzed, but not detected above detection limit
ug/kg	micrograms per kilogram
HPAHs	high-molecular weight polycyclic aromatic hydrocarbons
mg/kg	milligrams per kilogram
PCBs	polychlorinated biphenyls
(1) HPAHs	sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
(2) Total PCBs	sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Table 1
San Diego Shipyard Sediment Report for SMU-4

		Location ID	SMU-4
		Sample ID	SD-S-C-SMU4B-D-0535
		Sample Type	Composite
		Date	11/18/2013
		X	xxxxxx
		Y	xxxxxx
	Post Remedial Dredge Area Concentration	120 Percent of post Remedial Dredge Area Concentration	
HPAHs (ug/kg)			
BENZO(A)ANTHRACENE	--	--	**33**
BENZO(A)PYRENE	--	--	**150**
CHRYSENE	--	--	**36**
DIBENZ(A,H)ANTHRACENE	--	--	**16**
FLUORANTHENE	--	--	**62**
PERYLENE	--	--	**25**
(1) Total HPAHs	663	796	**322**
METALS (mg/kg)			
COPPER	121	145	**40.4**
MERCURY	0.57	0.68	**0.724**
NICKEL	--	--	**10.1**
SILVER	--	--	**0.883**
ZINC	--	--	**114**
TRIBUTYL TIN (ug/kg)			
TRIBUTYL TIN	22	26	4.4 U
PCBs (ug/kg)			
PCB-018	--	--	**1.8**
PCB-028	--	--	**5**
PCB-037	--	--	0.73 U
PCB-044	--	--	**2.1**
PCB-049	--	--	**6.4**
PCB-052	--	--	**2.4**
PCB-066	--	--	**1.3**
PCB-070	--	--	**1.4**
PCB-074	--	--	**0.92**
PCB-077	--	--	0.73 U
PCB-081	--	--	0.73 U
PCB-087	--	--	0.73 U
PCB-099	--	--	**1.2**
PCB-101	--	--	**3.1**
PCB-105	--	--	0.73 U
PCB-110	--	--	**2.1**
PCB-114	--	--	**0.48 J**
PCB-118	--	--	**2.8**
PCB-119	--	--	0.73 U
PCB-123	--	--	0.73 U
PCB-126	--	--	0.73 U
PCB-128	--	--	**0.46 J**
PCB-138/158	--	--	**3.7**
PCB-149	--	--	**2.4**
PCB-151	--	--	**0.68 J**
PCB-153	--	--	**3.6**
PCB-156	--	--	0.73 U
PCB-157	--	--	**2.3**
PCB-167	--	--	0.73 U
PCB-168	--	--	0.73 U
PCB-169	--	--	**0.71 J**
PCB-170	--	--	**1.2**
PCB-177	--	--	**0.48 J**
PCB-180	--	--	**2.4**
PCB-183	--	--	**0.53 J**
PCB-187	--	--	**1.5**
PCB-189	--	--	0.73 U
PCB-194	--	--	0.73 U
PCB-201	--	--	0.73 U
PCB-206	--	--	**1.1**
(2) Total PCBs	84	101	62.3
Other (%)			
TOTAL SOLIDS	--	--	68.8

Notes:

Detected concentration is greater than Post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))

Detected concentration is greater than 120 Percent of post Remedial Dredge Area Concentration Level (Cleanup and Abatement Order - (Water Board 2012a))

Non-detected concentration is above one or more identified screening levels

Bold	Detected result
J	Estimated value
U	Compound analyzed, but not detected above detection limit
ug/kg	micrograms per kilogram
HPAHs	high-molecular weight polycyclic aromatic hydrocarbons
mg/kg	milligrams per kilogram
PCBs	polychlorinated biphenyls
(1) HPAHs	sum of six PAHs: Fluoranthene, Perylene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenzo(a,h)anthracene.
(2) Total PCBs	sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Calscience
Environmental
Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-12-1128 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S Lane

Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-12-1128

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: South Shipyard Post Dredge

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 12/18/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: South Shipyard Post Dredge
Work Order Number: 13-12-1128

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-12-1128 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 12/13/13. They were assigned to Work Order 13-12-1128.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	13-12-1128
		Project Name:	South Shipyard Post Dredge
		PO Number:	
		Date/Time Received:	12/13/13 19:00
		Number of Containers:	1
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SD-S-C-SMU1-C-0535	13-12-1128-1	12/13/13 12:00	1	Sediment

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
		Units:	%
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**N/A**	**12/14/13**	**12/14/13 17:00**	**D1214TSB2**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	78.2	0.100	0.100	1	

Method Blank	**099-05-019-2439**	**N/A**	**Solid**	**N/A**	**12/14/13**	**12/14/13 17:00**	**D1214TSB2**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	ND	0.100	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**ICP/MS 03**	**12/16/13**	**12/16/13 18:48**	**131216L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	5.91	0.128	0.0536	1	
Nickel	2.68	0.128	0.0647	1	
Silver	ND	0.128	0.0400	1	
Zinc	24.3	1.28	1.02	1	

Method Blank	**099-15-254-177**	**N/A**	**Solid**	**ICP/MS 03**	**12/16/13**	**12/16/13 18:28**	**131216L03E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	0.100	0.0419	1	
Nickel	ND	0.100	0.0506	1	
Silver	ND	0.100	0.0313	1	
Zinc	ND	1.00	0.795	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**Mercury**	**12/16/13**	**12/16/13 14:29**	**131216L04E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0303	0.0256	0.00752	1	

Method Blank	**099-12-452-439**	**N/A**	**Solid**	**Mercury**	**12/16/13**	**12/16/13 14:25**	**131216L04E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00588	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**GC/MS AAA**	**12/14/13**	**12/16/13 20:49**	**131214L02**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	13	13	2.0	1	
Benzo (a) Pyrene	8.2	13	1.3	1	J
Benzo (b) Fluoranthene	9.0	13	1.3	1	J
Benzo (g,h,i) Perylene	3.6	13	1.2	1	J
Benzo (k) Fluoranthene	7.8	13	1.8	1	J
Chrysene	13	13	1.5	1	
Dibenz (a,h) Anthracene	ND	13	1.3	1	
Fluoranthene	58	13	1.3	1	
Indeno (1,2,3-c,d) Pyrene	3.1	13	1.4	1	J
Perylene	ND	13	12	1	
Pyrene	55	13	1.3	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	90	14-146	
Nitrobenzene-d5	88	18-162	
p-Terphenyl-d14	87	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-119**	**N/A**	**Solid**	**GC/MS AAA**	**12/14/13**	**12/17/13 11:46**	**131214L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	ND	10	1.6	1	
Benzo (a) Pyrene	ND	10	1.0	1	
Benzo (b) Fluoranthene	ND	10	1.0	1	
Benzo (g,h,i) Perylene	ND	10	0.94	1	
Benzo (k) Fluoranthene	ND	10	1.4	1	
Chrysene	ND	10	1.2	1	
Dibenz (a,h) Anthracene	ND	10	1.0	1	
Fluoranthene	ND	10	0.98	1	
Indeno (1,2,3-c,d) Pyrene	ND	10	1.1	1	
Perylene	ND	10	9.8	1	
Pyrene	ND	10	0.99	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	81	14-146	
Nitrobenzene-d5	73	18-162	
p-Terphenyl-d14	80	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**GC/MS HHH**	**12/14/13**	**12/16/13 16:45**	**131214L01**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.64	0.20	1	
PCB028	ND	0.64	0.13	1	
PCB037	ND	0.64	0.17	1	
PCB044	ND	0.64	0.17	1	
PCB049	ND	0.64	0.15	1	
PCB052	ND	0.64	0.12	1	
PCB066	ND	0.64	0.12	1	
PCB070	ND	0.64	0.10	1	
PCB074	ND	0.64	0.12	1	
PCB077	ND	0.64	0.12	1	
PCB081	ND	0.64	0.16	1	
PCB087	ND	0.64	0.13	1	
PCB099	ND	0.64	0.11	1	
PCB101	ND	0.64	0.10	1	
PCB105	ND	0.64	0.13	1	
PCB110	ND	0.64	0.13	1	
PCB114	ND	0.64	0.13	1	
PCB118	ND	0.64	0.17	1	
PCB119	ND	0.64	0.11	1	
PCB123	ND	0.64	0.11	1	
PCB126	ND	0.64	0.18	1	
PCB128	ND	0.64	0.13	1	
PCB138/158	ND	1.3	0.26	1	
PCB149	ND	0.64	0.11	1	
PCB151	ND	0.64	0.13	1	
PCB153	ND	0.64	0.13	1	
PCB156	ND	0.64	0.13	1	
PCB157	ND	0.64	0.12	1	
PCB167	ND	0.64	0.13	1	
PCB168	ND	0.64	0.11	1	
PCB169	ND	0.64	0.10	1	
PCB170	ND	0.64	0.12	1	
PCB177	ND	0.64	0.16	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 2 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	ND	0.64	0.078	1	
PCB183	ND	0.64	0.14	1	
PCB187	ND	0.64	0.13	1	
PCB189	ND	0.64	0.11	1	
PCB194	ND	0.64	0.12	1	
PCB201	ND	0.64	0.073	1	
PCB206	ND	0.64	0.11	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	121	19-133	
p-Terphenyl-d14	105	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-145**	**N/A**	**Solid**	**GC/MS HHH**	**12/14/13**	**12/16/13 16:17**	**131214L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.50	0.16	1	
PCB028	ND	0.50	0.099	1	
PCB037	ND	0.50	0.13	1	
PCB044	ND	0.50	0.13	1	
PCB049	ND	0.50	0.12	1	
PCB052	ND	0.50	0.097	1	
PCB066	ND	0.50	0.091	1	
PCB070	ND	0.50	0.082	1	
PCB074	ND	0.50	0.094	1	
PCB077	ND	0.50	0.097	1	
PCB081	ND	0.50	0.12	1	
PCB087	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1	
PCB101	ND	0.50	0.081	1	
PCB105	ND	0.50	0.10	1	
PCB110	ND	0.50	0.10	1	
PCB114	ND	0.50	0.10	1	
PCB118	ND	0.50	0.13	1	
PCB119	ND	0.50	0.087	1	
PCB123	ND	0.50	0.087	1	
PCB126	ND	0.50	0.14	1	
PCB128	ND	0.50	0.10	1	
PCB138/158	ND	1.0	0.20	1	
PCB149	ND	0.50	0.089	1	
PCB151	ND	0.50	0.10	1	
PCB153	ND	0.50	0.10	1	
PCB156	ND	0.50	0.098	1	
PCB157	ND	0.50	0.096	1	
PCB167	ND	0.50	0.10	1	
PCB168	ND	0.50	0.086	1	
PCB169	ND	0.50	0.082	1	
PCB170	ND	0.50	0.093	1	
PCB177	ND	0.50	0.12	1	
PCB180	ND	0.50	0.061	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 4 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB183	ND	0.50	0.11	1	
PCB187	ND	0.50	0.10	1	
PCB189	ND	0.50	0.086	1	
PCB194	ND	0.50	0.096	1	
PCB201	ND	0.50	0.057	1	
PCB206	ND	0.50	0.083	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	73	19-133	
p-Terphenyl-d14	93	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU1-C-0535	**13-12-1128-1-A**	**12/13/13 12:00**	**Sediment**	**GC/MS Y**	**12/14/13**	**12/17/13 18:59**	**131214L03**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.8	0.74	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	70	27-135	

Method Blank	**099-07-016-1110**	**N/A**	**Solid**	**GC/MS Y**	**12/14/13**	**12/17/13 17:34**	**131214L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.0	0.58	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	96	27-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard Post Dredge			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**ICP/MS 03**	**12/16/13**	**12/16/13 18:35**	**131216S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	4.622	25.00	28.48	95	29.28	99	80-120	3	0-20	
Nickel	2.097	25.00	24.51	90	25.56	94	80-120	4	0-20	
Silver	ND	12.50	11.93	95	12.51	100	80-120	5	0-20	
Zinc	19.04	25.00	43.43	98	43.04	96	80-120	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard Post Dredge			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**Mercury**	**12/16/13**	**12/16/13 14:31**	**131216S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02373	0.8350	0.6971	81	0.7378	86	76-136	6	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**GC/MS AAA**	**12/14/13**	**12/16/13 21:12**	**131214S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzo (a) Anthracene	10.33	100.0	92.80	82	102.4	92	40-160	10	0-20	
Benzo (a) Pyrene	ND	100.0	84.83	85	93.41	93	40-160	10	0-20	
Benzo (b) Fluoranthene	ND	100.0	98.18	98	108.1	108	40-160	10	0-20	
Benzo (g,h,i) Perylene	ND	100.0	71.03	71	77.57	78	40-160	9	0-20	
Benzo (k) Fluoranthene	ND	100.0	91.12	91	100.3	100	40-160	10	0-20	
Chrysene	10.52	100.0	89.98	79	99.91	89	40-160	10	0-20	
Dibenz (a,h) Anthracene	ND	100.0	63.99	64	69.40	69	40-160	8	0-20	
Fluoranthene	45.34	100.0	132.9	88	147.4	102	40-160	10	0-20	
Indeno (1,2,3-c,d) Pyrene	ND	100.0	68.61	69	74.35	74	40-160	8	0-20	
Pyrene	42.90	100.0	130.4	87	144.3	101	40-160	10	0-46	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**GC/MS HHH**	**12/14/13**	**12/16/13 17:13**	**131214S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	ND	25.00	21.95	88	21.95	88	50-125	0	0-30	
PCB028	ND	25.00	23.07	92	23.46	94	50-125	2	0-30	
PCB044	ND	25.00	23.46	94	23.57	94	50-125	0	0-30	
PCB052	ND	25.00	23.03	92	23.32	93	50-125	1	0-30	
PCB066	ND	25.00	23.99	96	23.66	95	50-125	1	0-30	
PCB077	ND	25.00	24.43	98	24.34	97	50-125	0	0-30	
PCB101	ND	25.00	23.15	93	23.13	93	50-125	0	0-30	
PCB105	ND	25.00	22.92	92	22.70	91	50-125	1	0-30	
PCB118	ND	25.00	26.04	104	25.80	103	50-125	1	0-30	
PCB126	ND	25.00	21.93	88	22.25	89	50-125	1	0-30	
PCB128	ND	25.00	20.37	81	20.42	82	50-125	0	0-30	
PCB153	ND	25.00	22.11	88	22.22	89	50-125	1	0-30	
PCB170	ND	25.00	23.53	94	23.43	94	50-125	0	0-30	
PCB180	ND	25.00	21.56	86	21.37	85	50-125	1	0-30	
PCB187	ND	25.00	21.26	85	21.05	84	50-125	1	0-30	
PCB206	ND	25.00	26.13	105	25.83	103	50-125	1	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-12-1128
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**GC/MS Y**	**01/01/95**	**12/17/13 19:13**	**131214S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Tributyltin	ND	100.0	67.90	68	82.86	83	34-142	20	0-50	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**ICP/MS 03**	**12/16/13 00:00**	**12/16/13 18:41**	**131216S03**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	4.622	25.00	31.03	106	75-125	
Nickel	2.097	25.00	26.77	99	75-125	
Silver	ND	12.50	11.03	88	75-125	
Zinc	19.04	25.00	43.87	99	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	SM 2540 B (M)
Project: South Shipyard Post Dredge		Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SD-S-C-SMU1-C-0535	**Sediment**	**N/A**	**12/14/13 00:00**	**12/14/13 17:00**	**D1214TSD2**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	78.20	78.40	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-254-177	**Solid**	**ICP/MS 03**	**12/16/13 18:31**	**131216L03E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper	25.00	29.01	116	80-120	
Nickel	25.00	26.80	107	80-120	
Silver	12.50	11.42	91	80-120	
Zinc	25.00	29.43	118	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: South Shipyard Post Dredge		Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-452-439	**Solid**	**Mercury**	**12/16/13 14:27**	**131216L04E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7826	94	82-124	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge		Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-097-119	**Solid**	**GC/MS AAA**	**12/17/13 12:09**	**131214L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Benzo (a) Anthracene	100.0	83.55	84	40-160	
Benzo (a) Pyrene	100.0	79.95	80	40-160	
Benzo (b) Fluoranthene	100.0	88.33	88	40-160	
Benzo (g,h,i) Perylene	100.0	98.68	99	40-160	
Benzo (k) Fluoranthene	100.0	88.40	88	40-160	
Chrysene	100.0	88.28	88	40-160	
Dibenz (a,h) Anthracene	100.0	80.77	81	40-160	
Fluoranthene	100.0	103.5	104	40-160	
Indeno (1,2,3-c,d) Pyrene	100.0	90.93	91	40-160	
Pyrene	100.0	105.7	106	40-160	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge		Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-341-145	**Solid**	**GC/MS HHH**	**12/16/13 15:48**	**131214L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
PCB018	25.00	23.60	94	50-125	38-138	
PCB028	25.00	23.90	96	50-125	38-138	
PCB044	25.00	24.47	98	50-125	38-138	
PCB052	25.00	23.78	95	50-125	38-138	
PCB066	25.00	24.72	99	50-125	38-138	
PCB077	25.00	25.74	103	50-125	38-138	
PCB101	25.00	25.09	100	50-125	38-138	
PCB105	25.00	25.21	101	50-125	38-138	
PCB118	25.00	28.14	113	50-125	38-138	
PCB126	25.00	25.49	102	50-125	38-138	
PCB128	25.00	24.52	98	50-125	38-138	
PCB153	25.00	24.63	99	50-125	38-138	
PCB170	25.00	22.89	92	50-125	38-138	
PCB180	25.00	25.63	103	50-125	38-138	
PCB187	25.00	24.58	98	50-125	38-138	
PCB206	25.00	26.49	106	50-125	38-138	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	12/13/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-12-1128
San Diego, CA 92106-2727	Preparation:	EPA 3550B (M)
	Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge		Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-07-016-1110	**Solid**	**GC/MS Y**	**12/17/13 17:49**	**131214L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Tributyltin	100.0	78.30	78	33-147	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-12-1128

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 12/13/13
PAGE: 1 OF 1

LABORATORY CLIENT: San Diego Bay Environmental Restoration Fund South
ADDRESS: C/O de maximis, Inc. 1322 Scott Street, Suite 104
CITY: San Diego STATE: CA ZIP: 92106-2727
TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SOUTH SHIPYARD
P.O. NO.: 131510800.0004.01
PROJECT CONTACT: Mike Palmer and Adam Gale
LAB CONTACT OR QUOTE NO.: Danielle Gonsman
SAMPLER(S) (SIGNATURE): [signature]
LAB USE ONLY: 12-1148

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☒ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS:
Low level sediment detection limits
Danielle Gonsman is P.M.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 / 7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
	SD-S-C-SMU1-C-0535	SOUTH SHIP	12/12/13	1200	SED	1	X	X	X	X	X
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	12/12/10	1555
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 12/13/13
PAGE: 1 OF 1

LABORATORY CLIENT: San Diego Bay Environmental Restoration Fund South
ADDRESS: C/O de maximis, Inc.
1322 Scott Street, Suite 104
CITY: San Diego STATE: CA ZIP: 92106-2727
TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SOUTH SHIPYARD
P.O. NO.: 13510800-0004.01
PROJECT CONTACT: Mike Palmer and Adam Gale
LAB CONTACT OR QUOTE NO.: Danielle Gonsman
SAMPLER(S): (SIGNATURE)
LAB USE ONLY: 13-12-1128

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____ / ____ / ____

SPECIAL INSTRUCTIONS:
Low level sediment detection limits
Danielle Gonsman is PM

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 /7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
1	SD-SC-SMM1-C-0535	SOUTH SHIP	12/13/13	1200	SED	1	X	X	X	X	X
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		12/13/13	1555
		12/13/13	1900

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-12-1128

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 12/13/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.7 °C - 0.2 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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Calscience
Environmental
Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-01-1523 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

Supplemental Report 2

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 14-01-1523

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: South Shipyard Post Dredge Sampling

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 01/31/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: South Shipyard Post Dredge
Work Order Number: 14-01-1523

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-01-1523

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 01/25/14. They were assigned to Work Order 14-01-1523.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	14-01-1523
		Project Name:	South Shipyard Post Dredge
		PO Number:	
		Date/Time Received:	01/25/14 16:07
		Number of Containers:	1
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SD-S-C-SMU2A/B-C-0535	14-01-1523-1	01/25/14 14:00	1	Sediment

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
		Units:	%
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**N/A**	**01/28/14**	**01/28/14 18:10**	**E0128TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	68.5	0.100	1	

Method Blank	**099-05-019-2462**	**N/A**	**Solid**	**N/A**	**01/28/14**	**01/28/14 18:10**	**E0128TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	ND	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**ICP/MS 03**	**01/27/14**	**01/27/14 22:12**	**140127L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	134	0.146	0.0612	1	
Nickel	9.18	0.146	0.0739	1	
Silver	0.435	0.146	0.0457	1	
Zinc	153	1.46	1.16	1	

Method Blank	**099-15-254-184**	**N/A**	**Solid**	**ICP/MS 03**	**01/27/14**	**01/27/14 21:14**	**140127L03E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	0.100	0.0419	1	
Nickel	ND	0.100	0.0506	1	
Silver	ND	0.100	0.0313	1	
Zinc	ND	1.00	0.795	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**Mercury**	**01/27/14**	**01/27/14 20:46**	**140127L06E**

Comment(s): - Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qualifiers
Mercury	0.566	0.0293	0.599	

Method Blank	**099-12-452-448**	**N/A**	**Solid**	**Mercury**	**01/27/14**	**01/27/14 18:36**	**140127L06E**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0200	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**GC/MS AAA**	**01/27/14**	**01/28/14 12:24**	**140127L02**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	150	15	2.3	1	
Benzo (a) Pyrene	280	15	1.5	1	
Benzo (b) Fluoranthene	340	15	1.5	1	
Benzo (g,h,i) Perylene	150	15	1.4	1	
Benzo (k) Fluoranthene	230	15	2.0	1	
Chrysene	160	15	1.7	1	
Dibenz (a,h) Anthracene	42	15	1.5	1	
Fluoranthene	360	15	1.4	1	
Indeno (1,2,3-c,d) Pyrene	180	15	1.5	1	
Perylene	53	15	14	1	
Pyrene	500	15	1.4	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	145	14-146	
Nitrobenzene-d5	117	18-162	
p-Terphenyl-d14	90	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-123**	**N/A**	**Solid**	**GC/MS AAA**	**01/27/14**	**01/28/14 11:37**	**140127L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	ND	10	1.6	1	
Benzo (a) Pyrene	ND	10	1.0	1	
Benzo (b) Fluoranthene	ND	10	1.0	1	
Benzo (g,h,i) Perylene	ND	10	0.94	1	
Benzo (k) Fluoranthene	ND	10	1.4	1	
Chrysene	ND	10	1.2	1	
Dibenz (a,h) Anthracene	ND	10	1.0	1	
Fluoranthene	ND	10	0.98	1	
Indeno (1,2,3-c,d) Pyrene	ND	10	1.1	1	
Perylene	ND	10	9.8	1	
Pyrene	ND	10	0.99	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	82	14-146	
Nitrobenzene-d5	100	18-162	
p-Terphenyl-d14	83	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**GC/MS HHH**	**01/29/14**	**01/29/14 15:49**	**140129L03**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.72	0.23	1	
PCB028	ND	0.72	0.14	1	
PCB037	ND	0.72	0.19	1	
PCB044	ND	0.72	0.19	1	
PCB049	ND	0.72	0.17	1	
PCB052	ND	0.72	0.14	1	
PCB066	ND	0.72	0.13	1	
PCB070	ND	0.72	0.12	1	
PCB074	ND	0.72	0.14	1	
PCB077	ND	0.72	0.14	1	
PCB081	ND	0.72	0.18	1	
PCB087	ND	0.72	0.15	1	
PCB099	ND	0.72	0.12	1	
PCB101	ND	0.72	0.12	1	
PCB105	ND	0.72	0.15	1	
PCB110	ND	0.72	0.15	1	
PCB114	ND	0.72	0.14	1	
PCB118	ND	0.72	0.19	1	
PCB119	ND	0.72	0.12	1	
PCB123	ND	0.72	0.13	1	
PCB126	ND	0.72	0.20	1	
PCB128	ND	0.72	0.15	1	
PCB138/158	ND	1.4	0.29	1	
PCB149	ND	0.72	0.13	1	
PCB151	ND	0.72	0.15	1	
PCB153	ND	0.72	0.15	1	
PCB156	ND	0.72	0.14	1	
PCB157	ND	0.72	0.14	1	
PCB167	ND	0.72	0.14	1	
PCB168	ND	0.72	0.12	1	
PCB169	ND	0.72	0.12	1	
PCB170	ND	0.72	0.13	1	
PCB177	ND	0.72	0.18	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-1523
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 2 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	ND	0.72	0.088	1	
PCB183	ND	0.72	0.16	1	
PCB187	ND	0.72	0.15	1	
PCB189	ND	0.72	0.12	1	
PCB194	ND	0.72	0.14	1	
PCB201	ND	0.72	0.082	1	
PCB206	ND	0.72	0.12	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	85	19-133	
p-Terphenyl-d14	77	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-152**	**N/A**	**Solid**	**GC/MS HHH**	**01/29/14**	**01/29/14 15:21**	**140129L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.50	0.16	1	
PCB028	ND	0.50	0.099	1	
PCB037	ND	0.50	0.13	1	
PCB044	ND	0.50	0.13	1	
PCB049	ND	0.50	0.12	1	
PCB052	ND	0.50	0.097	1	
PCB066	ND	0.50	0.091	1	
PCB070	ND	0.50	0.082	1	
PCB074	ND	0.50	0.094	1	
PCB077	ND	0.50	0.097	1	
PCB081	ND	0.50	0.12	1	
PCB087	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1	
PCB101	ND	0.50	0.081	1	
PCB105	ND	0.50	0.10	1	
PCB110	ND	0.50	0.10	1	
PCB114	ND	0.50	0.10	1	
PCB118	ND	0.50	0.13	1	
PCB119	ND	0.50	0.087	1	
PCB123	ND	0.50	0.087	1	
PCB126	ND	0.50	0.14	1	
PCB128	ND	0.50	0.10	1	
PCB138/158	ND	1.0	0.20	1	
PCB149	ND	0.50	0.089	1	
PCB151	ND	0.50	0.10	1	
PCB153	ND	0.50	0.10	1	
PCB156	ND	0.50	0.098	1	
PCB157	ND	0.50	0.096	1	
PCB167	ND	0.50	0.10	1	
PCB168	ND	0.50	0.086	1	
PCB169	ND	0.50	0.082	1	
PCB170	ND	0.50	0.093	1	
PCB177	ND	0.50	0.12	1	
PCB180	ND	0.50	0.061	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 4 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB183	ND	0.50	0.11	1	
PCB187	ND	0.50	0.10	1	
PCB189	ND	0.50	0.086	1	
PCB194	ND	0.50	0.096	1	
PCB201	ND	0.50	0.057	1	
PCB206	ND	0.50	0.083	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	110	19-133	
p-Terphenyl-d14	96	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2A/B-C-0535	**14-01-1523-1-AA**	**01/25/14 14:00**	**Sediment**	**GC/MS Y**	**01/27/14**	**01/28/14 11:30**	**140127L08**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	5.4	4.3	0.83	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	67	27-135	

Method Blank	**099-07-016-1118**	**N/A**	**Solid**	**GC/MS Y**	**01/27/14**	**01/28/14 10:58**	**140127L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.0	0.58	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	69	27-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-1523
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**ICP/MS 03**	**01/27/14**	**01/27/14 22:12**	**140127S03**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike**	**Sediment**	**ICP/MS 03**	**01/27/14**	**01/27/14 21:24**	**140127S03**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike Duplicate**	**Sediment**	**ICP/MS 03**	**01/27/14**	**01/27/14 21:27**	**140127S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	92.01	25.00	109.4	69	113.7	87	80-120	4	0-20	3
Nickel	6.288	25.00	30.88	98	32.52	105	80-120	5	0-20	
Silver	0.2980	12.50	14.01	110	14.25	112	80-120	2	0-20	
Zinc	104.5	25.00	122.7	4X	128.7	4X	80-120	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard Post Dredge			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**Mercury**	**01/27/14**	**01/27/14 20:46**	**140127S06**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike**	**Sediment**	**Mercury**	**01/27/14**	**01/27/14 20:49**	**140127S06**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike Duplicate**	**Sediment**	**Mercury**	**01/27/14**	**01/27/14 20:51**	**140127S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.3876	0.8350	1.341	114	1.278	107	76-136	5	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**GC/MS AAA**	**01/27/14**	**01/28/14 12:24**	**140127S02**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike**	**Sediment**	**GC/MS AAA**	**01/27/14**	**01/28/14 12:47**	**140127S02**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike Duplicate**	**Sediment**	**GC/MS AAA**	**01/27/14**	**01/28/14 13:10**	**140127S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzo (a) Anthracene	104.6	100.0	216.0	111	196.3	92	40-160	10	0-20	
Benzo (a) Pyrene	189.2	100.0	301.6	112	278.7	89	40-160	8	0-20	
Benzo (b) Fluoranthene	231.9	100.0	360.1	128	342.2	110	40-160	5	0-20	
Benzo (g,h,i) Perylene	102.2	100.0	200.1	98	184.6	82	40-160	8	0-20	
Benzo (k) Fluoranthene	156.5	100.0	221.4	65	227.0	71	40-160	2	0-20	
Chrysene	113.0	100.0	214.8	102	200.9	88	40-160	7	0-20	
Dibenz (a,h) Anthracene	29.09	100.0	151.7	123	140.5	111	40-160	8	0-20	
Fluoranthene	247.9	100.0	323.0	75	343.2	95	40-160	6	0-20	
Indeno (1,2,3-c,d) Pyrene	125.4	100.0	252.2	127	242.0	117	40-160	4	0-20	
Pyrene	341.3	100.0	516.4	175	458.7	117	40-160	12	0-46	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-1523
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge		Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**GC/MS HHH**	**01/29/14**	**01/29/14 15:49**	**140129S03**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike**	**Sediment**	**GC/MS HHH**	**01/29/14**	**01/29/14 16:18**	**140129S03**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike Duplicate**	**Sediment**	**GC/MS HHH**	**01/29/14**	**01/29/14 16:47**	**140129S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	ND	25.00	15.31	61	13.27	53	50-125	14	0-30	
PCB028	ND	25.00	16.52	66	15.96	64	50-125	3	0-30	
PCB044	ND	25.00	16.91	68	16.12	64	50-125	5	0-30	
PCB052	ND	25.00	21.68	87	20.30	81	50-125	7	0-30	
PCB066	ND	25.00	16.79	67	16.09	64	50-125	4	0-30	
PCB077	ND	25.00	14.10	56	13.34	53	50-125	6	0-30	
PCB101	ND	25.00	21.88	88	20.61	82	50-125	6	0-30	
PCB105	ND	25.00	16.19	65	15.47	62	50-125	5	0-30	
PCB118	ND	25.00	22.53	90	21.49	86	50-125	5	0-30	
PCB126	ND	25.00	14.06	56	13.51	54	50-125	4	0-30	
PCB128	ND	25.00	16.04	64	15.36	61	50-125	4	0-30	
PCB153	ND	25.00	20.37	81	19.31	77	50-125	5	0-30	
PCB170	ND	25.00	15.26	61	14.75	59	50-125	3	0-30	
PCB180	ND	25.00	16.93	68	16.51	66	50-125	2	0-30	
PCB187	ND	25.00	14.74	59	14.17	57	50-125	4	0-30	
PCB206	ND	25.00	19.76	79	19.10	76	50-125	3	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**GC/MS Y**	**01/27/14**	**01/28/14 11:30**	**140127S08**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike**	**Sediment**	**GC/MS Y**	**01/27/14**	**01/28/14 11:46**	**140127S08**
SD-S-C-SMU2A/B-C-0535	**Matrix Spike Duplicate**	**Sediment**	**GC/MS Y**	**01/27/14**	**01/28/14 12:03**	**140127S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Tributyltin	3.693	100.0	80.14	76	78.44	75	34-142	2	0-50	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard Post Dredge			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
SD-S-C-SMU2A/B-C-0535	**Sample**	**Sediment**	**ICP/MS 03**	**01/27/14 00:00**	**01/27/14 22:12**	**140127S03**
SD-S-C-SMU2A/B-C-0535	**PDS**	**Sediment**	**ICP/MS 03**	**01/27/14 00:00**	**01/27/14 21:30**	**140127S03**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	92.01	25.00	112.6	82	75-125	
Nickel	6.288	25.00	31.70	102	75-125	
Silver	0.2980	12.50	10.19	79	75-125	
Zinc	104.5	25.00	126.5	4X	75-125	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
Project: South Shipyard Post Dredge			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-01-1488-1	**Sample**	**Sediment**	**N/A**	**01/28/14 00:00**	**01/28/14 18:10**	**E0128TSD1**
14-01-1488-1	**Sample Duplicate**	**Sediment**	**N/A**	**01/28/14 00:00**	**01/28/14 18:10**	**E0128TSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	20.40	19.70	3	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-1523
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-254-184	**LCS**	**Solid**	**ICP/MS 03**	**01/27/14**	**01/28/14 18:15**	**140127L03E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper	25.00	26.77	107	80-120	
Nickel	25.00	25.75	103	80-120	
Silver	12.50	10.01	80	80-120	
Zinc	25.00	28.38	114	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-1523
San Diego, CA 92106-2727	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: South Shipyard Post Dredge		Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-452-448	**LCS**	**Solid**	**Mercury**	**01/27/14**	**01/28/14 12:26**	**140127L06E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7528	90	82-124	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-097-123	**LCS**	**Solid**	**GC/MS AAA**	**01/27/14**	**01/28/14 12:00**	**140127L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Benzo (a) Anthracene	100.0	82.79	83	40-160	
Benzo (a) Pyrene	100.0	82.37	82	40-160	
Benzo (b) Fluoranthene	100.0	91.96	92	40-160	
Benzo (g,h,i) Perylene	100.0	87.45	87	40-160	
Benzo (k) Fluoranthene	100.0	81.93	82	40-160	
Chrysene	100.0	76.05	76	40-160	
Dibenz (a,h) Anthracene	100.0	93.37	93	40-160	
Fluoranthene	100.0	84.09	84	40-160	
Indeno (1,2,3-c,d) Pyrene	100.0	100.9	101	40-160	
Pyrene	100.0	80.20	80	40-160	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-341-152	**LCS**	**Solid**	**GC/MS HHH**	**01/29/14**	**01/29/14 14:51**	**140129L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
PCB018	25.00	26.28	105	50-125	38-138	
PCB028	25.00	26.87	107	50-125	38-138	
PCB044	25.00	25.99	104	50-125	38-138	
PCB052	25.00	24.43	98	50-125	38-138	
PCB066	25.00	26.80	107	50-125	38-138	
PCB077	25.00	27.49	110	50-125	38-138	
PCB101	25.00	25.80	103	50-125	38-138	
PCB105	25.00	26.62	106	50-125	38-138	
PCB118	25.00	27.94	112	50-125	38-138	
PCB126	25.00	27.30	109	50-125	38-138	
PCB128	25.00	27.89	112	50-125	38-138	
PCB153	25.00	26.09	104	50-125	38-138	
PCB170	25.00	24.90	100	50-125	38-138	
PCB180	25.00	28.14	113	50-125	38-138	
PCB187	25.00	26.60	106	50-125	38-138	
PCB206	25.00	28.68	115	50-125	38-138	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/25/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-1523
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-07-016-1118	**LCS**	**Solid**	**GC/MS Y**	**01/27/14**	**01/28/14 11:14**	**140127L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Tributyltin	100.0	69.66	70	33-147	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-01-1523

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 1/25/14
PAGE: 1 OF 1

LABORATORY CLIENT: ANCHOR QEA
ADDRESS: C/O de maximis, Inc.
1322 Scott Street, Suite 104
CITY: San Diego STATE: CA ZIP: 92106-2727
TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: South Shipyard Post-Dredge Sampling
P.O. NO.: 1315100800
PROJECT CONTACT: Mike Palmer and Adam Gale
LAB CONTACT OR QUOTE NO.: Danielle Gonsman
SAMPLER(S): (SIGNATURE) [AMEC]
LAB USE ONLY: 14-01-1523

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☒ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:
Low level sediment detection limits
Danielle Gonsman is PM
Anchor is Contact.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 /7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
	SD-SC-SMU2AIB-C-0335	SOUTH SHIPYARD	1/25/14	1400	SED	1	X	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Kimberlie Agobbi [AMEC]	[signature]	1/25/14	1400
[signature]	[signature] CEL	1/25/14	16:07

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-01-1523

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: Anchor

DATE: 01/25/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 5.2 °C - 0.3 °C (CF) = 4.9 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 681

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Checked by:** 681

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-01-0352 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-01-0352

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: South Shipyard

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 01/10/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

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Client Project Name: South Shipyard
Work Order Number: 14-01-0352

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-01-0352

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 01/08/14. They were assigned to Work Order 14-01-0352.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	14-01-0352
		Project Name:	South Shipyard
		PO Number:	
		Date/Time Received:	01/08/14 17:45
		Number of Containers:	1
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SD-S-C-SMU2-C1D-C-0535	14-01-0352-1	01/08/14 13:30	1	Sediment

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
		Units:	%
Project: South Shipyard			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**N/A**	**01/08/14**	**01/09/14 12:00**	**E0109TSB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	79.8	0.100	0.100	1	

Method Blank	**099-05-019-2453**	**N/A**	**Solid**	**N/A**	**01/08/14**	**01/09/14 12:00**	**E0109TSB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	ND	0.100	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: South Shipyard			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**ICP/MS 03**	**01/08/14**	**01/09/14 13:28**	**140108L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	12.5	0.125	0.0525	1	
Nickel	4.25	0.125	0.0634	1	
Silver	ND	0.125	0.0392	1	
Zinc	33.9	1.25	0.996	1	

Method Blank	**099-15-254-180**	**N/A**	**Solid**	**ICP/MS 03**	**01/08/14**	**01/10/14 12:28**	**140108L03E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	0.100	0.0419	1	
Nickel	ND	0.100	0.0506	1	
Silver	ND	0.100	0.0313	1	
Zinc	ND	1.00	0.795	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: South Shipyard			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**Mercury**	**01/09/14**	**01/09/14 11:15**	**140109L02E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0245	0.0251	0.00737	1	J

Method Blank	**099-12-452-443**	**N/A**	**Solid**	**Mercury**	**01/09/14**	**01/09/14 11:11**	**140109L02E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00588	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**GC/MS AAA**	**01/09/14**	**01/09/14 17:14**	**140109L01**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	8.8	13	2.0	1	J
Benzo (a) Pyrene	28	13	1.3	1	
Benzo (b) Fluoranthene	38	13	1.3	1	
Benzo (g,h,i) Perylene	16	13	1.2	1	
Benzo (k) Fluoranthene	29	13	1.7	1	
Chrysene	11	13	1.5	1	J
Dibenz (a,h) Anthracene	3.2	13	1.3	1	J
Fluoranthene	24	13	1.2	1	
Indeno (1,2,3-c,d) Pyrene	16	13	1.3	1	
Perylene	ND	13	12	1	
Pyrene	27	13	1.2	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	93	14-146	
Nitrobenzene-d5	95	18-162	
p-Terphenyl-d14	92	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-120**	**N/A**	**Solid**	**GC/MS AAA**	**01/09/14**	**01/09/14 16:27**	**140109L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	ND	10	1.6	1	
Benzo (a) Pyrene	ND	10	1.0	1	
Benzo (b) Fluoranthene	ND	10	1.0	1	
Benzo (g,h,i) Perylene	ND	10	0.94	1	
Benzo (k) Fluoranthene	ND	10	1.4	1	
Chrysene	ND	10	1.2	1	
Dibenz (a,h) Anthracene	ND	10	1.0	1	
Fluoranthene	ND	10	0.98	1	
Indeno (1,2,3-c,d) Pyrene	ND	10	1.1	1	
Perylene	ND	10	9.8	1	
Pyrene	ND	10	0.99	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	107	14-146	
Nitrobenzene-d5	110	18-162	
p-Terphenyl-d14	106	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**GC/MS HHH**	**01/09/14**	**01/09/14 18:39**	**140109L02**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	0.63	0.63	0.20	1	
PCB028	0.65	0.63	0.12	1	B
PCB037	ND	0.63	0.16	1	
PCB044	1.0	0.63	0.16	1	
PCB049	0.77	0.63	0.15	1	
PCB052	1.3	0.63	0.12	1	
PCB066	0.98	0.63	0.11	1	
PCB070	0.91	0.63	0.10	1	
PCB074	0.37	0.63	0.12	1	J
PCB077	0.42	0.63	0.12	1	J
PCB081	ND	0.63	0.15	1	
PCB087	0.45	0.63	0.13	1	J
PCB099	0.62	0.63	0.11	1	J
PCB101	1.6	0.63	0.10	1	
PCB105	0.80	0.63	0.13	1	
PCB110	1.0	0.63	0.13	1	
PCB114	ND	0.63	0.12	1	
PCB118	1.4	0.63	0.17	1	B
PCB119	ND	0.63	0.11	1	
PCB123	ND	0.63	0.11	1	
PCB126	0.48	0.63	0.17	1	J
PCB128	0.51	0.63	0.13	1	J
PCB138/158	1.2	1.3	0.25	1	J
PCB149	0.67	0.63	0.11	1	
PCB151	0.16	0.63	0.13	1	J
PCB153	1.3	0.63	0.13	1	B
PCB156	ND	0.63	0.12	1	
PCB157	ND	0.63	0.12	1	
PCB167	ND	0.63	0.13	1	
PCB168	ND	0.63	0.11	1	
PCB169	ND	0.63	0.10	1	
PCB170	0.68	0.63	0.12	1	
PCB177	ND	0.63	0.15	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard			Page 2 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	0.76	0.63	0.077	1	
PCB183	ND	0.63	0.14	1	
PCB187	0.56	0.63	0.13	1	J
PCB189	ND	0.63	0.11	1	
PCB194	ND	0.63	0.12	1	
PCB201	0.31	0.63	0.071	1	J
PCB206	0.47	0.63	0.10	1	J

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	99	19-133	
p-Terphenyl-d14	95	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-148**	**N/A**	**Solid**	**GC/MS HHH**	**01/09/14**	**01/09/14 18:12**	**140109L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.50	0.16	1	
PCB028	0.11	0.50	0.099	1	J
PCB037	ND	0.50	0.13	1	
PCB044	ND	0.50	0.13	1	
PCB049	ND	0.50	0.12	1	
PCB052	ND	0.50	0.097	1	
PCB066	ND	0.50	0.091	1	
PCB070	ND	0.50	0.082	1	
PCB074	ND	0.50	0.094	1	
PCB077	ND	0.50	0.097	1	
PCB081	0.15	0.50	0.12	1	J
PCB087	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1	
PCB101	ND	0.50	0.081	1	
PCB105	ND	0.50	0.10	1	
PCB110	ND	0.50	0.10	1	
PCB114	0.12	0.50	0.10	1	J
PCB118	0.14	0.50	0.13	1	J
PCB119	ND	0.50	0.087	1	
PCB123	0.12	0.50	0.087	1	J
PCB126	ND	0.50	0.14	1	
PCB128	ND	0.50	0.10	1	
PCB138/158	ND	1.0	0.20	1	
PCB149	ND	0.50	0.089	1	
PCB151	ND	0.50	0.10	1	
PCB153	0.17	0.50	0.10	1	J
PCB156	ND	0.50	0.098	1	
PCB157	0.17	0.50	0.096	1	J
PCB167	0.11	0.50	0.10	1	J
PCB168	ND	0.50	0.086	1	
PCB169	ND	0.50	0.082	1	
PCB170	ND	0.50	0.093	1	
PCB177	ND	0.50	0.12	1	
PCB180	ND	0.50	0.061	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard			Page 4 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB183	ND	0.50	0.11	1	
PCB187	ND	0.50	0.10	1	
PCB189	ND	0.50	0.086	1	
PCB194	ND	0.50	0.096	1	
PCB201	ND	0.50	0.057	1	
PCB206	ND	0.50	0.083	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	81	19-133	
p-Terphenyl-d14	98	33-147	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: South Shipyard			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU2-C1D-C-0535	**14-01-0352-1-A**	**01/08/14 13:30**	**Sediment**	**GC/MS Y**	**01/07/14**	**01/09/14 14:27**	**140107L10**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.8	0.72	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	102	27-135	

Method Blank	**099-07-016-1116**	**N/A**	**Solid**	**GC/MS Y**	**01/07/14**	**01/09/14 11:43**	**140107L10**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.0	0.58	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	101	27-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-0352
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2-C1D-C-0535	**Sample**	**Sediment**	**ICP/MS 03**	**01/08/14**	**01/09/14 13:28**	**140108S03**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike**	**Sediment**	**ICP/MS 03**	**01/08/14**	**01/09/14 13:02**	**140108S03**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike Duplicate**	**Sediment**	**ICP/MS 03**	**01/08/14**	**01/09/14 13:15**	**140108S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	9.956	25.00	33.16	93	38.67	115	80-120	15	0-20	
Nickel	3.394	25.00	24.03	83	27.44	96	80-120	13	0-20	
Silver	ND	12.50	11.78	94	13.32	107	80-120	12	0-20	
Zinc	27.07	25.00	54.48	110	59.27	129	80-120	8	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2-C1D-C-0535	**Sample**	**Sediment**	**Mercury**	**01/09/14**	**01/09/14 11:15**	**140109S02**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike**	**Sediment**	**Mercury**	**01/09/14**	**01/09/14 11:17**	**140109S02**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike Duplicate**	**Sediment**	**Mercury**	**01/09/14**	**01/09/14 11:19**	**140109S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7333	88	0.7279	87	76-136	1	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2-C1D-C-0535	**Sample**	**Sediment**	**GC/MS AAA**	**01/09/14**	**01/09/14 17:14**	**140109S01**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike**	**Sediment**	**GC/MS AAA**	**01/09/14**	**01/09/14 17:37**	**140109S01**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike Duplicate**	**Sediment**	**GC/MS AAA**	**01/09/14**	**01/09/14 18:00**	**140109S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzo (a) Anthracene	ND	100.0	98.36	98	95.72	96	40-160	3	0-20	
Benzo (a) Pyrene	22.72	100.0	112.5	90	110.5	88	40-160	2	0-20	
Benzo (b) Fluoranthene	30.24	100.0	128.3	98	132.4	102	40-160	3	0-20	
Benzo (g,h,i) Perylene	13.06	100.0	107.5	94	104.4	91	40-160	3	0-20	
Benzo (k) Fluoranthene	23.14	100.0	104.0	81	97.63	74	40-160	6	0-20	
Chrysene	ND	100.0	96.41	96	93.06	93	40-160	4	0-20	
Dibenz (a,h) Anthracene	ND	100.0	89.03	89	87.83	88	40-160	1	0-20	
Fluoranthene	19.39	100.0	127.4	108	123.8	104	40-160	3	0-20	
Indeno (1,2,3-c,d) Pyrene	13.00	100.0	115.3	102	114.9	102	40-160	0	0-20	
Pyrene	21.84	100.0	126.0	104	119.0	97	40-160	6	0-46	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South
C/O de maximis, Inc., 1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Project: South Shipyard

Date Received:	01/08/14
Work Order:	14-01-0352
Preparation:	EPA 3545
Method:	EPA 8270C SIM PCB Congeners

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU2-C1D-C-0535	**Sample**	**Sediment**	**GC/MS HHH**	**01/09/14**	**01/09/14 18:39**	**140109S02**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike**	**Sediment**	**GC/MS HHH**	**01/09/14**	**01/09/14 19:07**	**140109S02**
SD-S-C-SMU2-C1D-C-0535	**Matrix Spike Duplicate**	**Sediment**	**GC/MS HHH**	**01/09/14**	**01/09/14 19:35**	**140109S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	0.5006	25.00	22.91	90	24.35	95	50-125	6	0-30	
PCB028	0.5148	25.00	24.83	97	25.59	100	50-125	3	0-30	
PCB044	0.8162	25.00	24.25	94	25.09	97	50-125	3	0-30	
PCB052	1.043	25.00	25.85	99	26.27	101	50-125	2	0-30	
PCB066	0.7855	25.00	23.84	92	24.65	95	50-125	3	0-30	
PCB077	ND	25.00	22.47	90	23.09	92	50-125	3	0-30	
PCB101	1.294	25.00	24.11	91	25.10	95	50-125	4	0-30	
PCB105	0.6344	25.00	21.26	83	21.76	84	50-125	2	0-30	
PCB118	1.128	25.00	25.77	99	26.08	100	50-125	1	0-30	
PCB126	ND	25.00	20.12	80	20.66	83	50-125	3	0-30	
PCB128	ND	25.00	18.96	76	19.33	77	50-125	2	0-30	
PCB153	1.020	25.00	22.00	84	22.55	86	50-125	2	0-30	
PCB170	0.5397	25.00	20.28	79	21.02	82	50-125	4	0-30	
PCB180	0.6034	25.00	19.71	76	20.11	78	50-125	2	0-30	
PCB187	ND	25.00	19.88	80	19.85	79	50-125	0	0-30	
PCB206	ND	25.00	21.85	87	22.18	89	50-125	2	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-01-0113-3	**Sample**	**Sediment**	**GC/MS Y**	**01/07/14**	**01/09/14 13:05**	**140107S10**
14-01-0113-3	**Matrix Spike**	**Sediment**	**GC/MS Y**	**01/07/14**	**01/09/14 12:16**	**140107S10**
14-01-0113-3	**Matrix Spike Duplicate**	**Sediment**	**GC/MS Y**	**01/07/14**	**01/09/14 12:32**	**140107S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Tributyltin	ND	100.0	109.3	109	95.23	95	34-142	14	0-50	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
SD-S-C-SMU2-C1D-C-0535	**Sample**	**Sediment**	**ICP/MS 03**	**01/08/14 00:00**	**01/09/14 13:28**	**140108S03**
SD-S-C-SMU2-C1D-C-0535	**PDS**	**Sediment**	**ICP/MS 03**	**01/08/14 00:00**	**01/09/14 13:18**	**140108S03**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	9.956	25.00	36.31	105	75-125	
Nickel	3.394	25.00	26.95	94	75-125	
Silver	ND	12.50	12.29	98	75-125	
Zinc	27.07	25.00	54.55	110	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
Project: South Shipyard			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-01-0113-3	**Sample**	**Sediment**	**N/A**	**01/08/14 00:00**	**01/09/14 12:00**	**E0109TSD1**
14-01-0113-3	**Sample Duplicate**	**Sediment**	**N/A**	**01/08/14 00:00**	**01/09/14 12:00**	**E0109TSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	40.60	39.80	2	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	14-01-0352
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard		Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-254-180	**LCS**	**Solid**	**ICP/MS 03**	**01/08/14**	**01/09/14 12:59**	**140108L03E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper	25.00	27.19	109	80-120	
Nickel	25.00	24.18	97	80-120	
Silver	12.50	12.45	100	80-120	
Zinc	25.00	28.08	112	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-452-443	**LCS**	**Solid**	**Mercury**	**01/09/14**	**01/09/14 11:13**	**140109L02E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8144	98	82-124	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-097-120	**LCS**	**Solid**	**GC/MS AAA**	**01/09/14**	**01/09/14 16:51**	**140109L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Benzo (a) Anthracene	100.0	94.35	94	40-160	
Benzo (a) Pyrene	100.0	90.75	91	40-160	
Benzo (b) Fluoranthene	100.0	99.48	99	40-160	
Benzo (g,h,i) Perylene	100.0	98.78	99	40-160	
Benzo (k) Fluoranthene	100.0	105.0	105	40-160	
Chrysene	100.0	97.17	97	40-160	
Dibenz (a,h) Anthracene	100.0	90.56	91	40-160	
Fluoranthene	100.0	101.5	101	40-160	
Indeno (1,2,3-c,d) Pyrene	100.0	96.25	96	40-160	
Pyrene	100.0	97.47	97	40-160	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-341-148	**LCS**	**Solid**	**GC/MS HHH**	**01/09/14**	**01/09/14 17:44**	**140109L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
PCB018	25.00	26.12	104	50-125	38-138	
PCB028	25.00	26.85	107	50-125	38-138	
PCB044	25.00	26.50	106	50-125	38-138	
PCB052	25.00	25.43	102	50-125	38-138	
PCB066	25.00	26.64	107	50-125	38-138	
PCB077	25.00	26.67	107	50-125	38-138	
PCB101	25.00	25.84	103	50-125	38-138	
PCB105	25.00	24.75	99	50-125	38-138	
PCB118	25.00	28.21	113	50-125	38-138	
PCB126	25.00	23.72	95	50-125	38-138	
PCB128	25.00	22.19	89	50-125	38-138	
PCB153	25.00	24.16	97	50-125	38-138	
PCB170	25.00	22.27	89	50-125	38-138	
PCB180	25.00	21.82	87	50-125	38-138	
PCB187	25.00	22.89	92	50-125	38-138	
PCB206	25.00	23.83	95	50-125	38-138	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	01/08/14
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	14-01-0352
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-07-016-1116	**LCS**	**Solid**	**GC/MS Y**	**01/07/14**	**01/09/14 11:27**	**140107L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Tributyltin	100.0	84.01	84	33-147	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-01-0352

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 1/8/14
PAGE: 1 OF 1

LABORATORY CLIENT: San Diego Bay Environmental Restoration Fund South
ADDRESS: C/O de maximis, Inc. 1322 Scott Street, Suite 104
CITY: San Diego STATE: CA ZIP: 92106-2727
TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SOUTH SHIPYARD
P.O. NO.:
PROJECT CONTACT: Mike Palmer and Adam Gale
LAB CONTACT OR QUOTE NO.: D. Gonsman
SAMPLER(S): (SIGNATURE) KZY
LAB USE ONLY: 14-01-0352

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:
Low level sediment detection limits
D. Gonsman is PM

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 /7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
1	SD-S-C-SMU2-C1	S. SOUTH D-C-0535	1/8/14	1330	SED	1	x	x	x	x	x
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						

Relinquished by: (Signature) KZY	Received by: (Signature) CGL	Date: 1/8/14	Time: 1415
Relinquished by: (Signature)	Received by: (Signature) Danny le CGL	Date: 1/8/14	Time: 17:45
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-01-0352

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: DE MAXIMIS INC

DATE: 01/08/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.0 °C - 0.3 °C (CF) = 1.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 836

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 836

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Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-11-1792 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

Supplemental Report 2

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1792

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: South Shipyard Post Dredge

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 11/26/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: South Shipyard Post Dredge
Work Order Number: 13-11-1792

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-11-1792

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/21/13. They were assigned to Work Order 13-11-1792.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	13-11-1792
		Project Name:	South Shipyard Post Dredge
		PO Number:	
		Date/Time Received:	11/21/13 19:45
		Number of Containers:	6
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SD-S-C-SMU3A-D-0535	13-11-1792-1	11/21/13 12:10	2	Sediment
SD-S-C-SMU3B/C-C-0535	13-11-1792-2	11/21/13 14:30	2	Sediment
SD-S-C-SMU3D-D-0535	13-11-1792-3	11/21/13 14:55	2	Sediment

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
		Units:	%
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**N/A**	**11/21/13**	**11/22/13 12:05**	**D1122TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	59.5	0.100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**N/A**	**11/21/13**	**11/22/13 12:05**	**D1122TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	68.3	0.100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**N/A**	**11/21/13**	**11/22/13 12:05**	**D1122TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	79.4	0.100	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-05-019-2412**	**N/A**	**Solid**	**N/A**	**11/21/13**	**11/22/13 12:05**	**D1122TSB1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total	ND	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**ICP/MS 03**	**11/22/13**	**11/22/13 17:21**	**131122L01E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	128	0.168	0.0704	1	
Nickel	11.2	0.168	0.0851	1	
Silver	0.900	0.168	0.0526	1	
Zinc	189	1.68	1.34	1	

SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**ICP/MS 03**	**11/22/13**	**11/22/13 17:31**	**131122L01E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	49.2	0.146	0.0614	1	
Nickel	7.92	0.146	0.0741	1	
Silver	0.847	0.146	0.0458	1	
Zinc	107	1.46	1.16	1	

SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**ICP/MS 03**	**11/22/13**	**11/22/13 17:34**	**131122L01E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	56.3	0.126	0.0528	1	
Nickel	3.69	0.126	0.0638	1	
Silver	0.234	0.126	0.0394	1	
Zinc	118	1.26	1.00	1	

Method Blank	**099-15-254-165**	**N/A**	**Solid**	**ICP/MS 03**	**11/22/13**	**11/22/13 16:56**	**131122L01E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	0.100	0.0419	1	
Nickel	ND	0.100	0.0506	1	
Silver	ND	0.100	0.0313	1	
Zinc	ND	1.00	0.795	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**Mercury**	**11/22/13**	**11/22/13 13:15**	**131122L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.478	0.0337	0.00989	1	

SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**Mercury**	**11/22/13**	**11/22/13 13:21**	**131122L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.636	0.0293	0.00861	1	

SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**Mercury**	**11/22/13**	**11/22/13 13:23**	**131122L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0808	0.0252	0.00741	1	

Method Blank	**099-12-452-426**	**N/A**	**Solid**	**Mercury**	**11/22/13**	**11/22/13 13:10**	**131122L03E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00588	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**GC/MS AAA**	**11/21/13**	**11/22/13 15:41**	**131121L22**

Comment(s): - Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qualifiers
Benzo (a) Anthracene	25	17	1	
Benzo (a) Pyrene	74	17	1	
Benzo (b) Fluoranthene	71	17	1	
Benzo (g,h,i) Perylene	57	17	1	
Benzo (k) Fluoranthene	54	17	1	
Chrysene	32	17	1	
Dibenz (a,h) Anthracene	ND	17	1	
Fluoranthene	33	17	1	
Indeno (1,2,3-c,d) Pyrene	59	17	1	
Perylene	ND	17	1	
Pyrene	75	17	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	101	14-146	
Nitrobenzene-d5	109	18-162	
p-Terphenyl-d14	120	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**GC/MS AAA**	**11/21/13**	**11/22/13 16:04**	**131121L22**

Comment(s): - Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qualifiers
Benzo (a) Anthracene	20	15	1	
Benzo (a) Pyrene	88	15	1	
Benzo (b) Fluoranthene	67	15	1	
Benzo (g,h,i) Perylene	60	15	1	
Benzo (k) Fluoranthene	59	15	1	
Chrysene	21	15	1	
Dibenz (a,h) Anthracene	ND	15	1	
Fluoranthene	26	15	1	
Indeno (1,2,3-c,d) Pyrene	60	15	1	
Perylene	ND	15	1	
Pyrene	160	15	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	109	14-146	
Nitrobenzene-d5	115	18-162	
p-Terphenyl-d14	124	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**GC/MS AAA**	**11/21/13**	**11/22/13 16:28**	**131121L22**

Comment(s): - Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qualifiers
Benzo (a) Anthracene	ND	13	1	
Benzo (a) Pyrene	20	13	1	
Benzo (b) Fluoranthene	18	13	1	
Benzo (g,h,i) Perylene	14	13	1	
Benzo (k) Fluoranthene	14	13	1	
Chrysene	ND	13	1	
Dibenz (a,h) Anthracene	ND	13	1	
Fluoranthene	ND	13	1	
Indeno (1,2,3-c,d) Pyrene	14	13	1	
Perylene	ND	13	1	
Pyrene	14	13	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	113	14-146	
Nitrobenzene-d5	115	18-162	
p-Terphenyl-d14	124	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-108**	**N/A**	**Solid**	**GC/MS AAA**	**11/21/13**	**11/22/13 15:18**	**131121L22**

Parameter	Result	RL	DF	Qualifiers
Benzo (a) Anthracene	ND	10	1	
Benzo (a) Pyrene	ND	10	1	
Benzo (b) Fluoranthene	ND	10	1	
Benzo (g,h,i) Perylene	ND	10	1	
Benzo (k) Fluoranthene	ND	10	1	
Chrysene	ND	10	1	
Dibenz (a,h) Anthracene	ND	10	1	
Fluoranthene	ND	10	1	
Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Perylene	ND	10	1	
Pyrene	ND	10	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	70	14-146	
Nitrobenzene-d5	67	18-162	
p-Terphenyl-d14	81	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**GC/MS HHH**	**11/21/13**	**11/23/13 15:38**	**131121L21**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	1.2	0.84	0.26	1	
PCB028	1.4	0.84	0.17	1	
PCB037	ND	0.84	0.22	1	
PCB044	2.7	0.84	0.22	1	
PCB049	2.7	0.84	0.20	1	
PCB052	4.5	0.84	0.16	1	
PCB066	2.5	0.84	0.15	1	
PCB070	2.9	0.84	0.14	1	
PCB074	1.2	0.84	0.16	1	
PCB077	ND	0.84	0.16	1	
PCB081	ND	0.84	0.21	1	
PCB087	2.0	0.84	0.17	1	
PCB099	2.3	0.84	0.14	1	
PCB101	5.7	0.84	0.14	1	
PCB105	2.1	0.84	0.18	1	
PCB110	4.7	0.84	0.17	1	
PCB114	ND	0.84	0.17	1	
PCB118	4.9	0.84	0.22	1	
PCB119	0.16	0.84	0.15	1	J
PCB123	ND	0.84	0.15	1	
PCB126	ND	0.84	0.23	1	
PCB128	0.99	0.84	0.17	1	
PCB138/158	5.1	1.7	0.34	1	
PCB149	3.1	0.84	0.15	1	
PCB151	0.84	0.84	0.17	1	J
PCB153	5.2	0.84	0.17	1	
PCB156	0.54	0.84	0.16	1	J
PCB157	0.40	0.84	0.16	1	J
PCB167	0.18	0.84	0.17	1	J
PCB168	ND	0.84	0.14	1	
PCB169	ND	0.84	0.14	1	
PCB170	1.4	0.84	0.16	1	
PCB177	0.56	0.84	0.21	1	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 2 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	2.2	0.84	0.10	1	
PCB183	0.58	0.84	0.19	1	J
PCB187	1.4	0.84	0.18	1	
PCB189	ND	0.84	0.14	1	
PCB194	0.52	0.84	0.16	1	J
PCB201	ND	0.84	0.096	1	
PCB206	0.52	0.84	0.14	1	J

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	90	50-125	
p-Terphenyl-d14	106	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**GC/MS HHH**	**11/21/13**	**11/23/13 18:27**	**131121L21**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	1.9	0.73	0.23	1	
PCB028	1.7	0.73	0.15	1	
PCB037	ND	0.73	0.19	1	
PCB044	5.2	0.73	0.19	1	
PCB049	4.0	0.73	0.17	1	
PCB052	11	0.73	0.14	1	
PCB066	3.1	0.73	0.13	1	
PCB070	7.3	0.73	0.12	1	
PCB074	2.2	0.73	0.14	1	
PCB077	0.87	0.73	0.14	1	
PCB081	ND	0.73	0.18	1	
PCB087	6.5	0.73	0.15	1	
PCB099	5.9	0.73	0.12	1	
PCB101	16	0.73	0.12	1	
PCB105	5.6	0.73	0.15	1	
PCB110	14	0.73	0.15	1	
PCB114	ND	0.73	0.15	1	
PCB118	14	0.73	0.19	1	
PCB119	ND	0.73	0.13	1	
PCB123	ND	0.73	0.13	1	
PCB126	ND	0.73	0.20	1	
PCB128	2.9	0.73	0.15	1	
PCB138/158	15	1.5	0.30	1	
PCB149	8.6	0.73	0.13	1	
PCB151	2.2	0.73	0.15	1	
PCB153	13	0.73	0.15	1	
PCB156	2.0	0.73	0.14	1	
PCB157	0.96	0.73	0.14	1	
PCB167	0.61	0.73	0.15	1	J
PCB168	ND	0.73	0.13	1	
PCB169	0.57	0.73	0.12	1	J
PCB170	3.3	0.73	0.14	1	
PCB177	1.1	0.73	0.18	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 4 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	5.2	0.73	0.090	1	
PCB183	1.4	0.73	0.16	1	
PCB187	2.7	0.73	0.15	1	
PCB189	0.15	0.73	0.13	1	J
PCB194	1.1	0.73	0.14	1	
PCB201	0.17	0.73	0.083	1	J
PCB206	0.58	0.73	0.12	1	J

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	84	50-125	
p-Terphenyl-d14	160	50-125	1,2,7

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**GC/MS HHH**	**11/21/13**	**11/23/13 18:00**	**131121L21**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	0.41	0.63	0.20	1	J
PCB028	0.60	0.63	0.13	1	J
PCB037	ND	0.63	0.16	1	
PCB044	0.99	0.63	0.17	1	
PCB049	1.1	0.63	0.15	1	
PCB052	2.3	0.63	0.12	1	
PCB066	0.92	0.63	0.12	1	
PCB070	1.2	0.63	0.10	1	
PCB074	0.52	0.63	0.12	1	J
PCB077	ND	0.63	0.12	1	
PCB081	ND	0.63	0.15	1	
PCB087	0.92	0.63	0.13	1	
PCB099	1.2	0.63	0.11	1	
PCB101	2.7	0.63	0.10	1	
PCB105	0.93	0.63	0.13	1	
PCB110	2.1	0.63	0.13	1	
PCB114	ND	0.63	0.13	1	
PCB118	2.2	0.63	0.17	1	
PCB119	ND	0.63	0.11	1	
PCB123	ND	0.63	0.11	1	
PCB126	ND	0.63	0.17	1	
PCB128	0.54	0.63	0.13	1	J
PCB138/158	2.3	1.3	0.26	1	
PCB149	1.3	0.63	0.11	1	
PCB151	0.34	0.63	0.13	1	J
PCB153	2.3	0.63	0.13	1	
PCB156	0.29	0.63	0.12	1	J
PCB157	0.25	0.63	0.12	1	J
PCB167	ND	0.63	0.13	1	
PCB168	ND	0.63	0.11	1	
PCB169	ND	0.63	0.10	1	
PCB170	0.59	0.63	0.12	1	J
PCB177	0.16	0.63	0.16	1	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 6 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	0.89	0.63	0.077	1	
PCB183	0.20	0.63	0.14	1	J
PCB187	0.48	0.63	0.13	1	J
PCB189	ND	0.63	0.11	1	
PCB194	ND	0.63	0.12	1	
PCB201	ND	0.63	0.072	1	
PCB206	ND	0.63	0.10	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	72	50-125	
p-Terphenyl-d14	94	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-135**	**N/A**	**Solid**	**GC/MS HHH**	**11/21/13**	**11/23/13 15:10**	**131121L21**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.50	0.16	1	
PCB028	ND	0.50	0.099	1	
PCB037	ND	0.50	0.13	1	
PCB044	ND	0.50	0.13	1	
PCB049	ND	0.50	0.12	1	
PCB052	ND	0.50	0.097	1	
PCB066	ND	0.50	0.091	1	
PCB070	ND	0.50	0.082	1	
PCB074	ND	0.50	0.094	1	
PCB077	ND	0.50	0.097	1	
PCB081	ND	0.50	0.12	1	
PCB087	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1	
PCB101	ND	0.50	0.081	1	
PCB105	ND	0.50	0.10	1	
PCB110	ND	0.50	0.10	1	
PCB114	ND	0.50	0.10	1	
PCB118	ND	0.50	0.13	1	
PCB119	ND	0.50	0.087	1	
PCB123	ND	0.50	0.087	1	
PCB126	ND	0.50	0.14	1	
PCB128	ND	0.50	0.10	1	
PCB138/158	ND	1.0	0.20	1	
PCB149	ND	0.50	0.089	1	
PCB151	ND	0.50	0.10	1	
PCB153	ND	0.50	0.10	1	
PCB156	ND	0.50	0.098	1	
PCB157	ND	0.50	0.096	1	
PCB167	ND	0.50	0.10	1	
PCB168	ND	0.50	0.086	1	
PCB169	ND	0.50	0.082	1	
PCB170	ND	0.50	0.093	1	
PCB177	ND	0.50	0.12	1	
PCB180	ND	0.50	0.061	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 8 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
PCB183	ND	0.50	0.11	1	
PCB187	ND	0.50	0.10	1	
PCB189	ND	0.50	0.086	1	
PCB194	ND	0.50	0.096	1	
PCB201	ND	0.50	0.057	1	
PCB206	ND	0.50	0.083	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	70	50-125	
p-Terphenyl-d14	84	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU3A-D-0535	**13-11-1792-1-A**	**11/21/13 12:10**	**Sediment**	**GC/MS JJJ**	**11/22/13**	**11/23/13 12:52**	**131122L13**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	25	5.0	0.97	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	123	48-126	

SD-S-C-SMU3B/C-C-0535	**13-11-1792-2-A**	**11/21/13 14:30**	**Sediment**	**GC/MS JJJ**	**11/22/13**	**11/23/13 13:20**	**131122L13**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	4.4	0.84	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	113	48-126	

SD-S-C-SMU3D-D-0535	**13-11-1792-3-A**	**11/21/13 14:55**	**Sediment**	**GC/MS JJJ**	**11/22/13**	**11/23/13 13:49**	**131122L13**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	26	3.8	0.73	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	120	48-126	

Method Blank	**099-07-016-1101**	**N/A**	**Solid**	**GC/MS JJJ**	**11/22/13**	**11/23/13 11:31**	**131122L13**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.0	0.58	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	71	48-126	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard Post Dredge			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU3A-D-0535	**Sediment**	**ICP/MS 03**	**11/22/13**	**11/22/13 17:05**	**131122S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	76.35	25.00	102.5	105	101.3	100	80-120	1	0-20	
Nickel	6.638	25.00	30.39	95	30.91	97	80-120	2	0-20	
Silver	0.5353	12.50	13.85	107	13.86	107	80-120	0	0-20	
Zinc	112.4	25.00	139.1	4X	135.4	4X	80-120	4X	0-20	Q

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard Post Dredge			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU3A-D-0535	**Sediment**	**Mercury**	**11/22/13**	**11/22/13 13:17**	**131122S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.2843	0.8350	1.004	86	0.9096	75	76-136	10	0-16	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU3B/C-C-0535	**Sediment**	**GC/MS AAA**	**11/21/13**	**11/22/13 16:51**	**131121S22**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzo (a) Anthracene	13.60	100.0	99.76	86	98.19	85	40-160	2	0-20	
Benzo (a) Pyrene	60.06	100.0	156.4	96	149.3	89	40-160	5	0-20	
Benzo (b) Fluoranthene	45.84	100.0	139.9	94	138.4	93	40-160	1	0-20	
Benzo (g,h,i) Perylene	40.78	100.0	112.7	72	106.2	65	40-160	6	0-20	
Benzo (k) Fluoranthene	39.97	100.0	117.0	77	119.9	80	40-160	2	0-20	
Chrysene	14.16	100.0	94.01	80	90.64	76	40-160	4	0-20	
Dibenz (a,h) Anthracene	ND	100.0	87.12	87	88.95	89	40-160	2	0-20	
Fluoranthene	17.72	100.0	103.1	85	103.5	86	40-160	0	0-20	
Indeno (1,2,3-c,d) Pyrene	40.96	100.0	143.7	103	142.0	101	40-160	1	0-20	
Pyrene	111.6	100.0	192.9	81	190.8	79	40-160	1	0-46	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU3B/C-C-0535	**Sediment**	**GC/MS HHH**	**11/21/13**	**11/23/13 17:04**	**131121S21**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	1.269	25.00	22.44	85	24.38	92	50-125	8	0-30	
PCB028	1.136	25.00	23.80	91	22.43	85	50-125	6	0-30	
PCB044	3.559	25.00	21.34	71	20.04	66	50-125	6	0-30	
PCB052	7.294	25.00	24.48	69	22.49	61	50-125	8	0-30	
PCB066	2.113	25.00	21.23	76	20.15	72	50-125	5	0-30	
PCB077	0.5919	25.00	21.06	82	19.64	76	50-125	7	0-30	
PCB101	10.90	25.00	23.64	51	22.14	45	50-125	7	0-30	3
PCB105	3.825	25.00	21.38	70	19.73	64	50-125	8	0-30	
PCB118	9.540	25.00	26.61	68	24.70	61	50-125	7	0-30	
PCB126	ND	25.00	20.14	81	19.03	76	50-125	6	0-30	
PCB128	2.002	25.00	20.62	74	19.94	72	50-125	3	0-30	
PCB153	8.988	25.00	33.88	100	31.85	91	50-125	6	0-30	
PCB170	2.251	25.00	25.75	94	24.19	88	50-125	6	0-30	
PCB180	3.518	25.00	35.51	128	34.71	125	50-125	2	0-30	3
PCB187	1.836	25.00	25.72	96	24.89	92	50-125	3	0-30	
PCB206	ND	25.00	23.09	92	21.94	88	50-125	5	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU3B/C-C-0535	**Sediment**	**GC/MS JJJ**	**11/22/13**	**11/23/13 14:16**	**131122S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Tributyltin	ND	100.0	113.9	114	112.7	113	69-135	1	0-29	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard Post Dredge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
SD-S-C-SMU3A-D-0535	**Sediment**	**ICP/MS 03**	**11/22/13 00:00**	**11/22/13 17:11**	**131122S01**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	76.35	25.00	102.4	104	75-125	
Nickel	6.638	25.00	32.22	102	75-125	
Silver	0.5353	12.50	12.23	94	75-125	
Zinc	112.4	25.00	138.1	4X	75-125	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1792
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
Project: South Shipyard Post Dredge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SD-S-C-SMU3A-D-0535	**Sediment**	**N/A**	**11/21/13 00:00**	**11/22/13 12:05**	**D1122TSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	59.50	58.80	1	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-254-165	**Solid**	**ICP/MS 03**	**11/22/13 17:50**	**131122L01E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper	25.00	29.01	116	80-120	
Nickel	25.00	27.00	108	80-120	
Silver	12.50	11.53	92	80-120	
Zinc	25.00	28.82	115	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: South Shipyard Post Dredge		Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-452-426	**Solid**	**Mercury**	**11/22/13 13:12**	**131122L03E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7885	94	82-124	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge		Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-097-108	**Solid**	**GC/MS AAA**	**11/22/13 18:01**	**131121L22**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Benzo (a) Anthracene	100.0	76.06	76	40-160	
Benzo (a) Pyrene	100.0	84.00	84	40-160	
Benzo (b) Fluoranthene	100.0	72.66	73	40-160	
Benzo (g,h,i) Perylene	100.0	63.01	63	40-160	
Benzo (k) Fluoranthene	100.0	81.21	81	40-160	
Chrysene	100.0	69.66	70	40-160	
Dibenz (a,h) Anthracene	100.0	71.82	72	40-160	
Fluoranthene	100.0	81.60	82	40-160	
Indeno (1,2,3-c,d) Pyrene	100.0	92.58	93	40-160	
Pyrene	100.0	73.42	73	40-160	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge		Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-341-135	**Solid**	**GC/MS HHH**	**11/23/13 14:41**	**131121L21**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
PCB018	25.00	17.81	71	50-125	38-138	
PCB028	25.00	18.42	74	50-125	38-138	
PCB044	25.00	18.78	75	50-125	38-138	
PCB052	25.00	17.93	72	50-125	38-138	
PCB066	25.00	18.95	76	50-125	38-138	
PCB077	25.00	19.74	79	50-125	38-138	
PCB101	25.00	18.77	75	50-125	38-138	
PCB105	25.00	19.08	76	50-125	38-138	
PCB118	25.00	21.46	86	50-125	38-138	
PCB126	25.00	19.08	76	50-125	38-138	
PCB128	25.00	18.22	73	50-125	38-138	
PCB153	25.00	18.66	75	50-125	38-138	
PCB170	25.00	17.82	71	50-125	38-138	
PCB180	25.00	19.04	76	50-125	38-138	
PCB187	25.00	18.75	75	50-125	38-138	
PCB206	25.00	20.06	80	50-125	38-138	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/21/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1792
San Diego, CA 92106-2727	Preparation:	EPA 3550B (M)
	Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge		Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-07-016-1101	**Solid**	**GC/MS JJJ**	**11/23/13 11:58**	**131122L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Tributyltin	100.0	110.2	110	51-129	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1792

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 11/21/13
PAGE: 1 OF 1

LABORATORY CLIENT: San Diego Bay Environmental Restoration Fund South
ADDRESS: C/O de maximis, Inc. 1322 Scott Street, Suite 104
CITY: San Diego STATE: CA ZIP: 92106-2727
TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SOUTH SHIPYARD
P.O. NO.: 131510C800 00001.03
PROJECT CONTACT: Mike Palmer and Adam Gale
LAB CONTACT OR QUOTE NO.: D. Gonsman
SAMPLER(S): (SIGNATURE)
LAB USE ONLY: 13-11-1792

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS: Low level sediment detection limits

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 /7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
1	SD-S-C-SMUA-D-0535	S.SHP	11/21/13	1210	SED	1	X	X	X	X	X
2	SD-S-C-SMUB1CC-0535	S.SHP	11/21/13	1430	SED	1	X	X	X	X	X
3	SD-S-C-SMUD-D-0535	SSHP	11/21/13	1455	SED	1	X	X	X	X	X
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		11/21/13	1615
		11/21/13	16:30
		11/21/13	1945

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1792

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: SAN DIEGO BAY

DATE: 11/21/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.7 °C - 0.2 °C (CF) = 1.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 778

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 774

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1792

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☑ **Sample label(s) do not match COC** – Note in comments
  - ☑ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-1) Labeled as
SD-S-C-SMU3A-D-0535
11/21/13 12:10

(-2) Labeled as
SD-S-C-SMU3B/C-C-0535
11/21/13 14:30

(-3) Labeled as
SD-S-C-SMU3D-D-0535

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: Bk2 11/21/13

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Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-11-1440 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S Lane

Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1440

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: South Shipyard Post Dredge

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 11/21/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: South Shipyard Post Dredge
Work Order Number: 13-11-1440

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-11-1440

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/18/13. They were assigned to Work Order 13-11-1440.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	13-11-1440
		Project Name:	South Shipyard Post Dredge
		PO Number:	
		Date/Time Received:	11/18/13 17:48
		Number of Containers:	1
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SD-S-C-SMU4B-D-0535	13-11-1440-1	11/18/13 08:35	1	Sediment

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
		Units:	%
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-A**	**11/18/13 08:35**	**Sediment**	**N/A**	**11/19/13**	**11/19/13 15:20**	**D1119TSB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	68.8	0.100	0.100	1	

Method Blank	**099-05-019-2405**	**N/A**	**Solid**	**N/A**	**11/19/13**	**11/19/13 15:20**	**D1119TSB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	ND	0.100	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-A**	**11/18/13 08:35**	**Sediment**	**ICP/MS 03**	**11/19/13**	**11/19/13 16:47**	**131119L03E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	40.4	0.145	0.0609	1	
Nickel	10.1	0.145	0.0736	1	
Silver	0.883	0.145	0.0455	1	
Zinc	114	1.45	1.16	1	

Method Blank	**099-15-254-163**	**N/A**	**Solid**	**ICP/MS 03**	**11/19/13**	**11/19/13 16:02**	**131119L03E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	0.100	0.0419	1	
Nickel	ND	0.100	0.0506	1	
Silver	ND	0.100	0.0313	1	
Zinc	ND	1.00	0.795	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-A**	**11/18/13 08:35**	**Sediment**	**Mercury**	**11/19/13**	**11/19/13 13:51**	**131119L04E**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.724	0.0291	0.00855	1	

Method Blank	**099-12-452-425**	**N/A**	**Solid**	**Mercury**	**11/19/13**	**11/19/13 13:44**	**131119L04E**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00588	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-B**	**11/18/13 08:35**	**Sediment**	**GC/MS AAA**	**11/19/13**	**11/19/13 20:03**	**131119L03**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	33	15	2.3	1	
Benzo (a) Pyrene	150	15	1.5	1	
Benzo (b) Fluoranthene	100	15	1.5	1	
Benzo (g,h,i) Perylene	120	15	1.4	1	
Benzo (k) Fluoranthene	89	15	2.0	1	
Chrysene	36	15	1.7	1	
Dibenz (a,h) Anthracene	16	15	1.5	1	
Fluoranthene	62	15	1.4	1	
Indeno (1,2,3-c,d) Pyrene	110	15	1.5	1	
Perylene	25	15	14	1	
Pyrene	130	15	1.4	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	70	14-146	
Nitrobenzene-d5	67	18-162	
p-Terphenyl-d14	77	34-148	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-107**	**N/A**	**Solid**	**GC/MS AAA**	**11/19/13**	**11/20/13 12:16**	**131119L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzo (a) Anthracene	ND	10	1.6	1	
Benzo (a) Pyrene	ND	10	1.0	1	
Benzo (b) Fluoranthene	ND	10	1.0	1	
Benzo (g,h,i) Perylene	ND	10	0.94	1	
Benzo (k) Fluoranthene	ND	10	1.4	1	
Chrysene	ND	10	1.2	1	
Dibenz (a,h) Anthracene	ND	10	1.0	1	
Fluoranthene	ND	10	0.98	1	
Indeno (1,2,3-c,d) Pyrene	ND	10	1.1	1	
Perylene	ND	10	9.8	1	
Pyrene	ND	10	0.99	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	87	14-146	
Nitrobenzene-d5	87	18-162	
p-Terphenyl-d14	104	34-148	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-B**	**11/18/13 08:35**	**Sediment**	**GC/MS HHH**	**11/19/13**	**11/20/13 14:21**	**131119L04**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	1.8	0.73	0.23	1	
PCB028	5.0	0.73	0.14	1	
PCB037	ND	0.73	0.19	1	
PCB044	2.1	0.73	0.19	1	
PCB049	6.4	0.73	0.17	1	
PCB052	2.4	0.73	0.14	1	
PCB066	1.3	0.73	0.13	1	
PCB070	1.4	0.73	0.12	1	
PCB074	0.92	0.73	0.14	1	
PCB077	ND	0.73	0.14	1	
PCB081	ND	0.73	0.18	1	
PCB087	ND	0.73	0.15	1	
PCB099	1.2	0.73	0.12	1	
PCB101	3.1	0.73	0.12	1	
PCB105	ND	0.73	0.15	1	
PCB110	2.1	0.73	0.15	1	
PCB114	0.48	0.73	0.14	1	J
PCB118	2.8	0.73	0.19	1	
PCB119	ND	0.73	0.13	1	
PCB123	ND	0.73	0.13	1	
PCB126	ND	0.73	0.20	1	
PCB128	0.46	0.73	0.15	1	J
PCB138/158	3.7	1.5	0.30	1	
PCB149	2.4	0.73	0.13	1	
PCB151	0.68	0.73	0.15	1	J
PCB153	3.6	0.73	0.15	1	
PCB156	ND	0.73	0.14	1	
PCB157	2.3	0.73	0.14	1	
PCB167	ND	0.73	0.15	1	
PCB168	ND	0.73	0.13	1	
PCB169	0.71	0.73	0.12	1	J
PCB170	1.2	0.73	0.13	1	
PCB177	0.48	0.73	0.18	1	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 2 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB180	2.4	0.73	0.089	1	
PCB183	0.53	0.73	0.16	1	J
PCB187	1.5	0.73	0.15	1	
PCB189	ND	0.73	0.12	1	
PCB194	ND	0.73	0.14	1	
PCB201	ND	0.73	0.083	1	
PCB206	1.1	0.73	0.12	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	59	50-125	
p-Terphenyl-d14	108	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-133**	**N/A**	**Solid**	**GC/MS HHH**	**11/19/13**	**11/20/13 13:23**	**131119L04**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.50	0.16	1	
PCB028	ND	0.50	0.099	1	
PCB037	ND	0.50	0.13	1	
PCB044	ND	0.50	0.13	1	
PCB049	ND	0.50	0.12	1	
PCB052	ND	0.50	0.097	1	
PCB066	ND	0.50	0.091	1	
PCB070	ND	0.50	0.082	1	
PCB074	ND	0.50	0.094	1	
PCB077	ND	0.50	0.097	1	
PCB081	ND	0.50	0.12	1	
PCB087	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1	
PCB101	ND	0.50	0.081	1	
PCB105	ND	0.50	0.10	1	
PCB110	ND	0.50	0.10	1	
PCB114	ND	0.50	0.10	1	
PCB118	ND	0.50	0.13	1	
PCB119	ND	0.50	0.087	1	
PCB123	ND	0.50	0.087	1	
PCB126	ND	0.50	0.14	1	
PCB128	ND	0.50	0.10	1	
PCB138/158	ND	1.0	0.20	1	
PCB149	ND	0.50	0.089	1	
PCB151	ND	0.50	0.10	1	
PCB153	ND	0.50	0.10	1	
PCB156	ND	0.50	0.098	1	
PCB157	ND	0.50	0.096	1	
PCB167	ND	0.50	0.10	1	
PCB168	ND	0.50	0.086	1	
PCB169	ND	0.50	0.082	1	
PCB170	ND	0.50	0.093	1	
PCB177	ND	0.50	0.12	1	
PCB180	ND	0.50	0.061	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: South Shipyard Post Dredge		Page 4 of 4

Parameter	Result	RL	MDL	DF	Qualifiers
PCB183	ND	0.50	0.11	1	
PCB187	ND	0.50	0.10	1	
PCB189	ND	0.50	0.086	1	
PCB194	ND	0.50	0.096	1	
PCB201	ND	0.50	0.057	1	
PCB206	ND	0.50	0.083	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	66	50-125	
p-Terphenyl-d14	93	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: South Shipyard Post Dredge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SD-S-C-SMU4B-D-0535	**13-11-1440-1-B**	**11/18/13 08:35**	**Sediment**	**GC/MS JJJ**	**11/19/13**	**11/20/13 12:32**	**131119L14**

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	4.4	0.84	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	84	48-126	

Method Blank	**099-07-016-1097**	**N/A**	**Solid**	**GC/MS JJJ**	**11/19/13**	**11/20/13 11:01**	**131119L14**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Tributyltin	ND	3.0	0.58	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tripentyltin	98	48-126	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3050B
		Method:	EPA 6020
Project: South Shipyard Post Dredge			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**ICP/MS 03**	**11/19/13**	**11/19/13 16:17**	**131119S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	27.82	25.00	54.67	107	55.27	110	80-120	1	0-20	
Nickel	6.963	25.00	30.89	96	30.29	93	80-120	2	0-20	
Silver	0.6074	12.50	14.33	110	14.28	109	80-120	0	0-20	
Zinc	78.41	25.00	104.2	103	100.6	89	80-120	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: South Shipyard Post Dredge			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**Mercury**	**11/19/13**	**11/19/13 13:53**	**131119S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.4980	0.8350	1.290	95	1.326	99	76-136	3	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**GC/MS AAA**	**11/19/13**	**11/19/13 20:26**	**131119S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzo (a) Anthracene	22.46	100.0	75.57	53	75.34	53	40-160	0	0-20	
Benzo (a) Pyrene	106.5	100.0	155.2	49	133.2	27	40-160	15	0-20	3
Benzo (b) Fluoranthene	71.64	100.0	120.8	49	112.6	41	40-160	7	0-20	
Benzo (g,h,i) Perylene	83.75	100.0	119.0	35	100.6	17	40-160	17	0-20	3
Benzo (k) Fluoranthene	61.20	100.0	108.8	48	90.81	30	40-160	18	0-20	3
Chrysene	24.57	100.0	73.25	49	71.38	47	40-160	3	0-20	
Dibenz (a,h) Anthracene	10.93	100.0	55.74	45	52.73	42	40-160	6	0-20	
Fluoranthene	42.52	100.0	99.77	57	101.1	59	40-160	1	0-20	
Indeno (1,2,3-c,d) Pyrene	78.87	100.0	133.4	55	116.2	37	40-160	14	0-20	3
Pyrene	86.26	100.0	132.5	46	120.6	34	40-160	9	0-46	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**GC/MS HHH**	**11/19/13**	**11/20/13 14:49**	**131119S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	1.224	25.00	29.38	113	22.65	86	50-125	26	0-30	
PCB028	3.428	25.00	26.37	92	26.94	94	50-125	2	0-30	
PCB044	1.432	25.00	25.90	98	25.66	97	50-125	1	0-30	
PCB052	1.619	25.00	28.23	106	28.14	106	50-125	0	0-30	
PCB066	0.8807	25.00	27.52	107	27.42	106	50-125	0	0-30	
PCB077	ND	25.00	29.26	117	28.98	116	50-125	1	0-30	
PCB101	2.124	25.00	28.73	106	28.67	106	50-125	0	0-30	
PCB105	ND	25.00	29.64	119	29.02	116	50-125	2	0-30	
PCB118	1.924	25.00	33.79	127	33.00	124	50-125	2	0-30	3
PCB126	ND	25.00	29.44	118	29.26	117	50-125	1	0-30	
PCB128	ND	25.00	27.36	109	27.14	109	50-125	1	0-30	
PCB153	2.451	25.00	29.40	108	29.56	108	50-125	1	0-30	
PCB170	0.7961	25.00	23.14	89	23.15	89	50-125	0	0-30	
PCB180	1.661	25.00	30.03	113	29.70	112	50-125	1	0-30	
PCB187	1.013	25.00	28.56	110	28.29	109	50-125	1	0-30	
PCB206	0.7293	25.00	22.89	89	22.62	88	50-125	1	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**GC/MS JJJ**	**11/19/13**	**11/20/13 13:32**	**131119S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Tributyltin	ND	100.0	82.45	82	118.3	118	69-135	36	0-29	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**ICP/MS 03**	**11/19/13 00:00**	**11/19/13 16:38**	**131119S03**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	27.82	25.00	56.35	114	75-125	
Nickel	6.963	25.00	31.68	99	75-125	
Silver	0.6074	12.50	12.42	94	75-125	
Zinc	78.41	25.00	104.4	104	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 2540 B (M)
Project: South Shipyard Post Dredge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SD-S-C-SMU4B-D-0535	**Sediment**	**N/A**	**11/19/13 00:00**	**11/19/13 15:20**	**D1119TSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	68.80	68.50	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3050B
	Method:	EPA 6020
Project: South Shipyard Post Dredge		Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-254-163	**Solid**	**ICP/MS 03**	**11/19/13 16:08**	**131119L03E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper	25.00	29.41	118	80-120	
Nickel	25.00	27.26	109	80-120	
Silver	12.50	12.00	96	80-120	
Zinc	25.00	28.97	116	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: South Shipyard Post Dredge		Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-452-425	**Solid**	**Mercury**	**11/19/13 13:47**	**131119L04E**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9543	114	82-124	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PAHs
Project: South Shipyard Post Dredge		Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-097-107	**Solid**	**GC/MS AAA**	**11/19/13 19:39**	**131119L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Benzo (a) Anthracene	100.0	74.25	74	40-160	
Benzo (a) Pyrene	100.0	81.83	82	40-160	
Benzo (b) Fluoranthene	100.0	67.89	68	40-160	
Benzo (g,h,i) Perylene	100.0	54.44	54	40-160	
Benzo (k) Fluoranthene	100.0	78.82	79	40-160	
Chrysene	100.0	67.15	67	40-160	
Dibenz (a,h) Anthracene	100.0	57.54	58	40-160	
Fluoranthene	100.0	80.86	81	40-160	
Indeno (1,2,3-c,d) Pyrene	100.0	69.78	70	40-160	
Pyrene	100.0	72.43	72	40-160	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South		Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-11-1440
San Diego, CA 92106-2727		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
Project: South Shipyard Post Dredge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-341-133	**Solid**	**GC/MS HHH**	**11/20/13 12:53**	**131119L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
PCB018	25.00	17.91	72	50-125	38-138	
PCB028	25.00	18.73	75	50-125	38-138	
PCB044	25.00	18.76	75	50-125	38-138	
PCB052	25.00	18.53	74	50-125	38-138	
PCB066	25.00	19.30	77	50-125	38-138	
PCB077	25.00	20.20	81	50-125	38-138	
PCB101	25.00	18.68	75	50-125	38-138	
PCB105	25.00	18.72	75	50-125	38-138	
PCB118	25.00	21.12	84	50-125	38-138	
PCB126	25.00	18.66	75	50-125	38-138	
PCB128	25.00	17.28	69	50-125	38-138	
PCB153	25.00	18.32	73	50-125	38-138	
PCB170	25.00	15.94	64	50-125	38-138	
PCB180	25.00	18.38	74	50-125	38-138	
PCB187	25.00	18.09	72	50-125	38-138	
PCB206	25.00	17.83	71	50-125	38-138	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

San Diego Bay Environmental Restoration Fund South	Date Received:	11/18/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-11-1440
San Diego, CA 92106-2727	Preparation:	EPA 3550B (M)
	Method:	Organotins by Krone et al.
Project: South Shipyard Post Dredge		Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-07-016-1097	**Solid**	**GC/MS JJJ**	**11/20/13 12:02**	**131119L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Tributyltin	100.0	89.75	90	51-129	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1440

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 11/18/13
PAGE: 1 OF 1

LABORATORY CLIENT:

ADDRESS: C/O de maximis, Inc.
1322 Scott Street, Suite 104

CITY: San Diego STATE: CA ZIP: 92106-2727

TEL: 619-546-8377 FAX: E-MAIL: mpalmer@demaximis.com agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: South Shipyard Post-Dredge Sampling

P.O. NO.: 1315100800

PROJECT CONTACT: Mike Palmer and Adam Gale

LAB CONTACT OR QUOTE NO.: Danielle Gonsman

SAMPLER(S): (SIGNATURE)

LAB USE ONLY: 13-11-1440

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☒ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:
Low level sediment detection limits

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	SM 2540B Total Solids	EPA 6020 /7471A Cu, Hg, Ni, Ag, Zn	EPA 8270C SIM PCB Congeners	EPA 8270C SIM PAHs (target list)	Organotins by Krone et al. (Tributyltin only)
	SD-S-C-SMU4B-D-0535	SOUTH SHIPYARD	11/18/2013	835	SED	1	X	X	X	X	X
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						
					SED						

Relinquished by: (Signature)	Received by: (Signature)	Date: 11/18/13	Time: 14:45
Relinquished by: (Signature)	Received by: (Signature)	Date: 11/18/13	Time: 1748
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1440

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: de maximis, Inc.

DATE: 11/18/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.9 °C - 0.2 °C (CF) = 1.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 895

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 895

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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APPENDIX D
SAND COVER GRADATION AND ANALYTICAL INFORMATION

VULCAN MATERIALS COMPANY - West Region

Contractor: ***RE Staite Engineering Inc.*** January 20, 2014

Project: ***NASSCO South SD Shipyard Bay Remediation***

Plant: ***Vulcan Materials / Chula Vista***

Material: ***Washed Concrete Sand (WCS) as "Sand Cover Material"***

This is to certify that Vulcan Materials Company, West Region, **Chula Vista**, will supply Washed Concrete Sand (WCS) to the above listed project and that this product will conform to the gradation limits outlined for "Sand Cover Material" in section 352026 Part 2.02 - E. of the project specification Amendment 5, except where indicated.

Sieve Size		Section 35026 Part 2.02-E	Percent Passing
9.5 mm	(3/8")	100	100
4.75 mm	(No. 4)	95 - 100	97
2.36 mm	(No. 8)	80 - 95	85
1.18 mm	(No. 16)	40 - 70	67
600 um	(No. 30)	-----	43
300 um	(No. 50)	3 - 20	* 21
150 um	(No. 100)	-----	7
75 um	(No. 200)	0 - 5	2.6

* indicates out of specification

Average Total Moisture	3.2%

Submitted by:

Jeff Pollard
Technical Services Supervisor

If you should have any questions regarding this submittal please contact the San Diego Regional Laboratory at (858) 547-4981

* Please Note: ** NOT VALID IF ALTERED **

10051Black Mountain Road • San Diego, California 92126 • FAX (858) 547-9056

VULCAN MATERIALS COMPANY - West Region

Contractor: ***RE Staite Engineering Inc.*** January 20, 2014

Project: ***NASSCO South SD Shipyard Bay Remediation***

Plant: ***Vulcan Materials / Chula Vista***

Material: ***Gravel Cover Material***

This is to certify that Vulcan Materials Company, West Region, **Chula Vista**, will supply Gravel Cover Material to the above listed project and that this product will conform to the gradation limits outlined for "Gravel Cover Material" in section 352026 Part 2.03 C., of the project specification on page 352026-8, dated July 2013, **at the Chula Vista production facility only.**

Sieve Size		Section 352026 Part 2.03 C.	Percent Passing
100 mm	(4")	100	100
19 mm	(3/4")	50 - 75	71
4.75 mm	(No. 4)	35 - 55	36
2.36 mm	(No. 8)	------	28
2 mm	(No. 10)	25 - 45	25
425 um	(No. 40)	10 - 25	14
150 um	(No. 100)	------	3
75 um	(No. 200)	0 - 5	1.1

Average Total Moisture	2.0%

Submitted by:

Jeff Pollard
Technical Services Supervisor

If you should have any questions regarding this submittal please contact the San Diego Regional Laboratory at (858) 547-4981

*** Please Note: ** NOT VALID IF ALTERED ****

10051Black Mountain Road • San Diego, California 92126 • FAX (858) 547-9056

EnviroMatrix Analytical, Inc.

21 January 2014

Vulcan Materials Co. Foothill
Attn: Jeff Pollard
16009 Foothill Blvd.
Irwindale CA, CA 91706

EMA Log #: 14A0265

Project Name: Chula Vista-WCS

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 16:50. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Chula Vista-WCS	14A0265-01	Soil	01/09/14 10:00	01/09/14 16:50

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chula Vista-WCS (14A0265-01) Soil	**Sampled: 01/09/14 10:00**			**Received: 01/09/14 16:50**						
Silver	ND	0.10	0.50	mg/kg	1	4011005	01/10/14	01/10/14	EPA 6010	
Arsenic	ND	0.43	1.00	"	"	"	"	01/10/14	"	
Cadmium	ND	0.08	1.00	"	"	"	"	"	"	
Chromium	**3.90**	0.40	1.00	"	"	"	"	"	"	
Copper	**15.4**	0.09	1.00	"	"	"	"	01/10/14	"	
Mercury	ND	0.02	0.05	"	"	4011006	01/10/14	01/10/14	EPA 7471	
Nickel	**1.35**	0.31	1.00	"	"	4011005	01/10/14	01/10/14	EPA 6010	
Lead	**0.94**	0.79	1.00	"	"	"	"	"	"	J
Zinc	**13.5**	0.04	1.00	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chula Vista-WCS (14A0265-01) Soil	**Sampled: 01/09/14 10:00**		**Received: 01/09/14 16:50**							
Aroclor 1016	ND	4.60	20.0	ug/kg	1	4011024	01/10/14	01/13/14	EPA 8082	
Aroclor 1221	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1232	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1242	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1248	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1254	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1260	ND	4.60	20.0	"	"	"	"	"	"	
Surrogate: TCMX		*97 %*	*26-146*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chula Vista-WCS (14A0265-01) Soil	**Sampled: 01/09/14 10:00**		**Received: 01/09/14 16:50**							
Benzoic acid	ND	50.0	100	ug/kg	1	4010915	01/09/14	01/12/14	EPA 8270C	
Acenaphthene	ND	5.12	20.0	"	"	"	"	"	"	
Acenaphthylene	ND	5.37	20.0	"	"	"	"	"	"	
Anthracene	ND	2.82	20.0	"	"	"	"	"	"	
Benzidine	ND	150	150	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.09	20.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.09	20.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.68	20.0	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	4.63	40.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.07	20.0	"	"	"	"	"	"	
Benzyl alcohol	ND	1.44	75.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	7.26	20.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	7.96	25.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	8.81	25.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	**8.23**	5.72	45.0	"	"	"	"	"	"	J
4-Bromophenyl phenyl ether	ND	3.71	20.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	4.11	40.0	"	"	"	"	"	"	
Carbazole	ND	4.94	60.0	"	"	"	"	"	"	
4-Chloroaniline	ND	4.42	100	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	8.34	20.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	6.11	20.0	"	"	"	"	"	"	
2-Chlorophenol	ND	6.48	20.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	4.90	20.0	"	"	"	"	"	"	
Chrysene	ND	2.87	20.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.00	40.0	"	"	"	"	"	"	
Dibenzofuran	ND	5.42	20.0	"	"	"	"	"	"	
Di-n-butyl phthalate	**11.7**	3.87	40.0	"	"	"	"	"	"	J
1,2-Dichlorobenzene	ND	9.07	20.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	8.51	20.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	8.55	20.0	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	5.26	150	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.32	20.0	"	"	"	"	"	"	
Diethyl phthalate	**43.4**	1.61	20.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	2.40	80.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	3.36	20.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.50	50.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10.9	100	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	4.08	20.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	6.02	20.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	4.61	40.0	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chula Vista-WCS (14A0265-01) Soil Sampled: 01/09/14 10:00 Received: 01/09/14 16:50										
Fluoranthene	ND	3.43	20.0	ug/kg	1	4010915	01/09/14	01/12/14	EPA 8270C	
Fluorene	ND	4.50	20.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	3.10	20.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.09	20.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	6.98	50.0	"	"	"	"	"	"	
Hexachloroethane	ND	8.88	20.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	4.33	30.0	"	"	"	"	"	"	
Isophorone	ND	7.56	20.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	7.62	20.0	"	"	"	"	"	"	
2-Methylphenol	ND	6.56	20.0	"	"	"	"	"	"	
4-Methylphenol (3-Methylphenol)	ND	6.24	40.0	"	"	"	"	"	"	
Naphthalene	ND	7.25	20.0	"	"	"	"	"	"	
2-Nitroaniline	ND	3.91	50.0	"	"	"	"	"	"	
3-Nitroaniline	ND	6.54	100	"	"	"	"	"	"	
4-Nitroaniline	ND	5.49	70.0	"	"	"	"	"	"	
Nitrobenzene	ND	8.04	20.0	"	"	"	"	"	"	
2-Nitrophenol	ND	7.56	20.0	"	"	"	"	"	"	
4-Nitrophenol	ND	2.85	70.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	8.02	20.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	8.02	35.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	7.90	30.0	"	"	"	"	"	"	
Pentachlorophenol	ND	6.02	40.0	"	"	"	"	"	"	
Phenanthrene	ND	1.95	20.0	"	"	"	"	"	"	
Phenol	ND	8.81	30.0	"	"	"	"	"	"	
Pyrene	ND	2.88	20.0	"	"	"	"	"	"	
Pyridine	ND	8.85	100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.08	20.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	7.66	30.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	5.55	30.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*48 %*	*25-121*			"	"	"	"	
Surrogate: Phenol-d6		*49 %*	*24-113*			"	"	"	"	
Surrogate: Nitrobenzene-d5		*53 %*	*23-120*			"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*62 %*	*30-115*			"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*42 %*	*19-122*			"	"	"	"	
Surrogate: Terphenyl-dl4		*53 %*	*18-137*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011005											
Blank (4011005-BLK1)					Prepared & Analyzed: 01/10/14						
Copper	0.62	0.09	1.00	mg/kg							J, QB-01
Silver	ND	0.10	0.50	"							
Nickel	ND	0.31	1.00	"							
Chromium	ND	0.40	1.00	"							
Cadmium	ND	0.08	1.00	"							
Zinc	0.64	0.04	1.00	"							J, QB-01
Lead	ND	0.79	1.00	"							
Arsenic	ND	0.43	1.00	"							
LCS (4011005-BS1)					Prepared & Analyzed: 01/10/14						
Nickel	97.6	0.31	1.00	mg/kg	100		98	75-125			
Zinc	98.2	0.04	1.00	"	100		98	75-125			
Lead	99.3	0.79	1.00	"	100		99	75-125			
Chromium	98.6	0.40	1.00	"	100		99	75-125			
Cadmium	95.5	0.08	1.00	"	100		96	75-125			
Silver	52.1	0.10	0.50	"	50.0		104	75-125			
Copper	106	0.09	1.00	"	100		106	75-125			
Arsenic	96.3	0.43	1.00	"	100		96	75-125			
LCS Dup (4011005-BSD1)					Prepared & Analyzed: 01/10/14						
Cadmium	94.2	0.08	1.00	mg/kg	100		94	75-125	1	20	
Silver	52.8	0.10	0.50	"	50.0		106	75-125	1	20	
Lead	98.1	0.79	1.00	"	100		98	75-125	1	20	
Nickel	96.4	0.31	1.00	"	100		96	75-125	1	20	
Zinc	96.1	0.04	1.00	"	100		96	75-125	2	20	
Copper	105	0.09	1.00	"	100		105	75-125	0.8	20	
Chromium	97.5	0.40	1.00	"	100		98	75-125	1	20	
Arsenic	93.3	0.43	1.00	"	100		93	75-125	3	20	

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011005											
Duplicate (4011005-DUP1)			**Source: 14A0206-01**		Prepared & Analyzed: 01/10/14						
Nickel	9.38	0.31	1.00	mg/kg		7.87			18	20	
Copper	120	0.09	1.00	"		104			14	20	
Chromium	16.5	0.40	1.00	"		8.79			61	20	QR-02
Cadmium	0.28	0.08	1.00	"		0.14			64	20	J, QR-04
Silver	0.24	0.10	0.50	"		0.22			6	20	J
Zinc	136	0.04	1.00	"		158			15	20	
Lead	8.76	0.79	1.00	"		7.71			13	20	
Arsenic	0.71	0.43	1.00	"		0.79			11	20	J
Matrix Spike (4011005-MS1)			**Source: 14A0206-01**		Prepared & Analyzed: 01/10/14						
Nickel	88.4	0.31	1.00	mg/kg	86.2	7.87	93	75-125			
Chromium	91.7	0.40	1.00	"	86.2	8.79	96	75-125			
Silver	43.4	0.10	0.50	"	43.1	0.22	100	75-125			
Copper	374	0.09	1.00	"	86.2	104	314	75-125			QM-06
Cadmium	78.7	0.08	1.00	"	86.2	0.14	91	75-125			
Zinc	208	0.04	1.00	"	86.2	158	58	75-125			QM-06
Lead	88.4	0.79	1.00	"	86.2	7.71	94	75-125			
Arsenic	81.3	0.43	1.00	"	86.2	0.79	93	75-125			
Matrix Spike Dup (4011005-MSD1)			**Source: 14A0206-01**		Prepared & Analyzed: 01/10/14						
Chromium	96.9	0.40	1.00	mg/kg	90.9	8.79	97	75-125	5	20	
Lead	92.1	0.79	1.00	"	90.9	7.71	93	75-125	4	20	
Zinc	232	0.04	1.00	"	90.9	158	81	75-125	11	20	
Nickel	93.1	0.31	1.00	"	90.9	7.87	94	75-125	5	20	
Cadmium	82.8	0.08	1.00	"	90.9	0.14	91	75-125	5	20	
Silver	46.1	0.10	0.50	"	45.5	0.22	101	75-125	6	20	
Copper	202	0.09	1.00	"	90.9	104	109	75-125	60	20	QM-06
Arsenic	86.1	0.43	1.00	"	90.9	0.79	94	75-125	6	20	

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011006											
Blank (4011006-BLK1)					Prepared & Analyzed: 01/10/14						
Mercury	ND	0.02	0.05	mg/kg							
LCS (4011006-BS1)					Prepared & Analyzed: 01/10/14						
Mercury	0.17	0.02	0.05	mg/kg	0.167		100	75-125			
LCS Dup (4011006-BSD1)					Prepared & Analyzed: 01/10/14						
Mercury	0.17	0.02	0.05	mg/kg	0.167		101	75-125	2	20	
Duplicate (4011006-DUP1)			**Source: 14A0188-01**		Prepared & Analyzed: 01/10/14						
Mercury	ND	0.02	0.05	mg/kg		ND				20	
Matrix Spike (4011006-MS1)			**Source: 14A0188-01**		Prepared & Analyzed: 01/10/14						
Mercury	0.34	0.02	0.05	mg/kg	0.357	ND	96	75-125			
Matrix Spike Dup (4011006-MSD1)			**Source: 14A0188-01**		Prepared & Analyzed: 01/10/14						
Mercury	0.34	0.02	0.05	mg/kg	0.400	ND	86	75-125	0.6	20	

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011024											
Blank (4011024-BLK1)					Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1016	ND	4.60	20.0	ug/kg							
Aroclor 1221	ND	4.60	20.0	"							
Aroclor 1232	ND	4.60	20.0	"							
Aroclor 1242	ND	4.60	20.0	"							
Aroclor 1248	ND	4.60	20.0	"							
Aroclor 1254	ND	4.60	20.0	"							
Aroclor 1260	ND	4.60	20.0	"							
Surrogate: TCMX	*13.9*			*"*	*16.7*		*83*	*26-146*			
LCS (4011024-BS1)					Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1260	144	4.60	20.0	ug/kg	167		87	8-127			
Surrogate: TCMX	*13.7*			*"*	*16.7*		*82*	*26-146*			
LCS Dup (4011024-BSD1)					Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1260	157	4.60	20.0	ug/kg	167		94	8-127	8	30	
Surrogate: TCMX	*13.1*			*"*	*16.7*		*79*	*26-146*			
Duplicate (4011024-DUP1)			**Source: 14A0265-01**		Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1016	ND	4.60	20.0	ug/kg		ND				30	
Aroclor 1221	ND	4.60	20.0	"		ND				30	
Aroclor 1232	ND	4.60	20.0	"		ND				30	
Aroclor 1242	ND	4.60	20.0	"		ND				30	
Aroclor 1248	ND	4.60	20.0	"		ND				30	
Aroclor 1254	ND	4.60	20.0	"		ND				30	
Aroclor 1260	ND	4.60	20.0	"		ND				30	
Surrogate: TCMX	*16.3*			*"*	*16.7*		*98*	*26-146*			
Matrix Spike (4011024-MS1)			**Source: 14A0265-01**		Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1260	131	4.60	20.0	ug/kg	167	ND	79	8-127			
Surrogate: TCMX	*14.7*			*"*	*16.7*		*88*	*26-146*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011024											
Matrix Spike Dup (4011024-MSD1)			**Source: 14A0265-01**		Prepared: 01/10/14	Analyzed: 01/13/14					
Aroclor 1260	132	4.60	20.0	ug/kg	167	ND	79	8-127	0.8	30	
Surrogate: TCMX	*13.8*			*"*	*16.7*		*83*	*26-146*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
Blank (4010915-BLK1)					Prepared & Analyzed: 01/09/14						
Benzoic acid	ND	50.0	100	ug/kg							
Acenaphthene	ND	5.12	20.0	"							
Acenaphthylene	ND	5.37	20.0	"							
Anthracene	ND	2.82	20.0	"							
Benzidine	ND	150	150	"							
Benzo (a) anthracene	ND	3.09	20.0	"							
Benzo (b) fluoranthene	ND	3.09	20.0	"							
Benzo (k) fluoranthene	ND	3.68	20.0	"							
Benzo (g,h,i) perylene	ND	4.63	40.0	"							
Benzo (a) pyrene	ND	3.07	20.0	"							
Benzyl alcohol	ND	1.44	75.0	"							
Bis(2-chloroethoxy)methane	ND	7.26	20.0	"							
Bis(2-chloroethyl)ether	ND	7.96	25.0	"							
Bis(2-chloroisopropyl)ether	ND	8.81	25.0	"							
Bis(2-ethylhexyl)phthalate	ND	5.72	45.0	"							
4-Bromophenyl phenyl ether	ND	3.71	20.0	"							
Butyl benzyl phthalate	ND	4.11	40.0	"							
Carbazole	ND	4.94	60.0	"							
4-Chloroaniline	ND	4.42	100	"							
4-Chloro-3-methylphenol	ND	8.34	20.0	"							
2-Chloronaphthalene	ND	6.11	20.0	"							
2-Chlorophenol	ND	6.48	20.0	"							
4-Chlorophenyl phenyl ether	ND	4.90	20.0	"							
Chrysene	ND	2.87	20.0	"							
Dibenz (a,h) anthracene	ND	5.00	40.0	"							
Dibenzofuran	ND	5.42	20.0	"							
Di-n-butyl phthalate	ND	3.87	40.0	"							
1,2-Dichlorobenzene	ND	9.07	20.0	"							
1,3-Dichlorobenzene	ND	8.51	20.0	"							
1,4-Dichlorobenzene	ND	8.55	20.0	"							
3,3´-Dichlorobenzidine	ND	5.26	150	"							
2,4-Dichlorophenol	ND	5.32	20.0	"							
Diethyl phthalate	ND	1.61	20.0	"							
2,4-Dimethylphenol	ND	2.40	80.0	"							
Dimethyl phthalate	ND	3.36	20.0	"							
4,6-Dinitro-2-methylphenol	ND	5.50	50.0	"							
2,4-Dinitrophenol	ND	10.9	100	"							
2,4-Dinitrotoluene	ND	4.08	20.0	"							

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
Blank (4010915-BLK1)					Prepared & Analyzed: 01/09/14						
2,6-Dinitrotoluene	ND	6.02	20.0	ug/kg							
Di-n-octyl phthalate	ND	4.61	40.0	"							
Fluoranthene	ND	3.43	20.0	"							
Fluorene	ND	4.50	20.0	"							
Hexachlorobenzene	ND	3.10	20.0	"							
Hexachlorobutadiene	ND	7.09	20.0	"							
Hexachlorocyclopentadiene	ND	6.98	50.0	"							
Hexachloroethane	ND	8.88	20.0	"							
Indeno (1,2,3-cd) pyrene	ND	4.33	30.0	"							
Isophorone	ND	7.56	20.0	"							
2-Methylnaphthalene	ND	7.62	20.0	"							
2-Methylphenol	ND	6.56	20.0	"							
4-Methylphenol (3-Methylphenol)	ND	6.24	40.0	"							
Naphthalene	ND	7.25	20.0	"							
2-Nitroaniline	ND	3.91	50.0	"							
3-Nitroaniline	ND	6.54	100	"							
4-Nitroaniline	ND	5.49	70.0	"							
Nitrobenzene	ND	8.04	20.0	"							
2-Nitrophenol	ND	7.56	20.0	"							
4-Nitrophenol	ND	2.85	70.0	"							
N-Nitrosodimethylamine	ND	8.02	20.0	"							
N-Nitrosodiphenylamine	ND	8.02	35.0	"							
N-Nitrosodi-n-propylamine	ND	7.90	30.0	"							
Pentachlorophenol	ND	6.02	40.0	"							
Phenanthrene	ND	1.95	20.0	"							
Phenol	ND	8.81	30.0	"							
Pyrene	ND	2.88	20.0	"							
Pyridine	ND	8.85	100	"							
1,2,4-Trichlorobenzene	ND	7.08	20.0	"							
2,4,5-Trichlorophenol	ND	7.66	30.0	"							
2,4,6-Trichlorophenol	ND	5.55	30.0	"							
Surrogate: 2-Fluorophenol	*523*			*"*	*568*		*92*	*25-121*			
Surrogate: Phenol-d6	*516*			*"*	*568*		*91*	*24-113*			
Surrogate: Nitrobenzene-d5	*496*			*"*	*568*		*87*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*547*			*"*	*568*		*96*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*333*			*"*	*568*		*59*	*19-122*			
Surrogate: Terphenyl-dl4	*510*			*"*	*568*		*90*	*18-137*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
LCS (4010915-BS1)					Prepared & Analyzed: 01/09/14						
Acenaphthene	581	5.12	20.0	ug/kg	568		102	50-135			
4-Chloro-3-methylphenol	537	8.34	20.0	"	568		95	34-142			
2-Chlorophenol	597	6.48	20.0	"	568		105	38-125			
Di-n-butyl phthalate	621	3.87	40.0	"	568		109	44-152			
1,4-Dichlorobenzene	500	8.55	20.0	"	568		88	48-125			
2,4-Dinitrotoluene	506	4.08	20.0	"	568		89	41-144			
4-Nitrophenol	382	2.85	70.0	"	568		67	10-155			
N-Nitrosodi-n-propylamine	684	7.90	30.0	"	568		120	28-156			
Pentachlorophenol	288	6.02	40.0	"	568		51	21-133			
Phenol	565	8.81	30.0	"	568		99	35-120			
Pyrene	616	2.88	20.0	"	568		108	40-152			
1,2,4-Trichlorobenzene	554	7.08	20.0	"	568		98	47-125			
Surrogate: 2-Fluorophenol	*522*			*"*	*568*		*92*	*25-121*			
Surrogate: Phenol-d6	*490*			*"*	*568*		*86*	*24-113*			
Surrogate: Nitrobenzene-d5	*483*			*"*	*568*		*85*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*515*			*"*	*568*		*91*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*380*			*"*	*568*		*67*	*19-122*			
Surrogate: Terphenyl-dl4	*503*			*"*	*568*		*89*	*18-137*			
LCS Dup (4010915-BSD1)					Prepared & Analyzed: 01/09/14						
Acenaphthene	574	5.12	20.0	ug/kg	568		101	50-135	1	30	
4-Chloro-3-methylphenol	513	8.34	20.0	"	568		90	34-142	5	30	
2-Chlorophenol	587	6.48	20.0	"	568		103	38-125	2	30	
Di-n-butyl phthalate	630	3.87	40.0	"	568		111	44-152	1	30	
1,4-Dichlorobenzene	485	8.55	20.0	"	568		85	48-125	3	30	
2,4-Dinitrotoluene	491	4.08	20.0	"	568		86	41-144	3	30	
4-Nitrophenol	411	2.85	70.0	"	568		72	10-155	7	30	
N-Nitrosodi-n-propylamine	676	7.90	30.0	"	568		119	28-156	1	30	
Pentachlorophenol	277	6.02	40.0	"	568		49	21-133	4	30	
Phenol	542	8.81	30.0	"	568		95	35-120	4	30	
Pyrene	588	2.88	20.0	"	568		104	40-152	5	30	
1,2,4-Trichlorobenzene	554	7.08	20.0	"	568		97	47-125	0.1	30	
Surrogate: 2-Fluorophenol	*517*			*"*	*568*		*91*	*25-121*			
Surrogate: Phenol-d6	*476*			*"*	*568*		*84*	*24-113*			
Surrogate: Nitrobenzene-d5	*462*			*"*	*568*		*81*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*500*			*"*	*568*		*88*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*383*			*"*	*568*		*67*	*19-122*			
Surrogate: Terphenyl-dl4	*480*			*"*	*568*		*84*	*18-137*			

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
Duplicate (4010915-DUP1)			**Source: 14A0206-01**		Prepared & Analyzed: 01/09/14						
Benzoic acid	ND	100	200	ug/kg		ND				30	
Acenaphthene	ND	10.2	40.0	"		ND				30	
Acenaphthylene	ND	10.7	40.0	"		ND				30	
Anthracene	ND	5.64	40.0	"		ND				30	
Benzidine	ND	300	300	"		ND				30	
Benzo (a) anthracene	ND	6.18	40.0	"		17.1				30	
Benzo (b) fluoranthene	ND	6.18	40.0	"		ND				30	
Benzo (k) fluoranthene	ND	7.36	40.0	"		ND				30	
Benzo (g,h,i) perylene	ND	9.26	80.0	"		ND				30	
Benzo (a) pyrene	ND	6.14	40.0	"		ND				30	
Benzyl alcohol	ND	2.88	150	"		ND				30	
Bis(2-chloroethoxy)methane	ND	14.5	40.0	"		ND				30	
Bis(2-chloroethyl)ether	ND	15.9	50.0	"		ND				30	
Bis(2-chloroisopropyl)ether	ND	17.6	50.0	"		ND				30	
Bis(2-ethylhexyl)phthalate	1320	11.4	90.0	"		3350			87	30	QR-02
4-Bromophenyl phenyl ether	ND	7.42	40.0	"		ND				30	
Butyl benzyl phthalate	ND	8.22	80.0	"		ND				30	
Carbazole	ND	9.88	120	"		ND				30	
4-Chloroaniline	ND	8.84	200	"		ND				30	
4-Chloro-3-methylphenol	ND	16.7	40.0	"		ND				30	
2-Chloronaphthalene	ND	12.2	40.0	"		ND				30	
2-Chlorophenol	ND	13.0	40.0	"		ND				30	
4-Chlorophenyl phenyl ether	ND	9.80	40.0	"		ND				30	
Chrysene	ND	5.74	40.0	"		15.5				30	
Dibenz (a,h) anthracene	ND	10.0	80.0	"		ND				30	
Dibenzofuran	ND	10.8	40.0	"		ND				30	
Di-n-butyl phthalate	ND	7.74	80.0	"		153				30	
1,2-Dichlorobenzene	ND	18.1	40.0	"		ND				30	
1,3-Dichlorobenzene	ND	17.0	40.0	"		ND				30	
1,4-Dichlorobenzene	ND	17.1	40.0	"		ND				30	
3,3´-Dichlorobenzidine	ND	10.5	300	"		ND				30	
2,4-Dichlorophenol	ND	10.6	40.0	"		ND				30	
Diethyl phthalate	ND	3.22	40.0	"		ND				30	
2,4-Dimethylphenol	ND	4.80	160	"		ND				30	
Dimethyl phthalate	ND	6.72	40.0	"		ND				30	
4,6-Dinitro-2-methylphenol	ND	11.0	100	"		ND				30	
2,4-Dinitrophenol	ND	21.9	200	"		ND				30	
2,4-Dinitrotoluene	6190	8.16	40.0	"		24700			120	30	QR-02

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Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
Duplicate (4010915-DUP1)			**Source: 14A0206-01**		Prepared & Analyzed: 01/09/14						
2,6-Dinitrotoluene	ND	12.0	40.0	ug/kg		2140				30	
Di-n-octyl phthalate	ND	9.22	80.0	"		ND				30	
Fluoranthene	30.8	6.86	40.0	"		ND				30	J
Fluorene	ND	9.00	40.0	"		ND				30	
Hexachlorobenzene	ND	6.20	40.0	"		ND				30	
Hexachlorobutadiene	ND	14.2	40.0	"		ND				30	
Hexachlorocyclopentadiene	ND	14.0	100	"		ND				30	
Hexachloroethane	ND	17.8	40.0	"		ND				30	
Indeno (1,2,3-cd) pyrene	ND	8.66	60.0	"		ND				30	
Isophorone	ND	15.1	40.0	"		ND				30	
2-Methylnaphthalene	ND	15.2	40.0	"		ND				30	
2-Methylphenol	ND	13.1	40.0	"		ND				30	
4-Methylphenol (3-Methylphenol)	81.7	12.5	80.0	"		21.4			117	30	QR-02
Naphthalene	ND	14.5	40.0	"		ND				30	
2-Nitroaniline	ND	7.82	100	"		ND				30	
3-Nitroaniline	ND	13.1	200	"		ND				30	
4-Nitroaniline	ND	11.0	140	"		ND				30	
Nitrobenzene	ND	16.1	40.0	"		ND				30	
2-Nitrophenol	ND	15.1	40.0	"		ND				30	
4-Nitrophenol	ND	5.70	140	"		ND				30	
N-Nitrosodimethylamine	ND	16.0	40.0	"		ND				30	
N-Nitrosodiphenylamine	ND	16.0	70.0	"		ND				30	
N-Nitrosodi-n-propylamine	ND	15.8	60.0	"		ND				30	
Pentachlorophenol	ND	12.0	80.0	"		ND				30	
Phenanthrene	ND	3.90	40.0	"		ND				30	
Phenol	ND	17.6	60.0	"		ND				30	
Pyrene	ND	5.76	40.0	"		ND				30	
Pyridine	ND	17.7	200	"		ND				30	
1,2,4-Trichlorobenzene	ND	14.2	40.0	"		ND				30	
2,4,5-Trichlorophenol	ND	15.3	60.0	"		ND				30	
2,4,6-Trichlorophenol	ND	11.1	60.0	"		ND				30	
Surrogate: 2-Fluorophenol	*869*			*"*	*1140*		*76*	*25-121*			
Surrogate: Phenol-d6	*861*			*"*	*1140*		*76*	*24-113*			
Surrogate: Nitrobenzene-d5	*771*			*"*	*1140*		*68*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*918*			*"*	*1140*		*81*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*826*			*"*	*1140*		*73*	*19-122*			
Surrogate: Terphenyl-dl4	*775*			*"*	*1140*		*68*	*18-137*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: Chula Vista-WCS

EMA Log #: 14A0265

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010915											
Matrix Spike (4010915-MS1)		**Source: 14A0206-01**			Prepared & Analyzed: 01/09/14						
Acenaphthene	1930	20.5	80.0	ug/kg	2270	ND	85	46-140			
4-Chloro-3-methylphenol	1940	33.4	80.0	"	2270	ND	85	42-139			
2-Chlorophenol	1900	25.9	80.0	"	2270	ND	83	30-135			
Di-n-butyl phthalate	1860	15.5	160	"	2270	153	75	24-152			
1,4-Dichlorobenzene	1610	34.2	80.0	"	2270	ND	71	36-137			
2,4-Dinitrotoluene	48300	16.3	80.0	"	2270	24700	NR	28-145			QM-08
4-Nitrophenol	1210	11.4	280	"	2270	ND	53	23-150			
N-Nitrosodi-n-propylamine	2260	31.6	120	"	2270	ND	100	31-161			
Pentachlorophenol	1540	24.1	160	"	2270	ND	68	3-159			
Phenol	1730	35.2	120	"	2270	ND	76	31-138			
Pyrene	1650	11.5	80.0	"	2270	ND	73	30-152			
1,2,4-Trichlorobenzene	1810	28.3	80.0	"	2270	ND	80	39-134			
Surrogate: 2-Fluorophenol	*1610*			*"*	*2270*		*71*	*25-121*			
Surrogate: Phenol-d6	*1540*			*"*	*2270*		*68*	*24-113*			
Surrogate: Nitrobenzene-d5	*1560*			*"*	*2270*		*69*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*1770*			*"*	*2270*		*78*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*1600*			*"*	*2270*		*70*	*19-122*			
Surrogate: Terphenyl-dl4	*1560*			*"*	*2270*		*69*	*18-137*			
Matrix Spike Dup (4010915-MSD1)		**Source: 14A0206-01**			Prepared & Analyzed: 01/09/14						
Acenaphthene	2030	20.5	80.0	ug/kg	2270	ND	89	46-140	5	30	
4-Chloro-3-methylphenol	2060	33.4	80.0	"	2270	ND	91	42-139	6	30	
2-Chlorophenol	2060	25.9	80.0	"	2270	ND	91	30-135	8	30	
Di-n-butyl phthalate	1920	15.5	160	"	2270	153	78	24-152	3	30	
1,4-Dichlorobenzene	1760	34.2	80.0	"	2270	ND	78	36-137	9	30	
2,4-Dinitrotoluene	30300	16.3	80.0	"	2270	24700	247	28-145	46	30	QM-08
4-Nitrophenol	1350	11.4	280	"	2270	ND	60	23-150	11	30	
N-Nitrosodi-n-propylamine	2430	31.6	120	"	2270	ND	107	31-161	7	30	
Pentachlorophenol	1780	24.1	160	"	2270	ND	78	3-159	14	30	
Phenol	2200	35.2	120	"	2270	ND	97	31-138	24	30	
Pyrene	1270	11.5	80.0	"	2270	ND	56	30-152	26	30	
1,2,4-Trichlorobenzene	1930	28.3	80.0	"	2270	ND	85	39-134	6	30	
Surrogate: 2-Fluorophenol	*1780*			*"*	*2270*		*78*	*25-121*			
Surrogate: Phenol-d6	*1600*			*"*	*2270*		*70*	*24-113*			
Surrogate: Nitrobenzene-d5	*1570*			*"*	*2270*		*69*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*1910*			*"*	*2270*		*84*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*1760*			*"*	*2270*		*77*	*19-122*			
Surrogate: Terphenyl-dl4	*1660*			*"*	*2270*		*73*	*18-137*			

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
QM-08	The spike recovery was outside of the QC limits due to noted non-homogeneity of the QC sample matrix.
QM-06	Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.
QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

14A0265

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #:

Client: Vulcan Materials Co.

Attn: Jeff Pollard

Samplers(s): Vulcan

Address: 16009 Foothill Blvd. Irwindale CA 91706

Phone: 626 926 5789 Fax:

Email: pollardj@vmcmail.com

Billing Address: Same as above

Project ID:

Project #: PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	X See Attached				
1	Chula Vista - WCS	1-9-14	10am	Soil																								
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr ☒ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax ☒ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** ☒ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: ✓ Yes No N/A	Containers Properly Preseved: ✓ Yes No N/A
Custody Seals Intact: Yes ✓ No N/A	Temp @ Receipt: 2.02 No Ice
COC/Labels Agree: ✓ Yes No N/A	Sampled By: ✓ Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: [signature]	1/9/14 1650	Signature: [signature]
Print: Jeff Pollard		Print: Francisco Verbus
Company: Vulcan		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

ASAP Turn-Around-Time

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

22 January 2014

Vulcan Materials Co. Foothill
Attn: Jeff Pollard
16009 Foothill Blvd.
Irwindale CA, CA 91706

EMA Log #: 14A0455

Project Name: NASSCO Cover Material

Enclosed are the results of analyses for samples received by the laboratory on 01/17/14 11:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NASSCO Cover Material	14A0455-01	Soil	01/17/14 11:10	01/17/14 11:15

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NASSCO Cover Material (14A0455-01) Soil Sampled: 01/17/14 11:10 Received: 01/17/14 11:15										
Silver	ND	0.10	0.50	mg/kg	1	4012022	01/20/14	01/21/14	EPA 6010	
Arsenic	ND	0.43	1.00	"	"	"	"	01/20/14	"	
Cadmium	ND	0.08	1.00	"	"	"	"	"	"	
Chromium	**4.35**	0.40	1.00	"	"	"	"	"	"	
Copper	**3.29**	0.09	1.00	"	"	"	"	"	"	
Mercury	ND	0.02	0.05	"	"	4012036	01/20/14	01/20/14	EPA 7471	
Nickel	**1.46**	0.31	1.00	"	"	4012022	01/20/14	01/20/14	EPA 6010	
Lead	**0.79**	0.79	1.00	"	"	"	"	"	"	J
Zinc	**22.0**	0.56	1.00	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NASSCO Cover Material (14A0455-01) Soil Sampled: 01/17/14 11:10 Received: 01/17/14 11:15										
Aroclor 1016	ND	4.60	20.0	ug/kg	1	4011717	01/20/14	01/21/14	EPA 8082	
Aroclor 1221	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1232	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1242	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1248	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1254	ND	4.60	20.0	"	"	"	"	"	"	
Aroclor 1260	ND	4.60	20.0	"	"	"	"	"	"	
Surrogate: TCMX		*108 %*	*26-146*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NASSCO Cover Material (14A0455-01) Soil Sampled: 01/17/14 11:10 Received: 01/17/14 11:15										
Benzoic acid	ND	50.0	100	ug/kg	1	4011714	01/17/14	01/21/14	EPA 8270C	
Acenaphthene	ND	5.12	20.0	"	"	"	"	"	"	
Acenaphthylene	ND	5.37	20.0	"	"	"	"	"	"	
Anthracene	ND	2.82	20.0	"	"	"	"	"	"	
Benzidine	ND	150	150	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.09	20.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.09	20.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.68	20.0	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	4.63	40.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.07	20.0	"	"	"	"	"	"	
Benzyl alcohol	ND	1.44	75.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	7.26	20.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	7.96	25.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	8.81	25.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	**9.49**	5.72	45.0	"	"	"	"	"	"	J
4-Bromophenyl phenyl ether	ND	3.71	20.0	"	"	"	"	"	"	
Butyl benzyl phthalate	**5.80**	4.11	40.0	"	"	"	"	"	"	J
Carbazole	ND	4.94	60.0	"	"	"	"	"	"	
4-Chloroaniline	ND	4.42	100	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	8.34	20.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	6.11	20.0	"	"	"	"	"	"	
2-Chlorophenol	ND	6.48	20.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	4.90	20.0	"	"	"	"	"	"	
Chrysene	ND	2.87	20.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.00	40.0	"	"	"	"	"	"	
Dibenzofuran	ND	5.42	20.0	"	"	"	"	"	"	
Di-n-butyl phthalate	**17.4**	3.87	40.0	"	"	"	"	"	"	J
1,2-Dichlorobenzene	ND	9.07	20.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	8.51	20.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	8.55	20.0	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	5.26	150	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.32	20.0	"	"	"	"	"	"	
Diethyl phthalate	ND	1.61	20.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	2.40	80.0	"	"	"	"	"	"	
Dimethyl phthalate	**42.3**	3.36	20.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	5.50	50.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10.9	100	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	4.08	20.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	6.02	20.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	4.61	40.0	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NASSCO Cover Material (14A0455-01) Soil Sampled: 01/17/14 11:10 Received: 01/17/14 11:15										
Fluoranthene	ND	3.43	20.0	ug/kg	1	4011714	01/17/14	01/21/14	EPA 8270C	
Fluorene	ND	4.50	20.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	3.10	20.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.09	20.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	6.98	50.0	"	"	"	"	"	"	
Hexachloroethane	ND	8.88	20.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	4.33	30.0	"	"	"	"	"	"	
Isophorone	ND	7.56	20.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	7.62	20.0	"	"	"	"	"	"	
2-Methylphenol	ND	6.56	20.0	"	"	"	"	"	"	
4-Methylphenol (3-Methylphenol)	ND	6.24	40.0	"	"	"	"	"	"	
Naphthalene	ND	7.25	20.0	"	"	"	"	"	"	
2-Nitroaniline	ND	3.91	50.0	"	"	"	"	"	"	
3-Nitroaniline	ND	6.54	100	"	"	"	"	"	"	
4-Nitroaniline	ND	5.49	70.0	"	"	"	"	"	"	
Nitrobenzene	ND	8.04	20.0	"	"	"	"	"	"	
2-Nitrophenol	ND	7.56	20.0	"	"	"	"	"	"	
4-Nitrophenol	ND	2.85	70.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	8.02	20.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	8.02	35.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	7.90	30.0	"	"	"	"	"	"	
Pentachlorophenol	ND	6.02	40.0	"	"	"	"	"	"	
Phenanthrene	ND	1.95	20.0	"	"	"	"	"	"	
Phenol	ND	8.81	30.0	"	"	"	"	"	"	
Pyrene	ND	2.88	20.0	"	"	"	"	"	"	
Pyridine	ND	8.85	100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.08	20.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	7.66	30.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	5.55	30.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*72 %*	*25-121*			"	"	"	"	
Surrogate: Phenol-d6		*69 %*	*24-113*			"	"	"	"	
Surrogate: Nitrobenzene-d5		*69 %*	*23-120*			"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*75 %*	*30-115*			"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*56 %*	*19-122*			"	"	"	"	
Surrogate: Terphenyl-dl4		*66 %*	*18-137*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4012022											
Blank (4012022-BLK1)					Prepared & Analyzed: 01/20/14						
Copper	ND	0.09	1.00	mg/kg							
Silver	0.14	0.10	0.50	"							QB-02, J
Cadmium	ND	0.08	1.00	"							
Chromium	ND	0.40	1.00	"							
Lead	ND	0.79	1.00	"							
Zinc	ND	0.56	1.00	"							
Nickel	ND	0.31	1.00	"							
Arsenic	ND	0.43	1.00	"							
LCS (4012022-BS1)					Prepared: 01/20/14 Analyzed: 01/21/14						
Silver	47.9	0.10	0.50	mg/kg	50.0		96	75-125			
Cadmium	99.5	0.08	1.00	"	100		99	75-125			
Copper	105	0.09	1.00	"	100		105	75-125			
Zinc	102	0.56	1.00	"	100		102	75-125			
Chromium	102	0.40	1.00	"	100		102	75-125			
Lead	103	0.79	1.00	"	100		103	75-125			
Nickel	102	0.31	1.00	"	100		102	75-125			
Arsenic	98.4	0.43	1.00	"	100		98	75-125			
LCS Dup (4012022-BSD1)					Prepared & Analyzed: 01/20/14						
Cadmium	98.9	0.08	1.00	mg/kg	100		99	75-125	0.5	20	
Silver	49.5	0.10	0.50	"	50.0		99	75-125	3	20	
Zinc	102	0.56	1.00	"	100		102	75-125	1	20	
Lead	102	0.79	1.00	"	100		102	75-125	0.6	20	
Copper	105	0.09	1.00	"	100		105	75-125	0.1	20	
Nickel	101	0.31	1.00	"	100		101	75-125	0.7	20	
Chromium	102	0.40	1.00	"	100		102	75-125	0.4	20	
Arsenic	97.6	0.43	1.00	"	100		98	75-125	0.8	20	

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4012022											
Duplicate (4012022-DUP1)			**Source: 14A0296-01**		Prepared: 01/20/14 Analyzed: 01/21/14						
Silver	ND	0.10	0.50	mg/kg		ND				20	
Lead	3.35	0.79	1.00	"		3.56			6	20	
Zinc	38.0	0.56	1.00	"		38.6			2	20	
Chromium	63.4	0.40	1.00	"		59.6			6	20	
Cadmium	ND	0.08	1.00	"		ND				20	
Copper	35.1	0.09	1.00	"		35.0			0.2	20	
Nickel	19.5	0.31	1.00	"		19.1			2	20	
Arsenic	ND	0.43	1.00	"		ND				20	
Matrix Spike (4012022-MS1)			**Source: 14A0296-01**		Prepared & Analyzed: 01/20/14						
Zinc	127	0.56	1.00	mg/kg	94.3	38.6	93	75-125			
Chromium	151	0.40	1.00	"	94.3	59.6	97	75-125			
Silver	40.0	0.10	0.50	"	47.2	ND	85	75-125			
Lead	88.9	0.79	1.00	"	94.3	3.56	90	75-125			
Nickel	103	0.31	1.00	"	94.3	19.1	89	75-125			
Copper	139	0.09	1.00	"	94.3	35.0	110	75-125			
Cadmium	86.2	0.08	1.00	"	94.3	ND	91	75-125			
Arsenic	87.9	0.43	1.00	"	94.3	ND	93	75-125			
Matrix Spike Dup (4012022-MSD1)			**Source: 14A0296-01**		Prepared & Analyzed: 01/20/14						
Zinc	121	0.56	1.00	mg/kg	92.6	38.6	89	75-125	5	20	
Cadmium	84.1	0.08	1.00	"	92.6	ND	91	75-125	2	20	
Copper	129	0.09	1.00	"	92.6	35.0	102	75-125	7	20	
Nickel	98.8	0.31	1.00	"	92.6	19.1	86	75-125	4	20	
Silver	39.0	0.10	0.50	"	46.3	ND	84	75-125	3	20	
Lead	85.9	0.79	1.00	"	92.6	3.56	89	75-125	3	20	
Chromium	147	0.40	1.00	"	92.6	59.6	94	75-125	3	20	
Arsenic	84.8	0.43	1.00	"	92.6	ND	92	75-125	4	20	

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4012036											
Blank (4012036-BLK1)					Prepared & Analyzed: 01/20/14						
Mercury	ND	0.02	0.05	mg/kg							
LCS (4012036-BS1)					Prepared & Analyzed: 01/20/14						
Mercury	0.17	0.02	0.05	mg/kg	0.167		100	75-125			
LCS Dup (4012036-BSD1)					Prepared & Analyzed: 01/20/14						
Mercury	0.17	0.02	0.05	mg/kg	0.167		102	75-125	2	20	
Duplicate (4012036-DUP1)			**Source: 14A0455-01**		Prepared & Analyzed: 01/20/14						
Mercury	ND	0.02	0.05	mg/kg		ND				20	
Matrix Spike (4012036-MS1)			**Source: 14A0455-01**		Prepared & Analyzed: 01/20/14						
Mercury	0.40	0.02	0.05	mg/kg	0.385	ND	103	75-125			
Matrix Spike Dup (4012036-MSD1)			**Source: 14A0455-01**		Prepared & Analyzed: 01/20/14						
Mercury	0.34	0.02	0.05	mg/kg	0.333	ND	103	75-125	14	20	

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011717											
Blank (4011717-BLK1)					Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1016	ND	4.60	20.0	ug/kg							
Aroclor 1221	ND	4.60	20.0	"							
Aroclor 1232	ND	4.60	20.0	"							
Aroclor 1242	ND	4.60	20.0	"							
Aroclor 1248	ND	4.60	20.0	"							
Aroclor 1254	ND	4.60	20.0	"							
Aroclor 1260	ND	4.60	20.0	"							
Surrogate: TCMX	*18.7*			*"*	*16.7*		*112*	*26-146*			
LCS (4011717-BS2)					Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1260	93.1	4.60	20.0	ug/kg	167		56	8-127			
Surrogate: TCMX	*8.42*			*"*	*16.7*		*50*	*26-146*			
LCS Dup (4011717-BSD2)					Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1260	68.9	4.60	20.0	ug/kg	167		41	8-127	30	30	
Surrogate: TCMX	*6.45*			*"*	*16.7*		*39*	*26-146*			
Duplicate (4011717-DUP1)			**Source: 14A0455-01**		Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1016	ND	4.60	20.0	ug/kg		ND				30	
Aroclor 1221	ND	4.60	20.0	"		ND				30	
Aroclor 1232	ND	4.60	20.0	"		ND				30	
Aroclor 1242	ND	4.60	20.0	"		ND				30	
Aroclor 1248	ND	4.60	20.0	"		ND				30	
Aroclor 1254	ND	4.60	20.0	"		ND				30	
Aroclor 1260	ND	4.60	20.0	"		ND				30	
Surrogate: TCMX	*19.4*			*"*	*16.7*		*116*	*26-146*			
Matrix Spike (4011717-MS2)			**Source: 14A0455-01**		Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1260	184	4.60	20.0	ug/kg	167	ND	111	8-127			
Surrogate: TCMX	*20.1*			*"*	*16.7*		*120*	*26-146*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011717											
Matrix Spike Dup (4011717-MSD2)			**Source: 14A0455-01**		Prepared: 01/20/14	Analyzed: 01/21/14					
Aroclor 1260	180	4.60	20.0	ug/kg	167	ND	108	8-127	2	30	
Surrogate: TCMX	*18.6*			*"*	*16.7*		*112*	*26-146*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
Blank (4011714-BLK1)					Prepared: 01/17/14 Analyzed: 01/21/14						
Benzoic acid	ND	50.0	100	ug/kg							
Acenaphthene	ND	5.12	20.0	"							
Acenaphthylene	ND	5.37	20.0	"							
Anthracene	ND	2.82	20.0	"							
Benzidine	ND	150	150	"							
Benzo (a) anthracene	ND	3.09	20.0	"							
Benzo (b) fluoranthene	ND	3.09	20.0	"							
Benzo (k) fluoranthene	ND	3.68	20.0	"							
Benzo (g,h,i) perylene	ND	4.63	40.0	"							
Benzo (a) pyrene	ND	3.07	20.0	"							
Benzyl alcohol	ND	1.44	75.0	"							
Bis(2-chloroethoxy)methane	ND	7.26	20.0	"							
Bis(2-chloroethyl)ether	ND	7.96	25.0	"							
Bis(2-chloroisopropyl)ether	ND	8.81	25.0	"							
Bis(2-ethylhexyl)phthalate	ND	5.72	45.0	"							
4-Bromophenyl phenyl ether	ND	3.71	20.0	"							
Butyl benzyl phthalate	ND	4.11	40.0	"							
Carbazole	ND	4.94	60.0	"							
4-Chloroaniline	ND	4.42	100	"							
4-Chloro-3-methylphenol	ND	8.34	20.0	"							
2-Chloronaphthalene	ND	6.11	20.0	"							
2-Chlorophenol	ND	6.48	20.0	"							
4-Chlorophenyl phenyl ether	ND	4.90	20.0	"							
Chrysene	ND	2.87	20.0	"							
Dibenz (a,h) anthracene	ND	5.00	40.0	"							
Dibenzofuran	ND	5.42	20.0	"							
Di-n-butyl phthalate	ND	3.87	40.0	"							
1,2-Dichlorobenzene	ND	9.07	20.0	"							
1,3-Dichlorobenzene	ND	8.51	20.0	"							
1,4-Dichlorobenzene	ND	8.55	20.0	"							
3,3´-Dichlorobenzidine	ND	5.26	150	"							
2,4-Dichlorophenol	ND	5.32	20.0	"							
Diethyl phthalate	ND	1.61	20.0	"							
2,4-Dimethylphenol	ND	2.40	80.0	"							
Dimethyl phthalate	ND	3.36	20.0	"							
4,6-Dinitro-2-methylphenol	ND	5.50	50.0	"							
2,4-Dinitrophenol	ND	10.9	100	"							
2,4-Dinitrotoluene	ND	4.08	20.0	"							

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
Blank (4011714-BLK1)					Prepared: 01/17/14 Analyzed: 01/21/14						
2,6-Dinitrotoluene	ND	6.02	20.0	ug/kg							
Di-n-octyl phthalate	ND	4.61	40.0	"							
Fluoranthene	ND	3.43	20.0	"							
Fluorene	ND	4.50	20.0	"							
Hexachlorobenzene	ND	3.10	20.0	"							
Hexachlorobutadiene	ND	7.09	20.0	"							
Hexachlorocyclopentadiene	ND	6.98	50.0	"							
Hexachloroethane	ND	8.88	20.0	"							
Indeno (1,2,3-cd) pyrene	ND	4.33	30.0	"							
Isophorone	ND	7.56	20.0	"							
2-Methylnaphthalene	ND	7.62	20.0	"							
2-Methylphenol	ND	6.56	20.0	"							
4-Methylphenol (3-Methylphenol)	ND	6.24	40.0	"							
Naphthalene	ND	7.25	20.0	"							
2-Nitroaniline	ND	3.91	50.0	"							
3-Nitroaniline	ND	6.54	100	"							
4-Nitroaniline	ND	5.49	70.0	"							
Nitrobenzene	ND	8.04	20.0	"							
2-Nitrophenol	ND	7.56	20.0	"							
4-Nitrophenol	ND	2.85	70.0	"							
N-Nitrosodimethylamine	ND	8.02	20.0	"							
N-Nitrosodiphenylamine	ND	8.02	35.0	"							
N-Nitrosodi-n-propylamine	ND	7.90	30.0	"							
Pentachlorophenol	ND	6.02	40.0	"							
Phenanthrene	ND	1.95	20.0	"							
Phenol	ND	8.81	30.0	"							
Pyrene	ND	2.88	20.0	"							
Pyridine	ND	8.85	100	"							
1,2,4-Trichlorobenzene	ND	7.08	20.0	"							
2,4,5-Trichlorophenol	ND	7.66	30.0	"							
2,4,6-Trichlorophenol	ND	5.55	30.0	"							
Surrogate: 2-Fluorophenol	*536*			*"*	*568*		*94*	*25-121*			
Surrogate: Phenol-d6	*515*			*"*	*568*		*91*	*24-113*			
Surrogate: Nitrobenzene-d5	*483*			*"*	*568*		*85*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*537*			*"*	*568*		*94*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*292*			*"*	*568*		*51*	*19-122*			
Surrogate: Terphenyl-dl4	*483*			*"*	*568*		*85*	*18-137*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
LCS (4011714-BS1)					Prepared: 01/17/14 Analyzed: 01/21/14						
Acenaphthene	580	5.12	20.0	ug/kg	568		102	50-135			
4-Chloro-3-methylphenol	564	8.34	20.0	"	568		99	34-142			
2-Chlorophenol	590	6.48	20.0	"	568		104	38-125			
Di-n-butyl phthalate	593	3.87	40.0	"	568		104	44-152			
1,4-Dichlorobenzene	493	8.55	20.0	"	568		87	48-125			
2,4-Dinitrotoluene	553	4.08	20.0	"	568		97	41-144			
4-Nitrophenol	530	2.85	70.0	"	568		93	10-155			
N-Nitrosodi-n-propylamine	679	7.90	30.0	"	568		120	28-156			
Pentachlorophenol	190	6.02	40.0	"	568		33	21-133			
Phenol	539	8.81	30.0	"	568		95	35-120			
Pyrene	508	2.88	20.0	"	568		89	40-152			
1,2,4-Trichlorobenzene	558	7.08	20.0	"	568		98	47-125			
Surrogate: 2-Fluorophenol	*503*			*"*	*568*		*89*	*25-121*			
Surrogate: Phenol-d6	*474*			*"*	*568*		*83*	*24-113*			
Surrogate: Nitrobenzene-d5	*479*			*"*	*568*		*84*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*503*			*"*	*568*		*88*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*408*			*"*	*568*		*72*	*19-122*			
Surrogate: Terphenyl-dl4	*460*			*"*	*568*		*81*	*18-137*			
LCS Dup (4011714-BSD1)					Prepared: 01/17/14 Analyzed: 01/21/14						
Acenaphthene	571	5.12	20.0	ug/kg	568		101	50-135	1	30	
4-Chloro-3-methylphenol	506	8.34	20.0	"	568		89	34-142	11	30	
2-Chlorophenol	565	6.48	20.0	"	568		99	38-125	4	30	
Di-n-butyl phthalate	581	3.87	40.0	"	568		102	44-152	2	30	
1,4-Dichlorobenzene	489	8.55	20.0	"	568		86	48-125	0.9	30	
2,4-Dinitrotoluene	532	4.08	20.0	"	568		94	41-144	4	30	
4-Nitrophenol	464	2.85	70.0	"	568		82	10-155	13	30	
N-Nitrosodi-n-propylamine	662	7.90	30.0	"	568		117	28-156	3	30	
Pentachlorophenol	217	6.02	40.0	"	568		38	21-133	13	30	
Phenol	527	8.81	30.0	"	568		93	35-120	2	30	
Pyrene	495	2.88	20.0	"	568		87	40-152	3	30	
1,2,4-Trichlorobenzene	551	7.08	20.0	"	568		97	47-125	1	30	
Surrogate: 2-Fluorophenol	*492*			*"*	*568*		*87*	*25-121*			
Surrogate: Phenol-d6	*466*			*"*	*568*		*82*	*24-113*			
Surrogate: Nitrobenzene-d5	*473*			*"*	*568*		*83*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*504*			*"*	*568*		*89*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*365*			*"*	*568*		*64*	*19-122*			
Surrogate: Terphenyl-dl4	*450*			*"*	*568*		*79*	*18-137*			

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
Duplicate (4011714-DUP1)			**Source: 14A0455-01**		Prepared: 01/17/14 Analyzed: 01/21/14						
Benzoic acid	ND	50.0	100	ug/kg		ND				30	
Acenaphthene	ND	5.12	20.0	"		ND				30	
Acenaphthylene	ND	5.37	20.0	"		ND				30	
Anthracene	ND	2.82	20.0	"		ND				30	
Benzidine	ND	150	150	"		ND				30	
Benzo (a) anthracene	ND	3.09	20.0	"		ND				30	
Benzo (b) fluoranthene	ND	3.09	20.0	"		ND				30	
Benzo (k) fluoranthene	ND	3.68	20.0	"		ND				30	
Benzo (g,h,i) perylene	ND	4.63	40.0	"		ND				30	
Benzo (a) pyrene	ND	3.07	20.0	"		ND				30	
Benzyl alcohol	ND	1.44	75.0	"		ND				30	
Bis(2-chloroethoxy)methane	ND	7.26	20.0	"		ND				30	
Bis(2-chloroethyl)ether	ND	7.96	25.0	"		ND				30	
Bis(2-chloroisopropyl)ether	ND	8.81	25.0	"		ND				30	
Bis(2-ethylhexyl)phthalate	15.3	5.72	45.0	"		9.49			47	30	QR-04, J
4-Bromophenyl phenyl ether	ND	3.71	20.0	"		ND				30	
Butyl benzyl phthalate	14.5	4.11	40.0	"		5.80			86	30	QR-04, J
Carbazole	ND	4.94	60.0	"		ND				30	
4-Chloroaniline	ND	4.42	100	"		ND				30	
4-Chloro-3-methylphenol	ND	8.34	20.0	"		ND				30	
2-Chloronaphthalene	ND	6.11	20.0	"		ND				30	
2-Chlorophenol	ND	6.48	20.0	"		ND				30	
4-Chlorophenyl phenyl ether	ND	4.90	20.0	"		ND				30	
Chrysene	ND	2.87	20.0	"		ND				30	
Dibenz (a,h) anthracene	ND	5.00	40.0	"		ND				30	
Dibenzofuran	ND	5.42	20.0	"		ND				30	
Di-n-butyl phthalate	11.5	3.87	40.0	"		17.4			41	30	QR-04, J
1,2-Dichlorobenzene	ND	9.07	20.0	"		ND				30	
1,3-Dichlorobenzene	ND	8.51	20.0	"		ND				30	
1,4-Dichlorobenzene	ND	8.55	20.0	"		ND				30	
3,3´-Dichlorobenzidine	ND	5.26	150	"		ND				30	
2,4-Dichlorophenol	ND	5.32	20.0	"		ND				30	
Diethyl phthalate	ND	1.61	20.0	"		ND				30	
2,4-Dimethylphenol	ND	2.40	80.0	"		ND				30	
Dimethyl phthalate	39.8	3.36	20.0	"		42.3			6	30	
4,6-Dinitro-2-methylphenol	ND	5.50	50.0	"		ND				30	
2,4-Dinitrophenol	ND	10.9	100	"		ND				30	
2,4-Dinitrotoluene	ND	4.08	20.0	"		ND				30	

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Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
Duplicate (4011714-DUP1)			**Source: 14A0455-01**		Prepared: 01/17/14 Analyzed: 01/21/14						
2,6-Dinitrotoluene	ND	6.02	20.0	ug/kg		ND				30	
Di-n-octyl phthalate	ND	4.61	40.0	"		ND				30	
Fluoranthene	ND	3.43	20.0	"		ND				30	
Fluorene	ND	4.50	20.0	"		ND				30	
Hexachlorobenzene	ND	3.10	20.0	"		ND				30	
Hexachlorobutadiene	ND	7.09	20.0	"		ND				30	
Hexachlorocyclopentadiene	ND	6.98	50.0	"		ND				30	
Hexachloroethane	ND	8.88	20.0	"		ND				30	
Indeno (1,2,3-cd) pyrene	ND	4.33	30.0	"		ND				30	
Isophorone	ND	7.56	20.0	"		ND				30	
2-Methylnaphthalene	ND	7.62	20.0	"		ND				30	
2-Methylphenol	ND	6.56	20.0	"		ND				30	
4-Methylphenol (3-Methylphenol)	ND	6.24	40.0	"		ND				30	
Naphthalene	ND	7.25	20.0	"		ND				30	
2-Nitroaniline	ND	3.91	50.0	"		ND				30	
3-Nitroaniline	ND	6.54	100	"		ND				30	
4-Nitroaniline	ND	5.49	70.0	"		ND				30	
Nitrobenzene	ND	8.04	20.0	"		ND				30	
2-Nitrophenol	ND	7.56	20.0	"		ND				30	
4-Nitrophenol	ND	2.85	70.0	"		ND				30	
N-Nitrosodimethylamine	ND	8.02	20.0	"		ND				30	
N-Nitrosodiphenylamine	ND	8.02	35.0	"		ND				30	
N-Nitrosodi-n-propylamine	ND	7.90	30.0	"		ND				30	
Pentachlorophenol	ND	6.02	40.0	"		ND				30	
Phenanthrene	ND	1.95	20.0	"		ND				30	
Phenol	ND	8.81	30.0	"		ND				30	
Pyrene	ND	2.88	20.0	"		ND				30	
Pyridine	ND	8.85	100	"		ND				30	
1,2,4-Trichlorobenzene	ND	7.08	20.0	"		ND				30	
2,4,5-Trichlorophenol	ND	7.66	30.0	"		ND				30	
2,4,6-Trichlorophenol	ND	5.55	30.0	"		ND				30	
Surrogate: 2-Fluorophenol	*469*			*"*	*568*		*83*	*25-121*			
Surrogate: Phenol-d6	*459*			*"*	*568*		*81*	*24-113*			
Surrogate: Nitrobenzene-d5	*436*			*"*	*568*		*77*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*475*			*"*	*568*		*84*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*381*			*"*	*568*		*67*	*19-122*			
Surrogate: Terphenyl-dl4	*397*			*"*	*568*		*70*	*18-137*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: Vulcan Materials Co. Foothill
Project Name: NASSCO Cover Material

EMA Log #: 14A0455

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4011714											
Matrix Spike (4011714-MS1)			**Source: 14A0455-01**		Prepared: 01/17/14	Analyzed: 01/21/14					
Acenaphthene	475	5.12	20.0	ug/kg	568	ND	84	46-140			
4-Chloro-3-methylphenol	438	8.34	20.0	"	568	ND	77	42-139			
2-Chlorophenol	469	6.48	20.0	"	568	ND	83	30-135			
Di-n-butyl phthalate	507	3.87	40.0	"	568	17.4	86	24-152			
1,4-Dichlorobenzene	396	8.55	20.0	"	568	ND	70	36-137			
2,4-Dinitrotoluene	426	4.08	20.0	"	568	ND	75	28-145			
4-Nitrophenol	310	2.85	70.0	"	568	ND	55	23-150			
N-Nitrosodi-n-propylamine	534	7.90	30.0	"	568	ND	94	31-161			
Pentachlorophenol	189	6.02	40.0	"	568	ND	33	3-159			
Phenol	417	8.81	30.0	"	568	ND	73	31-138			
Pyrene	413	2.88	20.0	"	568	ND	73	30-152			
1,2,4-Trichlorobenzene	445	7.08	20.0	"	568	ND	78	39-134			
Surrogate: 2-Fluorophenol	*395*			*"*	*568*		*69*	*25-121*			
Surrogate: Phenol-d6	*369*			*"*	*568*		*65*	*24-113*			
Surrogate: Nitrobenzene-d5	*379*			*"*	*568*		*67*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*410*			*"*	*568*		*72*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*340*			*"*	*568*		*60*	*19-122*			
Surrogate: Terphenyl-dl4	*344*			*"*	*568*		*61*	*18-137*			
Matrix Spike Dup (4011714-MSD1)			**Source: 14A0455-01**		Prepared: 01/17/14	Analyzed: 01/21/14					
Acenaphthene	514	5.12	20.0	ug/kg	568	ND	91	46-140	8	30	
4-Chloro-3-methylphenol	486	8.34	20.0	"	568	ND	86	42-139	10	30	
2-Chlorophenol	516	6.48	20.0	"	568	ND	91	30-135	9	30	
Di-n-butyl phthalate	541	3.87	40.0	"	568	17.4	92	24-152	6	30	
1,4-Dichlorobenzene	425	8.55	20.0	"	568	ND	75	36-137	7	30	
2,4-Dinitrotoluene	470	4.08	20.0	"	568	ND	83	28-145	10	30	
4-Nitrophenol	389	2.85	70.0	"	568	ND	68	23-150	23	30	
N-Nitrosodi-n-propylamine	588	7.90	30.0	"	568	ND	103	31-161	10	30	
Pentachlorophenol	235	6.02	40.0	"	568	ND	41	3-159	21	30	
Phenol	480	8.81	30.0	"	568	ND	84	31-138	14	30	
Pyrene	454	2.88	20.0	"	568	ND	80	30-152	9	30	
1,2,4-Trichlorobenzene	481	7.08	20.0	"	568	ND	85	39-134	8	30	
Surrogate: 2-Fluorophenol	*433*			*"*	*568*		*76*	*25-121*			
Surrogate: Phenol-d6	*418*			*"*	*568*		*74*	*24-113*			
Surrogate: Nitrobenzene-d5	*419*			*"*	*568*		*74*	*23-120*			
Surrogate: 2-Fluorobiphenyl	*442*			*"*	*568*		*78*	*30-115*			
Surrogate: 2,4,6-Tribromophenol	*387*			*"*	*568*		*68*	*19-122*			
Surrogate: Terphenyl-dl4	*384*			*"*	*568*		*68*	*18-137*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QB-02	Analyte detected in associated method blank, however all samples in batch are non-detect for this analyte.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

14A0455

Page___ of ___

CHAIN-OF-CUSTODY RECORD

– EnviroMatrix Analytical, Inc. ——

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #:

Client: Vulcan Materials

Attn: Jeff Pollard

Samplers(s): Marco Estudillo

Address: 10051 Bilc Mtn Rd

Phone: 626-926-5789 Fax:

Email: pollardj@vmcmail.com

Billing Address: Same

Project ID:

Project #: PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	X See Attached				
1	Nascco Cover Material	1/17/14	11:10	S	1/6																		X					
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr ☒ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax ☒ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** ☒ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: ☒ Yes No N/A

Containers Properly Preseved: ☒ Yes No N/A

Custody Seals Intact: Yes No ☒ N/A

Temp @ Receipt: 2.0°C No Ice

COC/Labels Agree: ☒ Yes No N/A

Sampled By: ☒ Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature [signature]	1/17/14 1115	Signature [signature]
Print Marco Estudillo		Print JERICHO VEGILS
Company: VMC		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments: Also Report Benzoic Acid

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

APPENDIX E
SUMMARY OF MANUAL WATER QUALITY RESULTS

Table E-1
Baseline Water Quality Monitoring Results

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Presence of Surface Pollution	Discoloration or Turbidity
9/27/2013	11:47:32	Reference	PRE-BG-130927	32.69161	-117.15031	7.1	8.1	2.4	No	No	No
9/27/2013	12:07:39	Shipyard Site	PRE-BL1-130927	32.68947	-117.14301	6.4	8.0	1.5	No	No	No
9/27/2013	12:13:45	Shipyard Site	PRE-BL2-130927	32.68840	-117.14374	6.6	8.1	1.5	No	No	No
9/27/2013	12:32:24	Shipyard Site	PRE-BL3-130927	32.68904	-117.14241	6.5	8.0	1.5	No	No	No
9/27/2013	12:37:11	Shipyard Site	PRE-BL4-130927	32.68950	-117.14132	6.7	8.1	1.7	No	No	No
9/27/2013	12:42:15	Shipyard Site	PRE-BL5-130927	32.68968	-117.14043	6.7	8.1	1.5	No	No	No
9/27/2013	12:53:44	Shipyard Site	PRE-BL6-130927	32.68961	-117.13924	6.9	8.1	1.0	No	No	No
9/27/2013	13:04:45	Shipyard Site	PRE-BL7-130927	32.68816	-117.14041	6.9	8.1	1.9	No	No	No
9/27/2013	12:58:21	Shipyard Site	PRE-BL8-130927	32.68848	-117.13888	6.9	8.1	1.1	No	No	No
9/27/2013	13:15:13	Shipyard Site	PRE-BL9-130927	32.68754	-117.14115	6.9	8.1	2.6	No	No	No
9/27/2013	13:40:15	Shipyard Site	PRE-BL10-130927	32.68742	-117.13991	7.2	8.1	1.8	No	No	No

Notes:
DO = dissolved oxygen
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units
1 California State Plane, Zone 6, North American Datum 1983 (NAD83)

Table E-2
Water Quality Monitoring Results During Dredging - September 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Presence of Surface Pollution	Discoloration or Turbidity
9/30/2013	12:36:34	Reference	D-BG-130930	32.69167	-117.15029	7.0	7.9	1.1	No	No	No
9/30/2013	13:06:56	Early Warning	D-EWS-130930	32.68655	-117.13959	7.1	8.0	1.4	No	No	No
9/30/2013	13:21:45	Early Warning	D-EWN-130930	32.68833	-117.13960	6.7	7.9	1.0	No	No	No
9/30/2013	13:29:03	Compliance	D-CNN-130930	32.68911	-117.13921	6.6	7.9	0.6	No	No	No
9/30/2013	13:48:56	Compliance	D-CON-130930	32.68884	-117.14059	7.2	8.0	1.7[2]	No	No	No
9/30/2013	14:14:50	Reference	D-BG-130930	32.69161	-117.15027	7.1	8.0	1.1[3]	No	No	No
9/30/2013	14:30:50	Compliance	D-CON-130930	32.68883	-117.14065	7.2	8.0	0.9[3]	No	No	No
9/30/2013	14:42:29	Compliance	D-COS-130930	32.68769	-117.14112	7.5	8.0	1.5[2]	No	No	No
9/30/2013	14:50:48	Compliance	D-COS-130930	32.68766	-117.14120	7.4	8.0	1.2[3]	No	No	No
9/30/2013	15:04:26	Compliance	D-CNS-130930	32.68592	-117.14018	7.4	8.0	1.3	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 California State Plane, Zone 6, North American Datum 1983 (NAD83)

2 Compliance station potentially exceeds receiving water limitation compliance criteria. Upon further investigation, potential exceedances were not confirmed.

3 Measurements were re-taken at the reference station and compliance stations to confirm the exceedance. Turbidity concentrations were within 20 percent of the reference; therefore, compliance criteria were met.

Table E-3
Water Quality Monitoring Results During Dredging - October 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Presence of Surface Pollution	Discoloration or Turbidity
10/1/2013	12:51:58	Reference	D-BG-131001	32.69169	-117.15039	7.0	8.0	1.7	No	No	No
10/1/2013	13:17:52	Early Warning	D-EWS-131001	32.68691	-117.14014	7.1	8.0	1.6	No	No	No
10/1/2013	13:30:36	Early Warning	D-EWN-1001	32.68851	-117.13930	6.7	8.0	0.8	No	No	No
10/1/2013	13:39:06	Compliance	D-CNN-131001	32.68904	-117.13918	6.7	8.0	0.7	No	No	No
10/1/2013	13:55:42	Compliance	D-CON-131001	32.68914	-117.14016	7.0	8.0	1.7	No	No	No
10/1/2013	14:04:53	Compliance	D-COS-131001	32.68786	-117.14087	7.1	8.0	1.6	No	No	No
10/1/2013	14:34:48	Compliance	D-CNS-131001	32.68595	-117.14001	7.2	8.0	2.6[2]	No	No	No
10/1/2013	14:54:39	Reference	D-BG-131001	32.69180	-117.15039	7.0	8.0	2.8[3]	No	No	No
10/1/2013	15:06:42	Compliance	D-CNS-131001	32.68596	-117.13991	7.3	8.0	2.8[3]	No	No	No
10/15/2013	15:00:28	Reference	D-BG-131015	32.69156	-117.15026	6.9	8.1	1.9	No	No	No
10/15/2013	17:25:31	Early Warning	D-EWS-131015	32.68692	-117.14028	6.9	8.0	1.3	No	No	No
10/15/2013	17:31:03	Early Warning	D-EWN-131015	32.68849	-117.13926	7.3	8.1	1.4	No	No	No
10/15/2013	17:35:53	Compliance	D-CNN-131015	32.68957	-117.13942	7.4	8.1	1.6	No	No	No
10/15/2013	17:42:26	Compliance	D-CON-131015	32.68905	-117.14065	7.1	8.1	1.7	No	No	No
10/15/2013	17:52:25	Compliance	D-CNS-131015	32.68616	-117.13916	7.1	8.1	1.9	No	No	No
10/15/2013	17:59:48	Compliance	D-COS-131015	32.68600	-117.13963	7.1	8.1	1.9	No	No	No
10/17/2013	13:16:17	Reference	D-BG-131017	32.69153	-117.15047	7.0	7.9	1.9	No	No	No
10/17/2013	13:32:26	Early Warning	D-EWS-131017	32.68678	-117.13983	6.7	7.9	1.1	No	No	No
10/17/2013	13:39:03	Early Warning	D-EWN-131017	32.68867	-117.13938	6.8	7.9	1.7	No	No	No
10/17/2013	13:43:08	Compliance	D-CNN-131017	32.68938	-117.13917	6.7	7.9	1.7	No	No	No
10/17/2013	13:47:53	Compliance	D-CON-131017	32.68830	-117.14065	6.6	7.9	2.0	No	No	No
10/17/2013	13:55:29	Compliance	D-CNS-131017	32.68615	-117.13910	7.0	7.9	1.9	No	No	No
10/17/2013	14:03:35	Compliance	D-COS-131017	32.68600	-117.14000	7.0	7.9	1.7	No	No	No
10/24/2013	13:58:17	Reference	D-BG-131024	32.69167	-117.15015	6.6	7.9	1.7	No	No	No
10/24/2013	14:19:43	Early Warning	D-EWS-131024	32.68655	-117.13952	6.4	7.9	1.9	No	No	No
10/24/2013	14:26:08	Early Warning	D-EWN-131024	32.68878	-117.13927	6.4	7.9	1.2	No	No	No
10/24/2013	14:29:13	Compliance	D-CNN-131024	32.68950	-117.13918	6.3	7.9	1.9	No	No	No
10/24/2013	14:34:02	Compliance	D-CON-131024	32.68795	-117.14072	6.3	7.9	1.1	No	No	No
10/24/2013	14:37:51	Compliance	D-CNS-131024	32.68593	-117.13892	6.5	7.9	1.4	No	No	No
10/24/2013	14:45:18	Compliance	D-COS-131024	32.68605	-117.14017	6.5	7.9	1.5	No	No	No

Table E-3

Water Quality Monitoring Results During Dredging - October 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						(mg/L)	pH	(NTU)	Odor	Surface Pollution	Turbidity
10/31/2013	12:40:12	Reference	D-BG-131031	32.69172	-117.15057	7.1	7.9	2.9	No	No	No
10/31/2013	13:06:55	Early Warning	D-EWN-131031	32.68978	-117.13920	6.8	7.9	1.1	No	No	No
10/31/2013	13:17:31	Early Warning	D-EWS-131031	32.68740	-117.13937	6.6	7.9	2.0	No	No	No
10/31/2013	13:22:12	Compliance	D-CNN-131031	32.68964	-117.14029	6.7	7.9	1.9	No	No	No
10/31/2013	13:26:12	Compliance	D-CON-131031	32.68779	-117.14066	6.7	7.9	1.9	No	No	No
10/31/2013	13:30:36	Compliance	D-CNS-131031	32.68643	-117.13951	6.7	8.0	1.9	No	No	No
10/31/2013	13:39:40	Compliance	D-COS-131031	32.68663	-117.14044	7.0	8.0	1.8	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU).

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude and longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Compliance station potentially exceeds receiving water limitation compliance criteria. Upon further investigation, potential exceedances were not confirmed.

3 Measurements were re-taken at the reference station and compliance stations to confirm the exceedance. Turbidity concentrations were within 20 percent of the reference; therefore, compliance criteria were met.

Table E-4
Water Quality Monitoring Results During Dredging - November 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
11/5/2013	13:14:16	Reference	D-BG-131105	32.69167	-117.15066	7.1	8.0	1.3	No	No	No
11/5/2013	13:36:51	Early Warning	D-EWS-131105	32.68739	-117.13921	6.8	8.0	1.4	No	No	No
11/5/2013	13:44:44	Early Warning	D-EWN-131105	32.68807	-117.13970	6.8	8.0	1.3	No	No	No
11/5/2013	13:50:10	Compliance	D-CNN-131105	32.68953	-117.14055	6.7	8.0	1.4	No	No	No
11/5/2013	13:56:37	Compliance	D-CON-131105	32.68755	-117.14017	6.8	8.0	1.3	No	No	No
11/5/2013	14:09:03	Compliance	D-COS-131105	32.68705	-117.13996	6.8	8.0	1.3	No	No	No
11/5/2013	14:16:57	Compliance	D-CNS-131105	32.68637	-117.13931	6.9	8.0	1.4	No	No	No
11/12/2013	12:58:09	Reference	D-BG-131112	32.69136	-117.15026	7.4	8.0	1.7	No	No	No
11/12/2013	13:23:34	Early Warning	D-EWN-131112	32.68805	-117.13966	7.2	8.0	1.6	No	No	No
11/12/2013	13:33:24	Early Warning	D-EWS-131112	32.68714	-117.13969	7.5	8.0	1.7	No	No	No
11/12/2013	13:44:11	Compliance	D-CNN-131112	32.68936	-117.14075	7.3	8.0	1.6	No	No	No
11/12/2013	13:51:19	Compliance	D-CON-131112	32.68849	-117.14093	7.2	8.0	0.9	No	No	No
11/12/2013	14:01:27	Compliance	D-COS-131112	32.68755	-117.14056	7.3	8.0	1.1	No	No	No
11/12/2013	14:07:02	Compliance	D-CNS-131112	32.68664	-117.13990	7.3	8.0	1.5	No	No	No
11/20/2013	15:08:31	Reference	D-BG-131120	32.69157	-117.15053	6.6	7.9	4.1	No	No	No
11/20/2013	15:30:41	Early Warning	D-EWN-131120	32.68917	-117.14334	7.2	8.0	3.0	No	No	No
11/20/2013	15:38:11	Early Warning	D-EWS-131120	32.68882	-117.14205	6.0	8.0	2.6	No	No	No
11/20/2013	15:41:06	Compliance	D-CNS-131120	32.68884	-117.14106	6.2	8.0	1.8	No	No	No
11/20/2013	15:44:44	Compliance	D-COS-131120	32.68816	-117.14169	8.8	8.0	2.5	No	No	No
11/20/2013	16:17:24	Compliance	D-CNN-131120	32.68854	-117.14369	8.9	8.0	2.9	No	No	No
11/20/2013	16:22:29	Compliance	D-CON-131120	32.68821	-117.14330	6.2	8.0	2.9	No	No	No
11/26/2013	12:00:52	Reference	D-BG-131126	32.69133	-117.15017	6.6	8.0	2.1	No	No	No
11/26/2013	12:33:57	Early Warning	D-EWN-131126	32.68919	-117.14313	9.2	8.0	1.5	No	No	No
11/26/2013	13:09:29	Early Warning	D-EWS-131126	32.68868	-117.14182	6.0	8.0	5.0[2]	No	No	No
11/26/2013	13:22:10	Reference	D-BG-131126	32.69130	-117.15028	7.0[4]	8.0	1.9[3]	No	No	No
11/26/2013	13:39:25	Early Warning	D-EWS-131126	32.68874	-117.14190	7.2	8.0	5.0[3]	No	No	No
11/26/2013	13:46:34	Compliance	D-CNS-131126	32.68941	-117.14022	8.3	8.0	1.8	No	No	No
11/26/2013	13:53:37	Compliance	D-COS-131126	32.68826	-117.14156	6.5	8.0	1.2	No	No	No
11/26/2013	13:57:22	Compliance	D-CON-131126	32.68829	-117.14229	8.0	8.0	1.5	No	No	No

Table E-4

Water Quality Monitoring Results During Dredging - November 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
11/26/2013	14:00:26	Compliance	D-CNN-131126	32.68852	-117.14286	8.5	8.0	1.4	No	No	No
11/26/2013	14:37:06	Early Warning	D-EWS-131126	32.68886	-117.14199	6.0[4]	8.0	2.5[3]	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU).

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude and longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Early warning station results were potentially greater than the receiving water limitation. These results were used as an early indicator of a potential water quality issue. Dredging best management practices (BMPs) were evaluated and were found to be working properly. Results at the compliance stations met criteria; therefore, compliance criteria were not exceeded.

3 Measurements were re-taken at the reference station and early warning station to confirm the initial results. Turbidity concentrations were greater than 20 percent of the second reference measurement; therefore, the initial results were confirmed. Dredging BMPs were evaluated and found to be working properly and results at the compliance stations met criteria; therefore, compliance criteria were not exceeded.

4 Measurements were re-taken at the reference station and early warning station to confirm the initial results. DO concentrations were depressed by more than 10 percent of the second reference measurement. Dredging BMPs were evaluated and found to be working properly and results at the compliance stations met criteria; therefore, compliance criteria were not exceeded.

Table E-5
Water Quality Monitoring Results During Dredging - December 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
12/10/2013	12:04:54	Reference	D-BG-131210	32.69130	-117.15044	7.4	8.4	0.6	No	No	No
12/10/2013	12:35:43	Early Warning	D-EWN-131210	32.68844	-117.14237	7.4	8.3	0.9[2]	No	No	No
12/10/2013	12:42:56	Early Warning	D-EWS-131210	32.68877	-117.14114	7.4	8.3	2.0[2]	No	No	No
12/10/2013	12:55:22	Compliance	D-CNS-131210	32.68902	-117.13932	7.4	8.3	0.2	No	No	No
12/10/2013	12:59:53	Compliance	D-COS-131210	32.68749	-117.13982	7.4	8.3	0.4	No	No	No
12/10/2013	13:05:34	Compliance	D-CON-131210	32.68765	-117.14167	7.4	8.4	0.7	No	No	No
12/10/2013	13:15:42	Compliance	D-CNN-131210	32.68804	-117.14367	7.5	8.3	0.1	No	No	No
12/19/2013	13:13:09	Reference	D-BG-131219	32.69163	-117.15065	7.8	8.0	1.0	No	No	No
12/19/2013	13:48:29	Early Warning	D-EWS-131219	32.68882	-117.13875	7.8	8.1	0.1	No	No	No
12/19/2013	13:54:48	Early Warning	D-EWN-131219	32.68864	-117.13950	7.7	8.1	0.6	No	No	No
12/19/2013	14:00:19	Compliance	D-CNS-131219	32.68804	-117.13820	7.8	8.1	0.2	No	No	No
12/19/2013	14:06:10	Compliance	D-CNN-131219	32.68896	-117.14038	7.7	8.1	0.2	No	No	No
12/19/2013	14:12:14	Compliance	D-CON-131219	32.68795	-117.13968	7.7	8.1	1.1	No	No	No
12/19/2013	14:16:09	Compliance	D-COS-131219	32.68745	-117.13914	7.7	8.1	0.3	No	No	No
12/23/2013	14:37:56	Reference	D-BG-131223	32.69126	-117.15035	8.1	7.7	0.2	No	No	No
12/23/2013	15:06:04	Early Warning	D-EWS-131223	32.68852	-117.13850	8.0	8.0	0.1	No	No	No
12/23/2013	15:11:13	Compliance	D-CNS-131223	32.68777	-117.13777	8.0	8.0	0.1	No	No	No
12/23/2013	15:14:52	Compliance	D-COS-131223	32.68735	-117.13909	8.0	8.0	0.2	No	No	No
12/23/2013	15:17:38	Early Warning	D-EWN-131223	32.68833	-117.13972	7.8	8.0	0.0	No	No	No
12/23/2013	15:22:30	Compliance	D-CON-131223	32.68786	-117.14072	7.7	8.0	0.1	No	No	No
12/23/2013	15:27:01	Compliance	D-CNN-131223	32.68943	-117.14022	7.9	8.0	0.1	No	No	No
12/31/2013	12:35:22	Reference	D-BG-131231	32.69150	-117.15055	8.4	7.9	1.4	No	No	No
12/31/2013	12:57:35	Early Warning	D-EWN-131231	32.68888	-117.13924	8.1	8.0	0.5	No	No	No
12/31/2013	13:04:15	Early Warning	D-EWS-131231	32.68867	-117.13896	8.2	8.0	0.6	No	No	No

Table E-5
Water Quality Monitoring Results During Dredging - December 2013

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
12/31/2013	13:09:50	Compliance	D-CNS-131231	32.68804	-117.13850	8.2	8.0	0.8	No	No	No
12/31/2013	13:13:35	Compliance	D-COS-131231	32.68794	-117.13873	8.2	8.0	0.8	No	No	No
12/31/2013	13:21:19	Compliance	D-CON-131231	32.68784	-117.13991	8.2	8.0	0.3	No	No	No
12/31/2013	13:23:48	Compliance	D-CNN-131231	32.68830	-117.14046	8.0	8.0	0.6	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU).

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude and longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Early warning station results were greater than the receiving water limitation. These results were used as an early indicator of a potential water quality issue. Dredging best management practices were evaluated and found to be working properly and results at the compliance stations met criteria; therefore, compliance criteria were not exceeded.

Table E-6
Water Quality Monitoring Results During Dredging - January 2014

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
1/14/2014	13:58:17	Reference	D-BG-140114	32.69165	-117.15057	7.2	8.1	1.1	No	No	No
1/14/2014	14:19:43	Early Warning	D-EWN-140114	32.68962	-117.14042	8.6	8.1	0.2	No	No	No
1/14/2014	14:26:08	Compliance	D-CNN-140114	32.68958	-117.14133	7.5	8.1	0.8	No	No	No
1/14/2014	14:29:13	Compliance	D-CON-140114	32.68852	-117.14097	7.3	8.1	0.8	No	No	No
1/14/2014	14:34:02	Early Warning	D-EWS-140114	32.68922	-117.13918	7.3	8.1	0.6	No	No	No
1/14/2014	14:37:51	Compliance	D-CNS-140114	32.68860	-117.13850	6.9	8.1	0.8	No	No	No
1/14/2014	14:45:18	Compliance	D-COS-140114	32.68775	-117.13958	7.4	8.1	1	No	No	No
1/21/2014	12:03:16	Reference	D-BG-140121	32.69115	-117.15028	8.1	7.8	0.7	No	No	No
1/21/2014	13:10:52	Early Warning	D-EWS-140121	32.68909	-117.13916	8.0	7.9	0.9[2]	No	No	No
1/21/2014	12:38:09	Early Warning	D-EWN-140121	32.68914	-117.14044	7.8	7.9	0.5	No	No	No
1/21/2014	12:43:30	Compliance	D-CNN-140121	32.68949	-117.14137	7.7	7.9	0.2	No	No	No
1/21/2014	13:03:43	Compliance	D-CON-140121	32.68796	-117.14080	7.7	7.9	0.8	No	No	No
1/21/2014	13:21:36	Compliance	D-COS-140121	32.68736	-117.13961	7.9	7.9	0.9[2]	No	No	No
1/21/2014	13:15:45	Compliance	D-CNS-140121	32.68807	-117.13816	7.9	7.9	0.8	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU)

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude and longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Compliance station potentially exceeds receiving water limitation compliance criteria. Upon further investigation, potential exceedances were attributed to natural variability, which was increased due to very low turbidity concentrations and not dredging operations.

Table E-7
Water Quality Monitoring Results During Material Placement - February 2014

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
2/10/2014	15:15:58	Reference	P-BG-140210	32.69110	-117.15015	8.0	8.0	1.0	No	No	No
2/10/2014	15:45:42	Early Warning	P-EWN-140210	32.68756	-117.14026	8.3	8.1	0.2	No	No	No
2/10/2014	15:50:50	Compliance	P-CNN-140210	32.68915	-117.14019	8.2	8.1	0.9	No	No	No
2/10/2014	15:56:24	Compliance	P-CON-140210	32.68755	-117.14120	8.2	8.1	0.7	No	No	No
2/10/2014	16:02:49	Early Warning	P-EWS-140210	32.68682	-117.13981	8.2	8.1	1.0	No	No	No
2/10/2014	16:16:10	Compliance	P-CNS-140210	32.68638	-117.13772	7.8	8.1	5.0[2]	No	No	No
2/10/2014	16:28:51	Reference	P-BG-140210	32.69121	-117.15018	8.1	8.1	0.9	No	No	No
2/10/2014	16:45:18	Compliance	P-CNS-140210	32.68641	-117.13783	8.0	8.1	4.2[2]	No	No	No
2/10/2014	16:59:45	Compliance	P-COS-140210	32.68651	-117.14025	8.1	8.1	1.4[3]	No	No	No
2/10/2014	17:07:09	Reference	P-BG-140210	32.69126	-117.15037	8.0	8.1	1.5	No	No	No
2/10/2014	17:13:49	Compliance	P-COS-1402103	32.68668	-117.14078	8.0	8.1	1.4	No	No	No
2/11/2014	12:29:43	Reference	P-BG-140211	32.69161	-117.15054	8.0	8.0	1.5	No	No	No
2/11/2014	12:46:53	Compliance	P-CON-140211	32.68700	-117.14193	8.0	8.0	0.4	No	No	No
2/11/2014	12:55:34	Compliance	P-COS-140211	32.68598	-117.14035	8.0	8.0	0.7	No	No	No
2/11/2014	13:13:55	Early Warning	P-EWN-140211	32.68734	-117.14062	7.9	8.0	1.3	No	No	No
2/11/2014	13:25:52	Compliance	P-CNN-140211	32.68892	-117.14074	7.7	8.0	2.4[3]	No	No	No
2/11/2014	13:40:42	Reference	P-BG-140211	32.69125	-117.15032	8.1	8.0	2.3	No	No	No
2/11/2014	13:55:18	Compliance	P-CNN-140211	32.68897	-117.14081	7.6	8.0	2.5	No	No	No
2/11/2014	14:01:13	Early Warning	P-EWS-140211	32.68645	-117.13947	7.8	8.0	2.8[4]	No	No	No
2/11/2014	14:05:38	Compliance	P-CNS-140211	32.68647	-117.13755	7.8	8.0	1.1	No	No	No
2/12/2014	13:17:54	Reference	P-BG-140212	32.69137	-117.15037	7.9	8.0	0.7	No	No	No
2/12/2014	13:34:17	Compliance	P-CON-140212	32.68669	-117.14164	7.8	8.1	0.8	No	No	No
2/12/2014	14:00:01	Early Warning	P-EWN-140212	32.68758	-117.14074	7.6	8.0	8.4[4]	No	No	No
2/12/2014	14:05:05	Compliance	P-CNN-140212	32.68900	-117.14095	7.6	8.0	0.5	No	No	No
2/12/2014	14:13:43	Early Warning	P-EWS-140212	32.68684	-117.13956	7.7	8.0	1.0[4]	No	No	No
2/12/2014	14:18:26	Compliance	P-CNS-140212	32.68646	-117.13772	7.7	8.0	0.8	No	No	No
2/12/2014	14:27:10	Compliance	P-COS-140212	32.68584	-117.13925	7.8	8.0	0.8	No	No	No
2/17/2014	13:43:28	Reference	P-BG-140217	32.69153	-117.15070	8.1	7.9	0.9	No	No	No
2/17/2014	14:07:05	Early Warning	P-EWN-140217	32.68759	-117.14047	7.9	7.9	0.3	No	No	No
2/17/2014	14:19:46	Compliance	P-CNN-140217	32.68956	-117.14041	7.9	7.9	1.0	No	No	No
2/17/2014	14:27:48	Compliance	P-CON-140217	32.68764	-117.14120	7.8	8.0	1.0	No	No	No

Table E-7
Water Quality Monitoring Results During Material Placement - February 2014

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
2/17/2014	14:32:35	Early Warning	P-EWS-140217	32.68682	-117.13987	7.9	8.0	0.6	No	No	No
2/17/2014	14:36:11	Compliance	P-COS-140217	32.68602	-117.13933	7.9	8.0	0.7	No	No	No
2/17/2014	14:40:24	Compliance	P-CNS-140217	32.68635	-117.13776	8.0	8.0	0.2	No	No	No
2/25/2014	11:47:58	Reference	P-BG-140225	32.69178	-117.15048	8.0	7.9	0.9	No	No	No
2/25/2014	12:11:17	Early Warning	P-EWS-140225	32.68876	-117.13881	8.0	7.9	1.0	No	No	No
2/25/2014	12:15:17	Compliance	P-CNS-140225	32.68817	-117.13842	8.0	8.0	0.5	No	No	No
2/25/2014	12:19:04	Compliance	P-COS-140225	32.68804	-117.13910	8.0	8.0	0.7	No	No	No
2/25/2014	12:23:03	Compliance	P-CON-140225	32.68852	-117.14045	7.7	7.9	0.9	No	No	No
2/25/2014	12:25:41	Compliance	P-CNN-140225	32.68966	-117.14046	7.8	7.9	0.7	No	No	No
2/25/2014	12:31:05	Early Warning	P-EWN-140225	32.68865	-117.13932	7.9	8.0	1.0	No	No	No

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU).

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude and longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Compliance station potentially exceeded receiving water limitation compliance criterion for turbidity. Measurements were re-taken at the reference station and compliance station to confirm the exceedance. The turbidity concentration was greater than 20 percent of the second reference measurement; therefore, the initial result was confirmed. Visual observations indicated a tightly defined turbidity plume well contained within the silt curtain (and no silt curtain breach) and concentrations at both

3 Compliance station potentially exceeded receiving water limitation compliance criterion for turbidity. Measurements were re-taken at the reference and compliance stations to confirm the exceedance. Turbidity concentrations were within 20 percent of the reference; therefore, compliance criteria were not exceeded.

4 Early warning station results exceeded the receiving water limitation criterion for turbidity. These results were used as an early indicator of a potential water quality issue. Results at the compliance stations met the criterion; therefore, compliance criteria were not exceeded.

Table E-8
Water Quality Monitoring Results During Material Placement - March 2014

Date	Time	Station Type	Station ID	Latitude[1]	Longitude[1]	Water Quality Measurements			Visual Observations		
						DO (mg/L)	pH	Turbidity (NTU)	Odor	Surface Pollution	Discoloration or Turbidity
3/6/2014	12:31:01	Reference	P-BG-140306	32.69135	-117.15027	7.4	8.0	1.3	No	No	No
3/6/2014	12:53:15	Early Warning	P-EWN-140306	32.68740	-117.14025	7.3	8.0	0.3	No	No	No
3/6/2014	12:59:07	Compliance	P-CNN-140306	32.68892	-117.14085	7.1	8.0	0.8	No	No	No
3/6/2014	13:03:59	Early Warning	P-EWS-140306	32.68658	-117.13970	7.4	8.0	0.7	No	No	No
3/6/2014	13:07:59	Compliance	P-CNS-140306	32.68627	-117.13790	7.2	8.0	0.2	No	No	No
3/6/2014	13:12:53	Compliance	P-CON-140306	32.68680	-117.14106	7.5	8.0	0.2	No	No	No
3/6/2014	13:17:15	Compliance	P-COS-140306	32.68552	-117.13964	7.5	8.0	0.4	No	No	No
3/11/2014	14:19:57	Reference	P-BG-140311	32.69145	-117.15023	6.9	8.4	0.4	No	No	No
3/11/2014	14:49:48	Early Warning	P-EWN-140311	32.68759	-117.13986	6.5	8.4	0.0[4]	No	No	No
3/11/2014	14:52:30	Early Warning	P-EWS-140311	32.68710	-117.13972	7.6	8.4	0.0[4]	No	No	No
3/11/2014	14:57:53	Compliance	P-CNN-140311	32.68892	-117.14060	6.7	8.4	0.0[4]	No	No	No
3/11/2014	15:07:12	Compliance	P-CON-140311	32.68782	-117.14122	7.8	8.4	0.0[4]	No	No	No
3/11/2014	15:13:07	Compliance	P-COS-140311	32.68628	-117.13980	6.8	8.4	0.0[4]	No	No	No
3/11/2014	15:16:08	Compliance	P-CNS-140311	32.68626	-117.13808	6.6	8.4	0.0[4]	No	No	No
3/17/2014	12:32:00	Reference	P-BG-140317	32.69163	-117.15029	8.5	9.1[2]	1.5	No	No	No
3/17/2014	12:56:10	Early Warning	P-EWN-140317	32.68924	-117.14058	7.9	9.1[2]	1.1	No	No	No
3/17/2014	13:03:16	Compliance	P-CNN-140317	32.68938	-117.14191	8.1	9.1[2]	1.5	No	No	No
3/17/2014	13:08:09	Compliance	P-CON-140317	32.68829	-117.14146	8.0	9.1[2]	1.7	No	No	No
3/17/2014	13:13:43	Early Warning	P-EWS-140317	32.68859	-117.13919	9.4	9.2[2]	2.5[3]	No	No	No
3/17/2014	13:17:17	Compliance	P-CNS-140317	32.68790	-117.13855	8.3	9.1[2]	0.0[4]	No	No	No
3/17/2014	13:22:39	Compliance	P-COS-140317	32.68775	-117.13960	8.1	9.1[2]	1.6	No	No	No
3/24/2014	13:41:00	Reference	P-BG-140324	32.69118	-117.15033	7.6	8.0	0.0[4]	No	No	No
3/24/2014	14:04:00	Early Warning	P-EWS-140324	32.68923	-117.14207	7.6	8.0	0.0[4]	No	No	No
3/24/2014	14:08:00	Compliance	P-CNS-140324	32.68960	-117.14147	8.6	8.0	0.0[4]	No	No	No
3/24/2014	14:12:00	Compliance	P-COS-140324	32.68852	-117.14153	8.3	8.0	0.0[4]	No	No	No
3/24/2014	14:17:00	Early Warning	P-EWN-140324	32.68900	-117.14277	7.6	8.0	0.0[4]	No	No	No
3/24/2014	14:22:00	Compliance	P-CNN-140324	32.68845	-117.14368	8.0	8.0	0.0[4]	No	No	No
3/24/2014	14:25:00	Compliance	P-CON-140324	32.68777	-117.14282	7.9	8.0	0.0[4]	No	No	No

Table E-8

Water Quality Monitoring Results During Material Placement - March 2014

Notes:

Receiving water limitation compliance criteria: DO shall not be depressed more than 10 percent from the reference (BG); pH shall not be changed more than 0.2 unit from reference (BG); pH shall not be depressed below 7.0 nor raised above 9.0; turbidity must not exceed 20 percent of reference (BG; if natural turbidity from 0 to 50 NTU).

DO = dissolved oxygen

mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

1 Latitude/Longitude coordinates in decimal degrees, North American Datum 1983 (NAD83)

2 Early warning, compliance, and reference stations all exceeded receiving water limitation compliance criteria for pH. Concentrations were consistent with the reference station and therefore not attributed to sand placement operations.

3 Early warning station results exceeded receiving water limitation compliance criteria for turbidity. These results were used as an early indicator of a potential water quality issue. The compliance stations met criteria, therefore, compliance criteria were not exceeded.

4 The resolution for turbidity values using the Horiba U52 is 0.1 NTU

APPENDIX F
DISCHARGE MONITORING LABORATORY RESULTS

INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Way San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VAL/D analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Environmental Restoration Fund –
South Trust
c/o NASSCO MS 22A
2798 Harbor Drive
San Diego, CA 92113

RETURN REPORT
by
15-NOV-2013

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 152127[1]

Site Address: Harbor Drive, San Diego Permitted IW Flow: 288000

Sample Point: Final 21,000 gallon tank of treatment system, just before water meter

Laboratory Name: Calscience Environmental Laboratories, Inc. *COPY OF ANALYSIS REQUIRED*

Sample#: 0152127-01 Date: 10/26/2013 Time(s): 10:02

Grab

Please note: Grab samples were taken from the tank prior to initial discharge to Conn 100. No discharge had occurred at this time. Discharge was initiated following receipt of analytical results on 10/29/2013 and composite sampling of discharging water will soon occur and will be reported in November's Industry Self-Monitoring Form.

Sampler: C. Douglas Description: clear water

Parameter	Units	Daily Max	Result
Chemical Oxygen Demand	mg/L		330
Solids, Total Suspended	mg/L		10
Copper, Total	mg/L		0.0251
Lead, Total	mg/L		0.0141
Nickel, Total	mg/L		0.0158
Zinc, Total	mg/L		0.0418
Arsenic, Total	mg/L	5	0.0150
Mercury, Total	mg/L	0.2	<0.0002 ND

Sample#: 0152127-02 Date: 10/31/13 Time(s): 16:30

Evaluation only {no sample)

Sampler: A. Meeks Description: clear water

Beginning Meter Read and Date	gals		10,900	10/01/2013
Ending Meter Read and Date	gals		96,500	10/31/2013
Average Flow/calendar day thru Connection	gpd		2,761	
Imported Flow During Period	gals		85,600	
Maximum Flow/calendar day thru Connection	gpd		50,500	
Maximum gals/min thru meter	gpm	250	250	
Minimum gals/min thru meter when discharging	gpm	50	110	

1 Please see sample number D-ID-131026 in the attached laboratory report.

INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Way San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VAL/D analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Environmental Restoration Fund –
South Trust
c/o NASSCO MS 22A
2798 Harbor Drive
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-NOV-2013 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 152127[1]

Site Address: Harbor Drive, San Diego Permitted IW Flow: 288000

Sample Point: Final 21,000 gallon tank of treatment system, just before water meter

Laboratory Name: Calscience Environmental Laboratories, Inc. *COPY OF ANALYSIS REQUIRED*

Sample#: 0152127-03 Date: 10/26/2013 Time(s): 1000

Pesticide and PCB grab

Sampler: C. Douglas Description: clear water

Parameter	*Units*	*Daily Max*	*Result*
PCBs, Total	*µg/L*	*3*	*<1.0 µg/L*

1 Please see sample number D-ID-131026 in the attached laboratory report.

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-10-2012 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-10-2012

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: San Diego Bay Environmental Restoration Fund South

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Mike Palmer
C/O de maximis, Inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 10/29/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 13-10-2012

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-10-2012 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 10/26/13. They were assigned to Work Order 13-10-2012.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	San Diego Bay Environmental Restoration Fund South C/O de maximis, Inc., 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	13-10-2012
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	10/26/13 13:02
		Number of Containers:	5
Attn:	Mike Palmer		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-ID-131026	13-10-2012-1	10/26/13 10:02	1	Aqueous
D-ID-131026	13-10-2012-2	10/26/13 10:00	1	Aqueous
D-ID-131026	13-10-2012-3	10/26/13 10:04	1	Aqueous
D-ID-131026	13-10-2012-4	10/26/13 10:03	1	Aqueous
D-ID-131026	13-10-2012-5	10/26/13 10:05	1	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	SM 2540 D
	Units:	mg/L
Project: SD Shipyard Wastewater Discharge		Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-3-A**	**10/26/13 10:04**	**Aqueous**	**N/A**	**10/26/13**	**10/26/13 15:20**	**D1026TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	10	1.0	1	

Method Blank	**099-09-010-6452**	**N/A**	**Aqueous**	**N/A**	**10/26/13**	**10/26/13 15:20**	**D1026TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-4-A**	**10/26/13 10:03**	**Aqueous**	**BUR06**	**10/28/13**	**10/28/13 17:00**	**D1028ODB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	330	5.0	4.8	1	

Method Blank	**099-05-114-103**	**N/A**	**Aqueous**	**BUR06**	**10/28/13**	**10/28/13 17:00**	**D1028ODB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	4.8	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA 200.8
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-1-A**	**10/26/13 10:02**	**Aqueous**	**ICP/MS 03**	**10/28/13**	**10/28/13 19:08**	**131028L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	15.0	25.0	9.66	25	J
Copper	25.1	25.0	3.49	25	
Lead	14.1	25.0	2.24	25	J
Nickel	15.8	25.0	3.29	25	J
Zinc	41.8	125	12.0	25	J

Method Blank	**099-16-094-53**	**N/A**	**Aqueous**	**ICP/MS 03**	**10/28/13**	**10/28/13 17:48**	**131028L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	1.00	0.386	1	
Copper	ND	1.00	0.140	1	
Lead	ND	1.00	0.0898	1	
Nickel	ND	1.00	0.132	1	
Zinc	ND	5.00	0.479	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-1-A**	**10/26/13 10:02**	**Aqueous**	**Mercury**	**10/28/13**	**10/28/13 16:31**	**131028L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.200	0.0453	1	

Method Blank	**099-04-008-6697**	**N/A**	**Aqueous**	**Mercury**	**10/28/13**	**10/28/13 16:26**	**131028L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.200	0.0453	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-5-A**	**10/26/13 10:05**	**Aqueous**	**GC 51**	**10/28/13**	**10/28/13 19:59**	**131028L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	0.034	0.10	0.028	1	J
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	50-135	
2,4,5,6-Tetrachloro-m-Xylene	77	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-529-655**	**N/A**	**Aqueous**	**GC 51**	**10/28/13**	**10/28/13 19:16**	**131028L02**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-135	
2,4,5,6-Tetrachloro-m-Xylene	78	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131026	**13-10-2012-2-A**	**10/26/13 10:00**	**Aqueous**	**GC 31**	**10/28/13**	**10/28/13 18:37**	**131028L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	50-135	
2,4,5,6-Tetrachloro-m-Xylene	84	50-135	

Method Blank	**099-12-533-851**	**N/A**	**Aqueous**	**GC 31**	**10/28/13**	**10/28/13 18:18**	**131028L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	50-135	
2,4,5,6-Tetrachloro-m-Xylene	74	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge		Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-10-2032-1	**Aqueous**	**ICP/MS 03**	**10/28/13**	**10/28/13 16:44**	**131028S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	11.56	100.0	120.1	109	120.4	109	80-120	0	0-20	
Copper	ND	100.0	112.8	113	111.3	111	80-120	1	0-20	
Lead	ND	100.0	111.6	112	110.2	110	80-120	1	0-20	
Nickel	6.942	100.0	106.8	100	104.4	97	80-120	2	0-20	
Zinc	238.4	100.0	318.5	80	337.6	99	80-120	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	EPA 245.1 Total
	Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge		Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
D-ID-131026	**Aqueous**	**Mercury**	**10/28/13**	**10/28/13 16:33**	**131028S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	10.00	9.711	97	9.758	98	57-141	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge		Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-10-1882-1	**Aqueous**	**N/A**	**10/26/13 00:00**	**10/26/13 15:20**	**D1026TSSD2**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	658.0	680.0	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge		Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-ID-131026	**Aqueous**	**BUR06**	**10/28/13 00:00**	**10/28/13 17:00**	**D1028ODD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	330.2	332.2	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge		Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6452	**Aqueous**	**N/A**	**10/26/13**	**10/26/13 15:20**	**D1026TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	96.00	96	101.0	101	80-120	5	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	N/A
	Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge		Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-094-53	**Aqueous**	**ICP/MS 03**	**10/28/13**	**10/28/13 17:51**	**131028L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	100.0	96.54	97	98.11	98	80-120	2	0-20	
Copper	100.0	107.8	108	107.1	107	80-120	1	0-20	
Lead	100.0	96.60	97	98.22	98	80-120	2	0-20	
Nickel	100.0	99.41	99	98.43	98	80-120	1	0-20	
Zinc	100.0	104.5	104	103.6	104	80-120	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	EPA 245.1 Total
	Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge		Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-6697	**Aqueous**	**Mercury**	**10/28/13**	**10/28/13 16:28**	**131028L08**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	10.00	10.06	101	10.52	105	85-121	4	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

San Diego Bay Environmental Restoration Fund South		Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104		Work Order:	13-10-2012
San Diego, CA 92106-2727		Preparation:	EPA 3510C
		Method:	EPA 8081A
Project: SD Shipyard Wastewater Discharge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-529-655	**Aqueous**	**GC 51**	**10/28/13**	**10/28/13 19:30**	**131028L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.4216	84	0.3783	76	50-135	36-149	11	0-25	
Gamma-BHC	0.5000	0.4198	84	0.3738	75	50-135	36-149	12	0-25	
Beta-BHC	0.5000	0.4084	82	0.3467	69	50-135	36-149	16	0-25	
Heptachlor	0.5000	0.4199	84	0.3974	79	50-135	36-149	6	0-25	
Delta-BHC	0.5000	0.4297	86	0.4134	83	50-135	36-149	4	0-25	
Aldrin	0.5000	0.4233	85	0.4209	84	50-135	36-149	1	0-25	
Heptachlor Epoxide	0.5000	0.4398	88	0.4366	87	50-135	36-149	1	0-25	
Endosulfan I	0.5000	0.4564	91	0.4540	91	50-135	36-149	1	0-25	
Dieldrin	0.5000	0.4394	88	0.4352	87	50-135	36-149	1	0-25	
4,4'-DDE	0.5000	0.4412	88	0.4388	88	50-135	36-149	1	0-25	
Endrin	0.5000	0.3951	79	0.3143	63	50-135	36-149	23	0-25	
Endrin Aldehyde	0.5000	0.3719	74	0.3868	77	50-135	36-149	4	0-25	
4,4'-DDD	0.5000	0.4316	86	0.4444	89	50-135	36-149	3	0-25	
Endosulfan II	0.5000	0.4368	87	0.4350	87	50-135	36-149	0	0-25	
4,4'-DDT	0.5000	0.4227	85	0.3636	73	50-135	36-149	15	0-25	
Endosulfan Sulfate	0.5000	0.4149	83	0.4000	80	50-135	36-149	4	0-25	
Methoxychlor	0.5000	0.4240	85	0.3777	76	50-135	36-149	12	0-25	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

San Diego Bay Environmental Restoration Fund South	Date Received:	10/26/13
C/O de maximis, Inc., 1322 Scott Street, Suite 104	Work Order:	13-10-2012
San Diego, CA 92106-2727	Preparation:	EPA 3510C
	Method:	EPA 8082
Project: SD Shipyard Wastewater Discharge		Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-851	**Aqueous**	**GC 31**	**10/28/13**	**10/28/13 17:40**	**131028L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	1.690	84	1.762	88	50-135	4	0-25	
Aroclor-1260	2.000	1.580	79	1.684	84	50-135	6	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-10-2012

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: 13-10-2012

Date: 10/26/13

Page 1 of 1

LABORATORY CLIENT: ~~de maximis, inc~~ Anchor QEA

ADDRESS: 27201 Puerta Real, Suite 350

CITY: Mission Viejo STATE: CA ZIP: 92691

TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☒ 48 HR ☐ 72 HR ☐ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge

P.O. NO.:

PROJECT CONTACT: Adam Gale

SAMPLER(S): (PRINT) Ali Meeks

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010B/747X)	Cr(VI) [7196 or 7199 or 218.6]	ICP/MS Metals	TSS	COD		
1	D-1D-131026	10/26/13	10:02	WS	1		H NO3															X				
2	D-1D-131026	10/26/13	10:00	WS	1	X												X								
3	D-1D-131026	10/26/13	10:04	WS	1	X																	X			
4	D-1D-131026	10/26/13	10:03	WS	1																			X		
5	D-1D-131026	10/26/13	10:05	WS	1	X	H2 SO4										X									

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Alicia Meeks	CEL	10/26/13	11:00
	CEL	10/26/13	11:00
	CEL	10/26/13	13:02

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

09/01/13 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-10-2012

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Anchor QEA

DATE: 10/26/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.2 °C (CF) = 2.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 820

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 820

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**nu** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 854

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 854

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INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-DEC-2013 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 152668

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000

Sample Point: Final 21,000 gallon tank of treatment system, just before water meter.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0152668-01 Date: 11/17/2013 Time(s): 6:40, 7:10, 7:40, 8:10

24 hour composite

Sampler: K. Christensen Description: clear water

Parameter	Units	Daily Max		Result
Chemical Oxygen Demand	mg/L			260
Solids, Total Suspended	mg/L			21

Sample#: 0152668-02 Date: 11/30/2013 Time(s): 7:00

Evaluation only (no sample)

Sampler: K. Christensen Description: clear water

Beginning Meter Read and Date	gals		11/01/2013	96,500
Ending Meter Read and Date	gals		11/30/2013	485,000
Average Flow/calendar day thru Connection	gpd			12,950
Imported Flow During Period	gals			388,500
Maximum Flow/calendar day thru Connection	gpd			83,500
Maximum gals/min thru meter	gpm	250		250
Minimum gals/min thru meter when discharging	gpm	50-		50

Please note that the typical discharge period on site ranges from 1 to 4 hours, depending on the volume to be discharged. On November 17, discharge spanned approximately 2 hours; therefore, the "24 hour composite sample" described in the permit was collected over a 2-hour discharge period representative of typical site operations. No additional discharge occurred within 24 hours of the sampling event on November 17.

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-11-1371 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1371

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 11/26/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 13-11-1371

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-11-1371 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/16/13. They were assigned to Work Order 13-11-1371.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	13-11-1371
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	11/16/13 17:10
		Number of Containers:	5
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-1D-131116	13-11-1371-1	11/16/13 06:40	5	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-E**	**11/16/13 06:40**	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	21	1.0	1	

Method Blank	**099-09-010-6484**	**N/A**	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-A**	**11/16/13 06:40**	**Aqueous**	**BUR06**	**11/20/13**	**11/20/13 14:00**	**D1120ODB3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	260	5.0	4.8	1	

Method Blank	**099-05-114-105**	**N/A**	**Aqueous**	**BUR06**	**11/20/13**	**11/20/13 14:00**	**D1120ODB3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	4.8	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-B**	**11/16/13 06:40**	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:54**	**131118L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.0146	0.0100	0.00386	10	
Copper	0.0373	0.0100	0.00140	10	
Lead	0.00712	0.0100	0.000898	10	J
Nickel	0.0189	0.0100	0.00132	10	
Zinc	0.0287	0.0500	0.00479	10	J

Method Blank	**099-16-094-82**	**N/A**	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:20**	**131118L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.00100	0.000386	1	
Copper	ND	0.00100	0.000140	1	
Lead	ND	0.00100	0.0000898	1	
Nickel	ND	0.00100	0.000132	1	
Zinc	ND	0.00500	0.000479	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-B**	**11/16/13 06:40**	**Aqueous**	**Mercury**	**11/25/13**	**11/26/13 12:24**	**131125L06**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

Method Blank	**099-04-008-6739**	**N/A**	**Aqueous**	**Mercury**	**11/25/13**	**11/26/13 12:43**	**131125L06**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-C**	**11/16/13 06:40**	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 16:36**	**131118L07**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-135	
2,4,5,6-Tetrachloro-m-Xylene	84	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-529-663**	**N/A**	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 15:53**	**131118L07**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	50-135	
2,4,5,6-Tetrachloro-m-Xylene	77	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-C**	**11/16/13 06:40**	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 14:34**	**131118L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	50-135	
2,4,5,6-Tetrachloro-m-Xylene	96	50-135	

Method Blank	**099-12-533-864**	**N/A**	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 14:16**	**131118L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-135	
2,4,5,6-Tetrachloro-m-Xylene	90	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
D-1D-131116	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:30**	**131118S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01456	0.1000	0.1158	101	0.1143	100	80-120	1	0-20	
Copper	0.03731	0.1000	0.1337	96	0.1372	100	80-120	3	0-20	
Lead	ND	0.1000	0.1214	121	0.1229	123	80-120	1	0-20	3
Nickel	0.01893	0.1000	0.1087	90	0.1166	98	80-120	7	0-20	
Zinc	ND	0.1000	0.1157	116	0.1160	116	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1889-1	**Aqueous**	**Mercury**	**11/25/13**	**11/25/13 19:14**	**131125S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0002539	0.01000	0.008689	84	0.009824	96	57-141	12	0-10	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
D-1D-131116	**Aqueous**	**ICP/MS 04**	**11/18/13 00:00**	**11/18/13 15:37**	**131118S01**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01456	1.000	0.9287	91	0.9283	91	75-125	0	0-20	
Copper	0.03731	1.000	0.9714	93	0.9726	94	75-125	0	0-20	
Lead	ND	1.000	1.112	111	1.100	110	75-125	1	0-20	
Nickel	0.01893	1.000	0.9360	92	0.9245	91	75-125	1	0-20	
Zinc	ND	1.000	0.8412	84	0.8462	85	75-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-11-1406-1	**Sea Water**	**N/A**	**11/19/13 00:00**	**11/19/13 13:30**	**D1119TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	2.400	2.300	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-1D-131116	**Aqueous**	**BUR06**	**11/20/13 00:00**	**11/20/13 14:00**	**D1120ODD3**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	261.1	263.0	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6484	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	94.00	94	93.00	93	80-120	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-094-82	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:24**	**131118L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.1000	0.09968	100	0.1021	102	80-120	2	0-20	
Copper	0.1000	0.1086	109	0.1113	111	80-120	2	0-20	
Lead	0.1000	0.09709	97	0.1016	102	80-120	5	0-20	
Nickel	0.1000	0.1025	103	0.1049	105	80-120	2	0-20	
Zinc	0.1000	0.1057	106	0.1086	109	80-120	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-6739	**Aqueous**	**Mercury**	**11/25/13**	**11/25/13 19:09**	**131125L06**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.01000	0.01014	101	0.009444	94	85-121	7	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
Project: SD Shipyard Wastewater Discharge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-529-663	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 16:07**	**131118L07**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.3976	80	0.4089	82	50-135	36-149	3	0-25	
Gamma-BHC	0.5000	0.3890	78	0.4033	81	50-135	36-149	4	0-25	
Beta-BHC	0.5000	0.3298	66	0.3490	70	50-135	36-149	6	0-25	
Heptachlor	0.5000	0.4165	83	0.4278	86	50-135	36-149	3	0-25	
Delta-BHC	0.5000	0.3930	79	0.4048	81	50-135	36-149	3	0-25	
Aldrin	0.5000	0.4066	81	0.4005	80	50-135	36-149	2	0-25	
Heptachlor Epoxide	0.5000	0.4043	81	0.4121	82	50-135	36-149	2	0-25	
Endosulfan I	0.5000	0.4498	90	0.4530	91	50-135	36-149	1	0-25	
Dieldrin	0.5000	0.4194	84	0.4272	85	50-135	36-149	2	0-25	
4,4'-DDE	0.5000	0.3637	73	0.3868	77	50-135	36-149	6	0-25	
Endrin	0.5000	0.3608	72	0.3850	77	50-135	36-149	6	0-25	
Endrin Aldehyde	0.5000	0.4348	87	0.3748	75	50-135	36-149	15	0-25	
4,4'-DDD	0.5000	0.3691	74	0.3954	79	50-135	36-149	7	0-25	
Endosulfan II	0.5000	0.4088	82	0.4201	84	50-135	36-149	3	0-25	
4,4'-DDT	0.5000	0.3900	78	0.4116	82	50-135	36-149	5	0-25	
Endosulfan Sulfate	0.5000	0.3842	77	0.3940	79	50-135	36-149	3	0-25	
Methoxychlor	0.5000	0.3850	77	0.4023	80	50-135	36-149	4	0-25	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: SD Shipyard Wastewater Discharge			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-864	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 13:40**	**131118L08**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	2.692	135	2.210	110	50-135	20	0-25	
Aroclor-1260	2.000	2.448	122	2.122	106	50-135	14	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1371

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 11 ~~10~~ / 16 / 2013

Page 1 of 1

WO # / LAB USE ONLY: 13-11-1371

LABORATORY CLIENT: Anchor QEA

ADDRESS: 27201 Puerta Real, Ste 350

CITY: Mission Viejo STATE: CA ZIP: 92691

TEL: 949-334-9635. E-MAIL: agale@anchorQEA.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge

P.O. NO.:

PROJECT CONTACT: Adam Gale

SAMPLER(S): (PRINT) Kellee Christenser

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ~~48 HR~~ ☐ 72 HR ☒ STANDARD

☐ COELT EDF

GLOBAL ID:

LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	ICP/MS metals	TSS	COD	PCBs (8082)	Pesticides 8081
1	D-1D-131116	11/16/13	06:40	WS	1		HNO_3		X				
2	D-1D-131116	11/16/13	06:40	WS	1	X						X	
3	D-1D-131116	11/16/13	06:40	WS	1	X				X			
4	D-1D-131116	11/16/13	06:40	WS	1		H_2SO_4				X		
11/16/13	D-1D-131116	11/16/13	06:40	WS	1	X							X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		11/16/13	15:11
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 11/16/13	Time: 1710
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1371

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA.

DATE: 11/16/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.6 °C - 0.2 °C (CF) = 1.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 739

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 739

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-JAN-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 153094

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000
Sample Point: Final 21,000 gallon tank of treatment system, just before water meter.

Laboratory Name: Calscience Environmental Laboratories, Inc.

* COPY OF ANALYSIS REQUIRED *
6:40, 7:10, 7:40, 8:10

Sample#: 0153094-01 Date: 11/17/2013 and 12/10/2013 Time(s): 7:08, 8:08, 9:08, 10:08, 11:08
24 hour composite
Sampler: K. Christensen Description: clear water

Parameter	Units	Daily Max		Result
Chemical Oxygen Demand	mg/L			300
Solids, Total Suspended	mg/L			14
Copper, Total	mg/L			0.0373
Lead, Total	mg/L			0.00712
Nickel, Total	mg/L			0.0189
Zinc, Total	mg/L			0.0287
Arsenic, Total	mg/L	5		0.0146
Mercury, Total	mg/L	.2		>0.0002

Sample#: 0153094-02 Date: 12/31/2013 Time(s): 7:00
Evaluation only (no sample)
Sampler: K.Christensen Description: clear water

Beginning Meter Read and Date	gals		12/2/2013	485,000
Ending Meter Read and Date	gals		12/31/2013	829,600
Average Flow/calendar day thru Connection	gpd			11,120
Imported Flow During Period	gals			344,600
Maximum Flow/calendar day thru Connection	gpd			70,000
Maximum gals/min thru meter	gpm	250		250
Minimum gals/min thru meter when discharging	gpm	50-		50

INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-JAN-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 153094

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000
Sample Point: Final 21,000 gallon tank of treatment system, just before water meter.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0153094-03 Date: 11/17/2013 Time(s): 6:40
Pesticide and PCB grab
Sampler: K. Christensen Description: clear water

PCB's, Total	*ug/L*	*3*	>1.0

SELF MONITORING REPORT CERTIFICATION

City of San Diego Public Utilities Dept
Industrial Wastewater Control Program
9192 Topaz Way, San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Applicability: These instructions apply to any industry whose Industrial User Discharge Permit includes an Attachment B, "SELF-MONITORING AND REPORTING REQUIREMENTS".

All self monitoring reports submitted to the Industrial Wastewater Control Program must include the following certification statement and be signed as required in the permit under STANDARD CONDITIONS, **Signatory Requirements**.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations.

| 1 | 1 | - | 0 | 8 | 6 | 3 |

facility number

1/15/14
report due date

December 2014
monitoring period

Michael A Palmer
Print Name

Project Coordinator
Title

Signature
(Attach to Industry Self-Monitoring Form)

4/14/2014
Date

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-11-1371 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1371

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 11/26/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 13-11-1371

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-11-1371 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/16/13. They were assigned to Work Order 13-11-1371.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	13-11-1371
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	11/16/13 17:10
		Number of Containers:	5
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-1D-131116	13-11-1371-1	11/16/13 06:40	5	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-E**	**11/16/13 06:40**	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	21	1.0	1	

Method Blank	**099-09-010-6484**	**N/A**	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-A**	**11/16/13 06:40**	**Aqueous**	**BUR06**	**11/20/13**	**11/20/13 14:00**	**D1120ODB3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	260	5.0	4.8	1	

Method Blank	**099-05-114-105**	**N/A**	**Aqueous**	**BUR06**	**11/20/13**	**11/20/13 14:00**	**D1120ODB3**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	4.8	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-B**	**11/16/13 06:40**	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:54**	**131118L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.0146	0.0100	0.00386	10	
Copper	0.0373	0.0100	0.00140	10	
Lead	0.00712	0.0100	0.000898	10	J
Nickel	0.0189	0.0100	0.00132	10	
Zinc	0.0287	0.0500	0.00479	10	J

Method Blank	**099-16-094-82**	**N/A**	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:20**	**131118L01**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.00100	0.000386	1	
Copper	ND	0.00100	0.000140	1	
Lead	ND	0.00100	0.0000898	1	
Nickel	ND	0.00100	0.000132	1	
Zinc	ND	0.00500	0.000479	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-B**	**11/16/13 06:40**	**Aqueous**	**Mercury**	**11/25/13**	**11/26/13 12:24**	**131125L06**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

Method Blank	**099-04-008-6739**	**N/A**	**Aqueous**	**Mercury**	**11/25/13**	**11/26/13 12:43**	**131125L06**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-C**	**11/16/13 06:40**	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 16:36**	**131118L07**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-135	
2,4,5,6-Tetrachloro-m-Xylene	84	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-529-663**	**N/A**	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 15:53**	**131118L07**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	50-135	
2,4,5,6-Tetrachloro-m-Xylene	77	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-131116	**13-11-1371-1-C**	**11/16/13 06:40**	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 14:34**	**131118L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	50-135	
2,4,5,6-Tetrachloro-m-Xylene	96	50-135	

Method Blank	**099-12-533-864**	**N/A**	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 14:16**	**131118L08**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-135	
2,4,5,6-Tetrachloro-m-Xylene	90	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
D-1D-131116	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:30**	**131118S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01456	0.1000	0.1158	101	0.1143	100	80-120	1	0-20	
Copper	0.03731	0.1000	0.1337	96	0.1372	100	80-120	3	0-20	
Lead	ND	0.1000	0.1214	121	0.1229	123	80-120	1	0-20	3
Nickel	0.01893	0.1000	0.1087	90	0.1166	98	80-120	7	0-20	
Zinc	ND	0.1000	0.1157	116	0.1160	116	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1889-1	**Aqueous**	**Mercury**	**11/25/13**	**11/25/13 19:14**	**131125S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0002539	0.01000	0.008689	84	0.009824	96	57-141	12	0-10	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
D-1D-131116	**Aqueous**	**ICP/MS 04**	**11/18/13 00:00**	**11/18/13 15:37**	**131118S01**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01456	1.000	0.9287	91	0.9283	91	75-125	0	0-20	
Copper	0.03731	1.000	0.9714	93	0.9726	94	75-125	0	0-20	
Lead	ND	1.000	1.112	111	1.100	110	75-125	1	0-20	
Nickel	0.01893	1.000	0.9360	92	0.9245	91	75-125	1	0-20	
Zinc	ND	1.000	0.8412	84	0.8462	85	75-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-11-1406-1	**Sea Water**	**N/A**	**11/19/13 00:00**	**11/19/13 13:30**	**D1119TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	2.400	2.300	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-1D-131116	**Aqueous**	**BUR06**	**11/20/13 00:00**	**11/20/13 14:00**	**D1120ODD3**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	261.1	263.0	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6484	**Aqueous**	**N/A**	**11/19/13**	**11/19/13 13:30**	**D1119TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	94.00	94	93.00	93	80-120	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-094-82	**Aqueous**	**ICP/MS 04**	**11/18/13**	**11/18/13 15:24**	**131118L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.1000	0.09968	100	0.1021	102	80-120	2	0-20	
Copper	0.1000	0.1086	109	0.1113	111	80-120	2	0-20	
Lead	0.1000	0.09709	97	0.1016	102	80-120	5	0-20	
Nickel	0.1000	0.1025	103	0.1049	105	80-120	2	0-20	
Zinc	0.1000	0.1057	106	0.1086	109	80-120	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-6739	**Aqueous**	**Mercury**	**11/25/13**	**11/25/13 19:09**	**131125L06**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.01000	0.01014	101	0.009444	94	85-121	7	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
Project: SD Shipyard Wastewater Discharge			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-529-663	**Aqueous**	**GC 51**	**11/18/13**	**11/21/13 16:07**	**131118L07**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.3976	80	0.4089	82	50-135	36-149	3	0-25	
Gamma-BHC	0.5000	0.3890	78	0.4033	81	50-135	36-149	4	0-25	
Beta-BHC	0.5000	0.3298	66	0.3490	70	50-135	36-149	6	0-25	
Heptachlor	0.5000	0.4165	83	0.4278	86	50-135	36-149	3	0-25	
Delta-BHC	0.5000	0.3930	79	0.4048	81	50-135	36-149	3	0-25	
Aldrin	0.5000	0.4066	81	0.4005	80	50-135	36-149	2	0-25	
Heptachlor Epoxide	0.5000	0.4043	81	0.4121	82	50-135	36-149	2	0-25	
Endosulfan I	0.5000	0.4498	90	0.4530	91	50-135	36-149	1	0-25	
Dieldrin	0.5000	0.4194	84	0.4272	85	50-135	36-149	2	0-25	
4,4'-DDE	0.5000	0.3637	73	0.3868	77	50-135	36-149	6	0-25	
Endrin	0.5000	0.3608	72	0.3850	77	50-135	36-149	6	0-25	
Endrin Aldehyde	0.5000	0.4348	87	0.3748	75	50-135	36-149	15	0-25	
4,4'-DDD	0.5000	0.3691	74	0.3954	79	50-135	36-149	7	0-25	
Endosulfan II	0.5000	0.4088	82	0.4201	84	50-135	36-149	3	0-25	
4,4'-DDT	0.5000	0.3900	78	0.4116	82	50-135	36-149	5	0-25	
Endosulfan Sulfate	0.5000	0.3842	77	0.3940	79	50-135	36-149	3	0-25	
Methoxychlor	0.5000	0.3850	77	0.4023	80	50-135	36-149	4	0-25	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	11/16/13
27201 Puerta Real, Suite 350		Work Order:	13-11-1371
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: SD Shipyard Wastewater Discharge			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-864	**Aqueous**	**GC 58**	**11/18/13**	**11/22/13 13:40**	**131118L08**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	2.692	135	2.210	110	50-135	20	0-25	
Aroclor-1260	2.000	2.448	122	2.122	106	50-135	14	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1371

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 11 ~~10~~ / 16 / 2013

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WO # / LAB USE ONLY: 13-11-1371

LABORATORY CLIENT: Anchor QEA

ADDRESS: 27201 Puerta Real, Ste 350

CITY: Mission Viejo STATE: CA ZIP: 92691

TEL: 949-334-9635. E-MAIL: agale@anchorQEA.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge

P.O. NO.:

PROJECT CONTACT: Adam Gale

SAMPLER(S): (PRINT) Kellee Christenser

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ~~48 HR~~ ☐ 72 HR ☒ STANDARD

☐ COELT EDF

GLOBAL ID:

LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	ICP/MS metals	TSS	COD	PCBs (8082)	Pesticides 8081
1	D-1D-131116	11/16/13	06:40	WS	1		HNO_3		X				
2	D-1D-131116	11/16/13	06:40	WS	1	X						X	
3	D-1D-131116	11/16/13	06:40	WS	1	X				X			
4	D-1D-131116	11/16/13	06:40	WS	1		H_2SO_4				X		
11/16/13	D-1D-131116	11/16/13	06:40	WS	1	X							X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		11/16/13	15:11
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 11/16/13	Time: 1710
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1371

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA.

DATE: 11/16/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.6 °C - 0.2 °C (CF) = 1.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 739

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 739

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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Calscience
Environmental
Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 13-12-0790 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-12-0790

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 12/23/2013 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 13-12-0790

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-12-0790 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 12/10/13. They were assigned to Work Order 13-12-0790.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	13-12-0790
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	12/10/13 18:00
		Number of Containers:	2
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-ID-131210	13-12-0790-1	12/10/13 12:08	2	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	12/10/13
27201 Puerta Real, Suite 350		Work Order:	13-12-0790
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131210	**13-12-0790-1-A**	**12/10/13 12:08**	**Aqueous**	**N/A**	**12/14/13**	**12/14/13 14:30**	**D1214TSSL1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	14	1.0	0.95	1	

Method Blank	**099-09-010-6507**	**N/A**	**Aqueous**	**N/A**	**12/14/13**	**12/14/13 14:30**	**D1214TSSL1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.95	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	12/10/13
27201 Puerta Real, Suite 350		Work Order:	13-12-0790
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-131210	**13-12-0790-1-B**	**12/10/13 12:08**	**Aqueous**	**BUR06**	**12/19/13**	**12/19/13 18:00**	**D1219ODB5**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	300	5.0	4.8	1	

Method Blank	**099-05-114-108**	**N/A**	**Aqueous**	**BUR06**	**12/19/13**	**12/19/13 18:00**	**D1219ODB5**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	4.8	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	12/10/13
27201 Puerta Real, Suite 350		Work Order:	13-12-0790
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
13-12-0810-5	**Aqueous**	**N/A**	**12/14/13 00:00**	**12/14/13 14:30**	**D1214TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	430.0	435.0	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	12/10/13
27201 Puerta Real, Suite 350	Work Order:	13-12-0790
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge		Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-ID-131210	**Aqueous**	**BUR06**	**12/19/13 00:00**	**12/19/13 18:00**	**D1219ODD5**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	297.6	289.9	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	12/10/13
27201 Puerta Real, Suite 350		Work Order:	13-12-0790
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6507	**Aqueous**	**N/A**	**12/14/13**	**12/14/13 14:30**	**D1214TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	88.00	88	90.00	90	80-120	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-12-0790

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

WO#/LAB USE ONLY **13-12-0790**

DATE: 12/10/13
PAGE: 1 OF 1

LABORATORY CLIENT: Anchor QEA
ADDRESS: 27201 Puerta Real, Ste 350
CITY: Mission Viegjo STATE: CA ZIP: 92691
TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge
P.O. NO.:
PROJECT CONTACT: Adam Gale
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): Kellee Christensen
LAB USE ONLY

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

COELT EDF
GLOBAL ID
LOG CODE

SPECIAL INSTRUCTIONS:
Standard detection limits

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	EPA 200.8 As, Cu, Pb, Ni, Zn	EPA 245.1 Mercury	EPA 8082 PCB Aroclors	SM 2540D TSS	SM 5220C COD (reflux)
1	D-ID-131210	12/10/2013	7:08, 8:08, 9:08, 10:08, 11:08, 12:08	WS	1	X						X	
1	D-ID-131210	12/10/2013	7:08, 8:08, 9:08, 10:08, 11:08, 12:08	WS	1		H_2SO_4						X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Kellee Christensen	[illegible]	12/10/13	1420
[illegible]	[illegible]	12/10/13	1800

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-12-0790

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA

DATE: 12/10/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.8 °C - 0.2 °C (CF) = 1.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 854

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 854

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INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-FEB-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 153699

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000

Sample Point: Immediate left after guard station. The final 21,000 gallon tank of treatment system, just before water meter. Access sample tank through top access hole/port.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0153699-01 Date: 1/16/2014 Time(s): 06:20, 08:45, 09:30, 10:30, 11:30

24 hour composite

Sampler: K. King Description: clear water

Parameter	*Units*	*Daily Max*		*Result*
Chemical Oxygen Demand	*mg/L*			280
Solids, Total Suspended	*mg/L*			6.8

Sample#: 0153699-02 Date: 1/31/2014 Time(s): 7:00

Evaluation only (no sample)

Sampler: K. Christensen Description: clear water

Beginning Meter Read and Date	*gals*		1/2/2014	851,800
Ending Meter Read and Date	*gals*		1/31/2014	1,006,300
Average Flow/calendar day thru Connection	*gpd*			4,990
Imported Flow During Period	*gals*			154,500
Maximum Flow/calendar day thru Connection	*gpd*			55,600
Maximum gals/min thru meter	*gpm*	*250*		250
Minimum gals/min thru meter when discharging	*gpm*	*50-*		50

SELF MONITORING REPORT CERTIFICATION

City of San Diego Public Utilities Dept
Industrial Wastewater Control Program
9192 Topaz Way, San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Applicability: These instructions apply to any industry whose Industrial User Discharge Permit includes an Attachment B, "SELF-MONITORING AND REPORTING REQUIREMENTS".

All self monitoring reports submitted to the Industrial Wastewater Control Program must include the following certification statement and be signed as required in the permit under STANDARD CONDITIONS, **Signatory Requirements**.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations.

		–							

facility number

2/15/2014
report due date

1/1 - 1/31/2014
monitoring period

Print Name

Title

Signature
(Attach to Industry Self-Monitoring Form)

Date

INDUSTRY SELF MONITORING FORM (ISMF) INSTRUCTIONS

Refer to the Attachment B and Appendix B of your IU Discharge Permit for the complete monitoring schedule and instructions. Questions concerning these requirements may be answered by contacting your area inspector.

- Sample collection for IU self monitoring can be conducted whenever the IWLab is not already monitoring at your facility. If the IWLab samples all the wastewater discharges in a monitoring period (this is unlikely but can occur for infrequently batch discharged wastestreams), indicate this on your ISMF to prompt the reviewer to waive your sampling, but not the reporting, requirements for the period. Otherwise representative samples must be collected at the **sampling location and** for **all** the required self monitoring parameters specified in the permit for at least (1) 24 hour period **in the monitoring period**; advise the Compliance Supervisor if you believe the location is inappropriate.

- IU self monitoring analyses must be conducted by an ELAP certified laboratory that has provided evidence of its current certifications to this office **or the analytical results will be considered invalid.**

- IU self monitoring analyses must be submitted on the ISMF provided or a similarly formatted data entry form. Transfer the analysis results to the ISMF (if a result is ND, enter the parameter's reporting limit preceded by "<", except flash point which is preceded by ">"), attach a copy of the laboratory analysis report including the chain of custody, and return the report to this office by the due date specified in your permit. You may email or fax the report to meet the due date; however you must also mail a signed original. Failure to use the required format with the ISMF# clearly listed, risks the loss of your data and consequently a violation for late and/or incomplete reporting.

- A **Sample Type** is specified for each parameter and is generally either a 24 hour composite or Grab (includes Grab/Field Measurement, Grab/separate analysis, TTO result (sum), VOC grab, etc.). A **Grab** is a single sample collected over a period of time not exceeding 15 minutes and is often accomplished by simply dipping a sample out of the wastestream with a bailer or the sample container. **Note: pH, temperature, flash point, and many TTO compounds require discrete grab samples and analyses.** A **24 hour composite** requires a series of samples be collected during a 24 hour period representative of normal process operations and combined into a single container for analysis. Composites must be flow or time proportioned and may be collected with automatic sampling equipment or by manually combining a **minimum of (4)** grab samples. For all manually collected samples each individual sample time must be listed on the ISMF. For autosamplers list the time sampling began and the time it ended. Example: for a 16 hour workday and flow of 8,000 gpd, samples are collected at least every 4 hours or 2,000 gals. In contrast, the **Evaluation only** and **Fixed probe with chart** sample types do not require the actual collection of samples; for flow measurements and continuous pH recording use the sampling information fields to indicate the applicable time period.

- The sample **Description** should include the appearance of the sample. Indicate the color, clarity, layering if present, etceteras. Examples: clear, colorless and cloudy, tan.

- If a **Flow** parameter is required, enter your best estimate if a metered value is not available.

- The attached Self Monitoring Report Certification must be signed and dated by a person in your firm having the authority as set forth in the permit under Standard Conditions, Signatory Requirements. This (SMR Certification) and other Supporting Documents are available at: http://www.sandiego.gov/mwwd/environment/iwcp/index.shtml .

- Self monitoring early in the period and more frequently than required in the permit is highly recommended. Simply make additional copies of the ISMF and replace the ISMF# with "extra". Note however, that you must submit all "representative" self monitoring results to this office. This does **not** include in-house testing at locations other than the permitted sample point or when non-EPA approved analytical methods (see 40 CFR Part 136) are utilized.

- If self monitoring **INDICATES A VIOLATION** of a daily maximum or instantaneous limit, you must 1) notify the Compliance Supervisor within 24 hours of becoming aware of the violation and 2) unless your permit requires monthly self monitoring for the pollutant(s) in violation, resample at the sample point for the parameters in violation and submit the results to this office within 30 days of becoming aware of the violation, including a properly signed Self Monitoring Report Certification. The resample requirement is in addition to your routine self monitoring and therefore the results cannot be used for your next report.

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-01-0932 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-01-0932

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 01/24/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 14-01-0932

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 01/16/14. They were assigned to Work Order 14-01-0932.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	14-01-0932
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	01/16/14 19:30
		Number of Containers:	5
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-ID-140116	14-01-0932-1	01/16/14 06:20	5	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-A**	**01/16/14 06:20**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	6.8	1.0	1	

Method Blank	**099-09-010-6539**	**N/A**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-B**	**01/16/14 06:20**	**Aqueous**	**BUR06**	**01/20/14**	**01/20/14 18:00**	**E0120ODB4**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	280	5.0	1	

Method Blank	**099-05-114-110**	**N/A**	**Aqueous**	**BUR06**	**01/20/14**	**01/20/14 18:00**	**E0120ODB4**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-C**	**01/16/14 06:20**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:21**	**140117L01A**

Comment(s): - The reporting limit is elevated resulting from matrix interference.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.0113	0.0100	0.00386	10	
Copper	0.280	0.0100	0.00140	10	
Lead	0.0685	0.0100	0.000898	10	
Nickel	0.0145	0.0100	0.00132	10	
Zinc	0.0743	0.0500	0.00479	10	

Method Blank	**099-16-094-167**	**N/A**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 15:48**	**140117L01A**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.00100	0.000386	1	
Copper	ND	0.00100	0.000140	1	
Lead	ND	0.00100	0.0000898	1	
Nickel	ND	0.00100	0.000132	1	
Zinc	ND	0.00500	0.000479	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-C**	**01/16/14 06:20**	**Aqueous**	**Mercury**	**01/17/14**	**01/17/14 17:27**	**140117L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0000631	0.000200	0.0000453	1	J

Method Blank	**099-04-008-6798**	**N/A**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:40**	**140117L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-E**	**01/16/14 06:20**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 20:02**	**140121L16**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-135	
2,4,5,6-Tetrachloro-m-Xylene	90	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-529-675**	**N/A**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 18:46**	**140121L16**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	50-135	
2,4,5,6-Tetrachloro-m-Xylene	88	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-E**	**01/16/14 06:20**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 14:07**	**140121L17**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	0.98	0.29	1	
Aroclor-1221	ND	0.98	0.28	1	
Aroclor-1232	ND	0.98	0.24	1	
Aroclor-1242	ND	0.98	0.18	1	
Aroclor-1248	ND	0.98	0.20	1	
Aroclor-1254	ND	0.98	0.22	1	
Aroclor-1260	ND	0.98	0.26	1	
Aroclor-1262	ND	0.98	0.25	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-135	
2,4,5,6-Tetrachloro-m-Xylene	104	50-135	

Method Blank	**099-12-533-882**	**N/A**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 12:02**	**140121L17**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	50-135	
2,4,5,6-Tetrachloro-m-Xylene	97	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-01-0947-1	**Sample**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:08**	**140117S01**
14-01-0947-1	**Matrix Spike**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 15:58**	**140117S01**
14-01-0947-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:01**	**140117S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01602	0.1000	0.1134	97	0.1230	107	80-120	8	0-20	
Copper	ND	0.1000	0.09295	93	0.1003	100	80-120	8	0-20	
Lead	ND	0.1000	0.09924	99	0.1081	108	80-120	8	0-20	
Nickel	ND	0.1000	0.09188	92	0.1009	101	80-120	9	0-20	
Zinc	0.1832	0.1000	0.2865	103	0.2861	103	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-01-0314-1	**Sample**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:47**	**140117S03**
14-01-0314-1	**Matrix Spike**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:49**	**140117S03**
14-01-0314-1	**Matrix Spike Duplicate**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:51**	**140117S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.002339	0.01000	0.01175	94	0.01170	94	57-141	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-01-0918-3	**Sample**	**Aqueous**	**N/A**	**01/22/14 00:00**	**01/22/14 13:45**	**E0122TSSD1**
14-01-0918-3	**Sample Duplicate**	**Aqueous**	**N/A**	**01/22/14 00:00**	**01/22/14 13:45**	**E0122TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	203.0	198.0	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-ID-140116	**Sample**	**Aqueous**	**BUR06**	**01/20/14 00:00**	**01/20/14 18:00**	**E0120ODD4**
D-ID-140116	**Sample Duplicate**	**Aqueous**	**BUR06**	**01/20/14 00:00**	**01/20/14 18:00**	**E0120ODD4**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	276.5	268.8	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6539	**LCS**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**
099-09-010-6539	**LCSD**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	91.00	91	80-120	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-094-167	**LCS**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 17:06**	**140117L01A**
099-16-094-167	**LCSD**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 17:09**	**140117L01A**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.1000	0.1026	103	0.09802	98	80-120	5	0-20	
Copper	0.1000	0.1007	101	0.09687	97	80-120	4	0-20	
Lead	0.1000	0.1007	101	0.1031	103	80-120	2	0-20	
Nickel	0.1000	0.09755	98	0.09613	96	80-120	1	0-20	
Zinc	0.1000	0.1198	120	0.1151	115	80-120	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-6798	**LCS**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:42**	**140117L03**
099-04-008-6798	**LCSD**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:45**	**140117L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.01000	0.009801	98	0.009962	100	85-121	2	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
Project: SD Shipyard Wastewater Discharge			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-529-675	**LCS**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 19:00**	**140121L16**
099-12-529-675	**LCSD**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 19:14**	**140121L16**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.4764	95	0.5122	102	50-135	36-149	7	0-25	
Gamma-BHC	0.5000	0.4692	94	0.5143	103	50-135	36-149	9	0-25	
Beta-BHC	0.5000	0.4214	84	0.4560	91	50-135	36-149	8	0-25	
Heptachlor	0.5000	0.4254	85	0.4617	92	50-135	36-149	8	0-25	
Delta-BHC	0.5000	0.4359	87	0.5104	102	50-135	36-149	16	0-25	
Aldrin	0.5000	0.4094	82	0.5050	101	50-135	36-149	21	0-25	
Heptachlor Epoxide	0.5000	0.4515	90	0.4598	92	50-135	36-149	2	0-25	
Endosulfan I	0.5000	0.4840	97	0.5012	100	50-135	36-149	4	0-25	
Dieldrin	0.5000	0.4696	94	0.5186	104	50-135	36-149	10	0-25	
4,4'-DDE	0.5000	0.4261	85	0.4913	98	50-135	36-149	14	0-25	
Endrin	0.5000	0.4807	96	0.5258	105	50-135	36-149	9	0-25	
Endrin Aldehyde	0.5000	0.3597	72	0.4012	80	50-135	36-149	11	0-25	
4,4'-DDD	0.5000	0.4096	82	0.4774	95	50-135	36-149	15	0-25	
Endosulfan II	0.5000	0.4729	95	0.5163	103	50-135	36-149	9	0-25	
4,4'-DDT	0.5000	0.4407	88	0.5052	101	50-135	36-149	14	0-25	
Endosulfan Sulfate	0.5000	0.4456	89	0.4867	97	50-135	36-149	9	0-25	
Methoxychlor	0.5000	0.4287	86	0.4891	98	50-135	36-149	13	0-25	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: SD Shipyard Wastewater Discharge			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-882	**LCS**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 11:25**	**140121L17**
099-12-533-882	**LCSD**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 11:43**	**140121L17**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	2.609	130	2.370	119	50-135	10	0-25	
Aroclor-1260	2.000	1.919	96	1.976	99	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

WO#/LAB USE ONLY: **14-01-0932**

DATE: 1/16/2014
PAGE: 1 OF 1

LABORATORY CLIENT: Anchor QEA
ADDRESS: 27201 Puerta Real, Ste 350
CITY: Mission Viejo STATE: CA ZIP: 92691
TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge
P.O. NO.:
PROJECT CONTACT: Adam Gale
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): Kyle King
LAB USE ONLY: ☐☐-☐☐☐☐

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

COELT EDF
GLOBAL ID
LOG CODE

SPECIAL INSTRUCTIONS:
Standard detection limits
ROWY FIRST SAMPLE POINT WRITTEN ON BOTTLES

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	EPA 200.8 As, Cu, Pb, Ni, Zn	EPA 245.1 Mercury	EPA 8082 PCB Aroclors	EPA 8081 Pesticides	SM 5220C COD (reflux)	SM 2540D TSS
	D-ID-140116	1/16/2014	0620 0845, 0930 1030, 1130	WS	1		HNO_3		X	X				
	D-ID-140116	1/16/2014	0620 0845, 0930 1030, 1130	WS	1		H_2SO_4						X	
1	D-ID-140116	1/16/2014	0620	WS	1	X					X			
	D-ID-140116	1/16/2014	0620	WS	1	X						X		
	D-ID-140116	1/16/2014	0620, 0845, 0930, 1030, 1130	WS	1	X								X

Relinquished by: (Signature) [signature] Received by: (Signature) [signature] Date: 1/16/2014 Time: 1355
Relinquished by: (Signature) [signature] Received by: (Signature) bannyle COE Date: 1/16/14 Time: 19:30
Relinquished by: (Signature) Received by: (Signature) Date: Time:

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-01-0932

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA

DATE: 01/16/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB ☐250PB ☑250PB**nu** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-MAR-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 154187

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000

Sample Point: Immediate left after guard station. The final 21,000 gallon tank of treatment system, just before water meter. Access sample tank through top access hole/port.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0154187-01 Date: 2/5/2014 Time(s): 11:28, 11:45, 12:05

24 hour composite

Sampler: K. Christensen Description: clear water

Parameter	*Units*	*Daily Max*		*Result*
Chemical Oxygen Demand	*mg/L*			340
Solids, Total Suspended	*mg/L*			374

Sample#: 0154187-02 Date: 2/28/2014 Time(s): 7:00

Evaluation only (no sample)

Sampler: K. Christensen Description: clear water

Beginning Meter Read and Date	*gals*		2/3/2014	1,006,300
Ending Meter Read and Date	*gals*		2/28/2014	1,113,200
Average Flow/calendar day thru Connection	*gpd*			3,820
Imported Flow During Period	*gals*			106,900
Maximum Flow/calendar day thru Connection	*gpd*			50,200
Maximum gals/min thru meter	*gpm*	*250*		250
Minimum gals/min thru meter when discharging	*gpm*	*50-*		50

SELF MONITORING REPORT CERTIFICATION

City of San Diego Public Utilities Dept
Industrial Wastewater Control Program
9192 Topaz Way, San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Applicability: These instructions apply to any industry whose Industrial User Discharge Permit includes an Attachment B, "SELF-MONITORING AND REPORTING REQUIREMENTS".

All self monitoring reports submitted to the Industrial Wastewater Control Program must include the following certification statement and be signed as required in the permit under STANDARD CONDITIONS, **Signatory Requirements**.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations.

		–						

facility number

report due date

monitoring period

Print Name

Title

Signature
(Attach to Industry Self-Monitoring Form)

Date

INDUSTRY SELF MONITORING FORM (ISMF) INSTRUCTIONS

Refer to the Attachment B and Appendix B of your IU Discharge Permit for the complete monitoring schedule and instructions. Questions concerning these requirements may be answered by contacting your area inspector.

- Sample collection for IU self monitoring can be conducted whenever the IWLab is not already monitoring at your facility. If the IWLab samples all the wastewater discharges in a monitoring period (this is unlikely but can occur for infrequently batch discharged wastestreams), indicate this on your ISMF to prompt the reviewer to waive your sampling, but not the reporting, requirements for the period. Otherwise representative samples must be collected at the **sampling location and** for **all** the required self monitoring parameters specified in the permit for at least (1) 24 hour period **in the monitoring period**; advise the Compliance Supervisor if you believe the location is inappropriate.

- IU self monitoring analyses must be conducted by an ELAP certified laboratory that has provided evidence of its current certifications to this office **or the analytical results will be considered invalid.**

- IU self monitoring analyses must be submitted on the ISMF provided or a similarly formatted data entry form. Transfer the analysis results to the ISMF (if a result is ND, enter the parameter's reporting limit preceded by "<", except flash point which is preceded by ">"), attach a copy of the laboratory analysis report including the chain of custody, and return the report to this office by the due date specified in your permit. You may email or fax the report to meet the due date: however you must also mail a signed original. Failure to use the required format with the ISMF# clearly listed, risks the loss of your data and consequently a violation for late and/or incomplete reporting.

- A **Sample Type** is specified for each parameter and is generally either a 24 hour composite or Grab (includes Grab/Field Measurement, Grab/separate analysis, TTO result (sum), VOC grab, etc.). A **Grab** is a single sample collected over a period of time not exceeding 15 minutes and is often accomplished by simply dipping a sample out of the wastestream with a bailer or the sample container. **Note: pH, temperature, flash point, and many TTO compounds require discrete grab samples and analyses.** A **24 hour composite** requires a series of samples be collected during a 24 hour period representative of normal process operations and combined into a single container for analysis. Composites must be flow or time proportioned and may be collected with automatic sampling equipment or by manually combining a **minimum of (4)** grab samples. For all manually collected samples each individual sample time must be listed on the ISMF. For autosamplers list the time sampling began and the time it ended. Example: for a 16 hour workday and flow of 8,000 gpd, samples are collected at least every 4 hours or 2,000 gals. In contrast, the **Evaluation only** and **Fixed probe with chart** sample types do not require the actual collection of samples; for flow measurements and continuous pH recording use the sampling information fields to indicate the applicable time period.

- The sample **Description** should include the appearance of the sample. Indicate the color, clarity, layering if present, etceteras. Examples: clear, colorless and cloudy, tan.

- If a **Flow** parameter is required, enter your best estimate if a metered value is not available.

- The attached Self Monitoring Report Certification must be signed and dated by a person in your firm having the authority as set forth in the permit under Standard Conditions, Signatory Requirements. This (SMR Certification) and other Supporting Documents are available at: http://www.sandiego.gov/mwwd/environment/iwcp/index.shtml .

- Self monitoring early in the period and more frequently than required in the permit is highly recommended. Simply make additional copies of the ISMF and replace the ISMF# with "extra". Note however, that you must submit all "representative" self monitoring results to this office. This does **not** include in-house testing at locations other than the permitted sample point or when non-EPA approved analytical methods (see 40 CFR Part 136) are utilized.

- If self monitoring **INDICATES A VIOLATION** of a daily maximum or instantaneous limit, you must 1) notify the Compliance Supervisor within 24 hours of becoming aware of the violation and 2) unless your permit requires monthly self monitoring for the pollutant(s) in violation, resample at the sample point for the parameters in violation and submit the results to this office within 30 days of becoming aware of the violation, including a properly signed Self Monitoring Report Certification. The resample requirement is in addition to your routine self monitoring and therefore the results cannot be used for your next report.

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-02-0283 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-0283

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 02/14/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 14-02-0283

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-0283 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/05/14. They were assigned to Work Order 14-02-0283.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	14-02-0283
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	02/05/14 19:15
		Number of Containers:	2
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-ID-140205	14-02-0283-1	02/05/14 12:05	2	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	02/05/14
27201 Puerta Real, Suite 350		Work Order:	14-02-0283
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140205	**14-02-0283-1-B**	**02/05/14 12:05**	**Aqueous**	**N/A**	**02/07/14**	**02/08/14 11:00**	**E0208TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	374	1.00	1	

Method Blank	**099-09-010-6555**	**N/A**	**Aqueous**	**N/A**	**02/07/14**	**02/08/14 11:00**	**E0208TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	02/05/14
27201 Puerta Real, Suite 350		Work Order:	14-02-0283
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140205	**14-02-0283-1-A**	**02/05/14 12:05**	**Aqueous**	**BUR06**	**02/13/14**	**02/13/14 15:30**	**E0213ODB1**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	340	5.0	1	

Method Blank	**099-05-114-111**	**N/A**	**Aqueous**	**BUR06**	**02/13/14**	**02/13/14 15:30**	**E0213ODB1**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	02/05/14
27201 Puerta Real, Suite 350		Work Order:	14-02-0283
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-02-0344-6	**Sample**	**Aqueous**	**N/A**	**02/07/14 00:00**	**02/08/14 11:00**	**E0208TSSD1**
14-02-0344-6	**Sample Duplicate**	**Aqueous**	**N/A**	**02/07/14 00:00**	**02/08/14 11:00**	**E0208TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	16.30	18.80	14	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	02/05/14
27201 Puerta Real, Suite 350		Work Order:	14-02-0283
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-ID-140205	**Sample**	**Aqueous**	**BUR06**	**02/13/14 00:00**	**02/13/14 15:30**	**E0213ODD1**
D-ID-140205	**Sample Duplicate**	**Aqueous**	**BUR06**	**02/13/14 00:00**	**02/13/14 15:30**	**E0213ODD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	336.0	332.0	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	02/05/14
27201 Puerta Real, Suite 350		Work Order:	14-02-0283
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6555	**LCS**	**Aqueous**	**N/A**	**02/07/14**	**02/08/14 11:00**	**E0208TSSL1**
099-09-010-6555	**LCSD**	**Aqueous**	**N/A**	**02/07/14**	**02/08/14 11:00**	**E0208TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	87.00	87	90.00	90	80-120	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-0283

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

WO#/LAB USE ONLY **14-02-0283**

DATE: 02/05/14
PAGE: 1 OF 1

LABORATORY CLIENT: Anchor QEA
ADDRESS: 27201 Puerta Real, Ste 350
CITY: Mission Viegjo STATE: CA ZIP: 92691
TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge
P.O. NO.:
PROJECT CONTACT: Adam Gale
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): Kellee Christensen
LAB USE ONLY ☐☐-☐☐☐☐

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

COELT EDF
GLOBAL ID
LOG CODE

SPECIAL INSTRUCTIONS:
Standard detection limits

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	EPA 200.8 As, Cu, Pb, Ni, Zn	EPA 245.1 Mercury	EPA 8082 PCB Aroclors	SM 2540D TSS	SM 5220C COD (reflux)
14	D-ID-140205	2/5/2014	11:28, 11:45, 12:05	WS	1	X						X	
	D-ID-140205	2/5/2014	11:28, 11:45, 12:05	WS	1		H_2SO_4						X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Kellee Christensen	CGL	02/05/14	1540
	Dannyle CGL	2/5/14	19:15

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-0283

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA

DATE: 02/05/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☑250CGBs ☑1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 778

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 776

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INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-APR-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 154560

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000

Sample Point: Immediate left after guard station. The final 21,000 gallon tank of treatment system, just before water meter. Access sample tank through top access hole/port.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0154560-01 Date: 1/16/2014 and 3/3/2014 Time(s): 06:20, 08:45, 09:30, 10:30, 11:30 11:07, 11:20, 11:30, 11:45

24 hour composite

Sampler: K. King and K. Christensen Description: clear water

Parameter	*Units*	*Daily Max*	*Result*
Chemical Oxygen Demand	*mg/L*		250
Solids, Total Suspended	*mg/L*		76
Copper, Total	*mg/L*		0.280
Lead, Total	*mg/L*		0.0685
Nickel, Total	*mg/L*		0.0145
Zinc, Total	*mg/L*		0.0743
Arsenic, Total	*mg/L*	*5*	0.0113
Mercury, Total	*mg/L*	*.2*	0.0000631

Sample#: 0154560-02 Date: 3/31/2014 Time(s): 7:00

Evaluation only (no sample)

Sampler: K. King Description: clear water

Beginning Meter Read and Date	*gals*	3/01/2014	1,113,200
Ending Meter Read and Date	*gals*	3/31/2014	1,138,900
Average Flow/calendar day thru Connection	*gpd*		829
Imported Flow During Period	*gals*		25,700
Maximum Flow/calendar day thru Connection	*gpd*		25,700
Maximum gals/min thru meter	*gpm*	*250*	250
Minimum gals/min thru meter when discharging	*gpm*	*50-*	50

INDUSTRY SELF MONITORING FORM

City of San Diego Public Utilities
Industrial Wastewater Control Program
9192 Topaz Wy San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Note: If Monthly Average Limits apply, these self-monitoring results will be averaged with all other VALID analyses for samples collected in the same calendar year including IWCP monitoring data, to determine compliance.

Michael Palmer
San Diego Bay Enviro Restoration Fund South Trust
c/o NASSCO MS 22A
2798 Harbor Dr
San Diego, CA 92113

****
* RETURN REPORT *
* by *
* 15-APR-2014 *
****

IU# Pmt#: 11-0563 01-A Conn: 100 ISMF#: 154560

Site Address: Harbor Dr, San Diego Permitted IW Flow: 288000

Sample Point: Immediate left after guard station. The final 21,000 gallon tank of treatment system, just before water meter. Access sample tank through top access hole/port.

Laboratory Name: Calscience Environmental Laboratories, Inc. * COPY OF ANALYSIS REQUIRED *

Sample#: 0154560-03 Date: 3/3/2014 Time(s): 11:07, 11:20, 11:30, 11:45

Pesticide and PCB grab

Sampler: K. Christensen Description: clear water

PCB's, Total	*ug/L*	*3*	<0.98

SELF MONITORING REPORT CERTIFICATION

City of San Diego Public Utilities Dept
Industrial Wastewater Control Program
9192 Topaz Way, San Diego, CA 92123-1119
Tel (858) 654-4100 Fax (858) 654-4110

Applicability: These instructions apply to any industry whose Industrial User Discharge Permit includes an Attachment B, "SELF-MONITORING AND REPORTING REQUIREMENTS".

All self monitoring reports submitted to the Industrial Wastewater Control Program must include the following certification statement and be signed as required in the permit under STANDARD CONDITIONS, **Signatory Requirements**.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware of the potential for significant penalties for submission of false information, including the possibility of fines and imprisonment for knowing violations.

		–					

facility number

report due date

monitoring period

Print Name

Title

Signature
(Attach to Industry Self-Monitoring Form)

Date

INDUSTRY SELF MONITORING FORM (ISMF) INSTRUCTIONS

Refer to the Attachment B and Appendix B of your IU Discharge Permit for the complete monitoring schedule and instructions. Questions concerning these requirements may be answered by contacting your area inspector.

- Sample collection for IU self monitoring can be conducted whenever the IWLab is not already monitoring at your facility. If the IWLab samples all the wastewater discharges in a monitoring period (this is unlikely but can occur for infrequently batch discharged wastestreams), indicate this on your ISMF to prompt the reviewer to waive your sampling, but not the reporting, requirements for the period. Otherwise representative samples must be collected at the **sampling location and** for **all** the required self monitoring parameters specified in the permit for at least (1) 24 hour period **in the monitoring period**; advise the Compliance Supervisor if you believe the location is inappropriate.

- IU self monitoring analyses must be conducted by an ELAP certified laboratory that has provided evidence of its current certifications to this office **or the analytical results will be considered invalid**.

- IU self monitoring analyses must be submitted on the ISMF provided or a similarly formatted data entry form. Transfer the analysis results to the ISMF (if a result is ND, enter the parameter's reporting limit preceded by "<", except flash point which is preceded by ">"), attach a copy of the laboratory analysis report including the chain of custody, and return the report to this office by the due date specified in your permit. You may email or fax the report to meet the due date; however you must also mail a signed original. Failure to use the required format with the ISMF# clearly listed, risks the loss of your data and consequently a violation for late and/or incomplete reporting.

- A **Sample Type** is specified for each parameter and is generally either a 24 hour composite or Grab (includes Grab/Field Measurement, Grab/separate analysis, TTO result (sum), VOC grab, etc.). A **Grab** is a single sample collected over a period of time not exceeding 15 minutes and is often accomplished by simply dipping a sample out of the wastestream with a bailer or the sample container. **Note: pH, temperature, flash point, and many TTO compounds require discrete grab samples and analyses.** A **24 hour composite** requires a series of samples be collected during a 24 hour period representative of normal process operations and combined into a single container for analysis. Composites must be flow or time proportioned and may be collected with automatic sampling equipment or by manually combining a **minimum of (4)** grab samples. For all manually collected samples each individual sample time must be listed on the ISMF. For autosamplers list the time sampling began and the time it ended. Example: for a 16 hour workday and flow of 8,000 gpd, samples are collected at least every 4 hours or 2,000 gals. In contrast, the **Evaluation only** and **Fixed probe with chart** sample types do not require the actual collection of samples; for flow measurements and continuous pH recording use the sampling information fields to indicate the applicable time period.

- The sample **Description** should include the appearance of the sample. Indicate the color, clarity, layering if present, etceteras. Examples: clear, colorless and cloudy, tan.

- If a **Flow** parameter is required, enter your best estimate if a metered value is not available.

- The attached Self Monitoring Report Certification must be signed and dated by a person in your firm having the authority as set forth in the permit under Standard Conditions, Signatory Requirements. This (SMR Certification) and other Supporting Documents are available at: http://www.sandiego.gov/mwwd/environment/iwcp/index.shtml .

- Self monitoring early in the period and more frequently than required in the permit is highly recommended. Simply make additional copies of the ISMF and replace the ISMF# with "extra". Note however, that you must submit all "representative" self monitoring results to this office. This does **not** include in-house testing at locations other than the permitted sample point or when non-EPA approved analytical methods (see 40 CFR Part 136) are utilized.

- If self monitoring **INDICATES A VIOLATION** of a daily maximum or instantaneous limit, you must 1) notify the Compliance Supervisor within 24 hours of becoming aware of the violation and 2) unless your permit requires monthly self monitoring for the pollutant(s) in violation, resample at the sample point for the parameters in violation and submit the results to this office within 30 days of becoming aware of the violation, including a properly signed Self Monitoring Report Certification. The resample requirement is in addition to your routine self monitoring and therefore the results cannot be used for your next report.

Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-01-0932 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

S. Lane
Signature, Laboratory Director

May 20, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-01-0932

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 01/24/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 14-01-0932

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 01/16/14. They were assigned to Work Order 14-01-0932.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	14-01-0932
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	01/16/14 19:30
		Number of Containers:	5
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-ID-140116	14-01-0932-1	01/16/14 06:20	5	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-A**	**01/16/14 06:20**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	6.8	1.0	1	

Method Blank	**099-09-010-6539**	**N/A**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Result	RL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-B**	**01/16/14 06:20**	**Aqueous**	**BUR06**	**01/20/14**	**01/20/14 18:00**	**E0120ODB4**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	280	5.0	1	

Method Blank	**099-05-114-110**	**N/A**	**Aqueous**	**BUR06**	**01/20/14**	**01/20/14 18:00**	**E0120ODB4**

Parameter	Result	RL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-C**	**01/16/14 06:20**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:21**	**140117L01A**

Comment(s): - The reporting limit is elevated resulting from matrix interference.
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.0113	0.0100	0.00386	10	
Copper	0.280	0.0100	0.00140	10	
Lead	0.0685	0.0100	0.000898	10	
Nickel	0.0145	0.0100	0.00132	10	
Zinc	0.0743	0.0500	0.00479	10	

Method Blank	**099-16-094-167**	**N/A**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 15:48**	**140117L01A**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.00100	0.000386	1	
Copper	ND	0.00100	0.000140	1	
Lead	ND	0.00100	0.0000898	1	
Nickel	ND	0.00100	0.000132	1	
Zinc	ND	0.00500	0.000479	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-C**	**01/16/14 06:20**	**Aqueous**	**Mercury**	**01/17/14**	**01/17/14 17:27**	**140117L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0000631	0.000200	0.0000453	1	J

Method Blank	**099-04-008-6798**	**N/A**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:40**	**140117L03**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000200	0.0000453	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-E**	**01/16/14 06:20**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 20:02**	**140121L16**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-135	
2,4,5,6-Tetrachloro-m-Xylene	90	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-529-675**	**N/A**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 18:46**	**140121L16**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Alpha-BHC	ND	0.10	0.028	1	
Gamma-BHC	ND	0.10	0.030	1	
Beta-BHC	ND	0.10	0.030	1	
Heptachlor	ND	0.10	0.026	1	
Delta-BHC	ND	0.10	0.029	1	
Aldrin	ND	0.10	0.027	1	
Heptachlor Epoxide	ND	0.10	0.025	1	
Endosulfan I	ND	0.10	0.028	1	
Dieldrin	ND	0.10	0.029	1	
4,4'-DDE	ND	0.10	0.027	1	
Endrin	ND	0.10	0.031	1	
Endrin Aldehyde	ND	0.10	0.026	1	
4,4'-DDD	ND	0.10	0.027	1	
Endosulfan II	ND	0.10	0.027	1	
4,4'-DDT	ND	0.10	0.027	1	
Endosulfan Sulfate	ND	0.10	0.029	1	
Methoxychlor	ND	0.10	0.025	1	
Chlordane	ND	1.0	0.33	1	
Toxaphene	ND	2.0	0.59	1	
Endrin Ketone	ND	0.10	0.024	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	50-135	
2,4,5,6-Tetrachloro-m-Xylene	88	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-ID-140116	**14-01-0932-1-E**	**01/16/14 06:20**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 14:07**	**140121L17**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	0.98	0.29	1	
Aroclor-1221	ND	0.98	0.28	1	
Aroclor-1232	ND	0.98	0.24	1	
Aroclor-1242	ND	0.98	0.18	1	
Aroclor-1248	ND	0.98	0.20	1	
Aroclor-1254	ND	0.98	0.22	1	
Aroclor-1260	ND	0.98	0.26	1	
Aroclor-1262	ND	0.98	0.25	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-135	
2,4,5,6-Tetrachloro-m-Xylene	104	50-135	

Method Blank	**099-12-533-882**	**N/A**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 12:02**	**140121L17**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aroclor-1016	ND	1.0	0.29	1	
Aroclor-1221	ND	1.0	0.28	1	
Aroclor-1232	ND	1.0	0.25	1	
Aroclor-1242	ND	1.0	0.18	1	
Aroclor-1248	ND	1.0	0.20	1	
Aroclor-1254	ND	1.0	0.23	1	
Aroclor-1260	ND	1.0	0.26	1	
Aroclor-1262	ND	1.0	0.26	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	50-135	
2,4,5,6-Tetrachloro-m-Xylene	97	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-01-0947-1	**Sample**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:08**	**140117S01**
14-01-0947-1	**Matrix Spike**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 15:58**	**140117S01**
14-01-0947-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 16:01**	**140117S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01602	0.1000	0.1134	97	0.1230	107	80-120	8	0-20	
Copper	ND	0.1000	0.09295	93	0.1003	100	80-120	8	0-20	
Lead	ND	0.1000	0.09924	99	0.1081	108	80-120	8	0-20	
Nickel	ND	0.1000	0.09188	92	0.1009	101	80-120	9	0-20	
Zinc	0.1832	0.1000	0.2865	103	0.2861	103	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-01-0314-1	**Sample**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:47**	**140117S03**
14-01-0314-1	**Matrix Spike**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:49**	**140117S03**
14-01-0314-1	**Matrix Spike Duplicate**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:51**	**140117S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.002339	0.01000	0.01175	94	0.01170	94	57-141	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-01-0918-3	**Sample**	**Aqueous**	**N/A**	**01/22/14 00:00**	**01/22/14 13:45**	**E0122TSSD1**
14-01-0918-3	**Sample Duplicate**	**Aqueous**	**N/A**	**01/22/14 00:00**	**01/22/14 13:45**	**E0122TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	203.0	198.0	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-ID-140116	**Sample**	**Aqueous**	**BUR06**	**01/20/14 00:00**	**01/20/14 18:00**	**E0120ODD4**
D-ID-140116	**Sample Duplicate**	**Aqueous**	**BUR06**	**01/20/14 00:00**	**01/20/14 18:00**	**E0120ODD4**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	276.5	268.8	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6539	**LCS**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**
099-09-010-6539	**LCSD**	**Aqueous**	**N/A**	**01/22/14**	**01/22/14 13:45**	**E0122TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	91.00	91	80-120	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	EPA 200.8
Project: SD Shipyard Wastewater Discharge			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-094-167	**LCS**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 17:06**	**140117L01A**
099-16-094-167	**LCSD**	**Aqueous**	**ICP/MS 04**	**01/17/14**	**01/17/14 17:09**	**140117L01A**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.1000	0.1026	103	0.09802	98	80-120	5	0-20	
Copper	0.1000	0.1007	101	0.09687	97	80-120	4	0-20	
Lead	0.1000	0.1007	101	0.1031	103	80-120	2	0-20	
Nickel	0.1000	0.09755	98	0.09613	96	80-120	1	0-20	
Zinc	0.1000	0.1198	120	0.1151	115	80-120	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 245.1 Total
		Method:	EPA 245.1
Project: SD Shipyard Wastewater Discharge			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-6798	**LCS**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:42**	**140117L03**
099-04-008-6798	**LCSD**	**Aqueous**	**Mercury**	**01/17/14**	**01/20/14 12:45**	**140117L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.01000	0.009801	98	0.009962	100	85-121	2	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8081A
Project: SD Shipyard Wastewater Discharge			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-529-675	**LCS**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 19:00**	**140121L16**
099-12-529-675	**LCSD**	**Aqueous**	**GC 44**	**01/21/14**	**01/22/14 19:14**	**140121L16**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Alpha-BHC	0.5000	0.4764	95	0.5122	102	50-135	36-149	7	0-25	
Gamma-BHC	0.5000	0.4692	94	0.5143	103	50-135	36-149	9	0-25	
Beta-BHC	0.5000	0.4214	84	0.4560	91	50-135	36-149	8	0-25	
Heptachlor	0.5000	0.4254	85	0.4617	92	50-135	36-149	8	0-25	
Delta-BHC	0.5000	0.4359	87	0.5104	102	50-135	36-149	16	0-25	
Aldrin	0.5000	0.4094	82	0.5050	101	50-135	36-149	21	0-25	
Heptachlor Epoxide	0.5000	0.4515	90	0.4598	92	50-135	36-149	2	0-25	
Endosulfan I	0.5000	0.4840	97	0.5012	100	50-135	36-149	4	0-25	
Dieldrin	0.5000	0.4696	94	0.5186	104	50-135	36-149	10	0-25	
4,4'-DDE	0.5000	0.4261	85	0.4913	98	50-135	36-149	14	0-25	
Endrin	0.5000	0.4807	96	0.5258	105	50-135	36-149	9	0-25	
Endrin Aldehyde	0.5000	0.3597	72	0.4012	80	50-135	36-149	11	0-25	
4,4'-DDD	0.5000	0.4096	82	0.4774	95	50-135	36-149	15	0-25	
Endosulfan II	0.5000	0.4729	95	0.5163	103	50-135	36-149	9	0-25	
4,4'-DDT	0.5000	0.4407	88	0.5052	101	50-135	36-149	14	0-25	
Endosulfan Sulfate	0.5000	0.4456	89	0.4867	97	50-135	36-149	9	0-25	
Methoxychlor	0.5000	0.4287	86	0.4891	98	50-135	36-149	13	0-25	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	01/16/14
27201 Puerta Real, Suite 350		Work Order:	14-01-0932
Mission Viejo, CA 92691-8306		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: SD Shipyard Wastewater Discharge			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-882	**LCS**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 11:25**	**140121L17**
099-12-533-882	**LCSD**	**Aqueous**	**GC 58**	**01/21/14**	**01/23/14 11:43**	**140121L17**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	2.609	130	2.370	119	50-135	10	0-25	
Aroclor-1260	2.000	1.919	96	1.976	99	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

WO#/LAB USE ONLY: **14-01-0932**

DATE: 1/16/2014
PAGE: 1 OF 1

LABORATORY CLIENT: Anchor QEA
ADDRESS: 27201 Puerta Real, Ste 350
CITY: Mission Viejo STATE: CA ZIP: 92691
TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge
P.O. NO.:
PROJECT CONTACT: Adam Gale
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): Kyle King
LAB USE ONLY: ☐☐-☐☐☐☐

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

COELT EDF
GLOBAL ID
LOG CODE

SPECIAL INSTRUCTIONS:
Standard detection limits
ROWY FIRST SAMPLE POINT WRITTEN ON BOTTLES

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	EPA 200.8 As, Cu, Pb, Ni, Zn	EPA 245.1 Mercury	EPA 8082 PCB Aroclors	EPA 8081 Pesticides	SM 5220C COD (reflux)	SM 2540D TSS
	D-ID-140116	1/16/2014	0620 0845, 0930 1030, 1130	WS	1		HNO_3		X	X				
	D-ID-140116	1/16/2014	0620 0845, 0930 1030, 1130	WS	1		H_2SO_4						X	
1	D-ID-140116	1/16/2014	0620	WS	1	X					X			
	D-ID-140116	1/16/2014	0620	WS	1	X						X		
	D-ID-140116	1/16/2014	0620, 0845, 0930, 1030, 1130	WS	1	X								X

Relinquished by: (Signature) [signature] Received by: (Signature) [signature] Date: 1/16/2014 Time: 1355
Relinquished by: (Signature) [signature] Received by: (Signature) bannyle COE Date: 1/16/14 Time: 19:30
Relinquished by: (Signature) Received by: (Signature) Date: Time:

02/24/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-01-0932

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA

DATE: 01/16/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB ☐1PB**na** ☐500PB ☐250PB ☑250PB**nu** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 681

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Calscience Environmental Laboratories, Inc.

CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with applicable USEPA and NELAP accreditation procedures.

I certify under penalty of law that the data generated for Calscience Work Order No. 14-03-0247 were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The Project Manager or designee who signed the Calscience Work Order has been specifically authorized and approved to do so.

The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Signature, Laboratory Director

May 21, 2014
Date

Name of Laboratory: **Calscience Environmental Laboratories**
Address of Laboratory: **7440 Lincoln Way**
Garden Grove, CA 92841-1432

This Certification signed by: **Steve Lane**

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0247

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: SD Shipyard Wastewater Discharge

Attention: Adam Gale
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Approved for release on 03/13/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: SD Shipyard Wastewater Discharge
Work Order Number: 14-03-0247

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0247 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/04/14. They were assigned to Work Order 14-03-0247.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Work Order:	14-03-0247
		Project Name:	SD Shipyard Wastewater Discharge
		PO Number:	
		Date/Time Received:	03/04/14 18:55
		Number of Containers:	2
Attn:	Adam Gale		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
D-1D-140303	14-03-0247-1	03/03/14 11:07	2	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	03/04/14
27201 Puerta Real, Suite 350		Work Order:	14-03-0247
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-140303	**14-03-0247-1-B**	**03/03/14 11:07**	**Aqueous**	**N/A**	**03/08/14**	**03/08/14 13:30**	**E0308TSSL1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	76	1.0	0.95	1.00	

Method Blank	**099-09-010-6610**	**N/A**	**Aqueous**	**N/A**	**03/08/14**	**03/08/14 13:30**	**E0308TSSL1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.95	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

ANCHOR QEA, LLC		Date Received:	03/04/14
27201 Puerta Real, Suite 350		Work Order:	14-03-0247
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
		Units:	mg/L
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1D-140303	**14-03-0247-1-A**	**03/03/14 11:07**	**Aqueous**	**BUR06**	**03/12/14**	**03/12/14 14:00**	**E0312ODB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	250	5.0	4.8	1.00	

Method Blank	**099-05-114-112**	**N/A**	**Aqueous**	**BUR06**	**03/12/14**	**03/12/14 14:00**	**E0312ODB1**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chemical Oxygen Demand	ND	5.0	4.8	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	03/04/14
27201 Puerta Real, Suite 350		Work Order:	14-03-0247
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-03-0311-4	**Sample**	**Aqueous**	**N/A**	**03/08/14 00:00**	**03/08/14 13:30**	**E0308TSSD1**
14-03-0311-4	**Sample Duplicate**	**Aqueous**	**N/A**	**03/08/14 00:00**	**03/08/14 13:30**	**E0308TSSD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended	4717	4710	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Sample Duplicate

ANCHOR QEA, LLC		Date Received:	03/04/14
27201 Puerta Real, Suite 350		Work Order:	14-03-0247
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 5220 C
Project: SD Shipyard Wastewater Discharge			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
D-1D-140303	**Sample**	**Aqueous**	**BUR06**	**03/12/14 00:00**	**03/12/14 14:00**	**E0312ODD1**
D-1D-140303	**Sample Duplicate**	**Aqueous**	**BUR06**	**03/12/14 00:00**	**03/12/14 14:00**	**E0312ODD1**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	253.0	250.0	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

ANCHOR QEA, LLC		Date Received:	03/04/14
27201 Puerta Real, Suite 350		Work Order:	14-03-0247
Mission Viejo, CA 92691-8306		Preparation:	N/A
		Method:	SM 2540 D
Project: SD Shipyard Wastewater Discharge			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6610	**LCS**	**Aqueous**	**N/A**	**03/08/14**	**03/08/14 13:30**	**E0308TSSL1**
099-09-010-6610	**LCSD**	**Aqueous**	**N/A**	**03/08/14**	**03/08/14 13:30**	**E0308TSSL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	92.00	92	80-120	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0247

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Calscience Environmental Laboratories, Inc.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
Other CA office locations: Concord and San Luis Obispo
For courier service / sample drop off information,
contact sales@calscience.com or call us.

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: **14-03-0247**

Date 3/3/2014

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LABORATORY CLIENT: Anchor QEA

ADDRESS: 27201 Puerta Real, Ste 350

CITY: Mission Viejo STATE: CA ZIP: 92691

TEL: 949-334-9635 E-MAIL: agale@anchorqea.com

CLIENT PROJECT NAME / NUMBER: SD Shipyard Wastewater Discharge

P.O. NO.:

PROJECT CONTACT: Adam Gale

SAMPLER(S): (PRINT) K. Christensen

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:
COD in 1L Amber did not have 250mL clear preserved onsite.
Only first sample time written on bottle

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	SM 2540D TSS	SM 5220C COD (reflux)		
1	D-1D-140303	3/3/2014	11:07, 11:20, 11:30, 11:45	WS	1	X																	X			
	D-1D-140303	3/3/2014	11:07, 11:20, 11:30, 11:45	WS	1		X																	X		

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] CEL	03/04/14	1450
[signature]	[signature] CEL	3/4/14	1855

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

11/01/12 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0247

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ANCHOR QEA

DATE: 03/04/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.7 °C - 0.3 °C (CF) = 1.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 671

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 681

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☑1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☑1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: 681

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 854

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered Scanned by: 854

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APPENDIX G
SUMMARY OF BIOLOGICAL MONITORING RESULTS

Daily Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Start Date:** 9/30/2013
	End Date:

Observation No.	Date	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	9/30/2013	710	California brown pelican	1	SMU-4, waterward and over barge, flying overhead, no disturbance
2	9/30/2013	1145	California brown pelican	2	SMU-4, waterward and over barge, flying overhead, no disturbance
3	10/1/2013	1530	Osprey	1	Alighted on adjacent ship scaffolding, observed, flew away. No disturbance.

Daily Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Start Date:** 9/30/2013
*Observations are recorded only when special status birds observed.	**End Date:** 11/2/2013

Observation No.	Date	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	9/30/2013	710	California brown pelican	1	SMU-4, waterward and over barge, flying overhead. No disturbance.
2	9/30/2013	1145	California brown pelican	2	SMU-4, waterward and over barge, flying overhead. No disturbance.
3	10/1/2013	1530	Osprey	1	Alighted on adjacent ship scaffolding, observed, flew away. No disturbance.
4	10/10/2013	900	California brown pelican	1	SMU-1, resting on timber pier. No disturbance.
5	10/15/2013	1425	California brown pelican	1	SMU-4, flying over adjacent ship scaffolding. No disturbance.
6	10/16/2013	810	California brown pelican	1	SMU-2 and -3, flying over adjacent ship. No disturbance.
7	10/18/2013	825	California brown pelican	1	SMU-4, waterward and over barge, flying overhead. No disturbance.
8	10/21/2013	930	California brown pelican	1	SMU-4, over security boom, flying overhead. No disturbance.
9	10/23/2013	1000	California brown pelican	1	SMU -3, flying over water more than 300 feet from shore. No disturbance.
10	10/25/2013	1145	Double-crested cormorant	1	SMU-1, resting on timber pier. No disturbance.
11	10/25/2013	1225	California brown pelican	1	SMU-4, over security boom, flying overhead. No disturbance.

Daily Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Start Date:** 9/30/2013
*Observations are recorded only when special status birds observed.	**End Date:** 11/2/2013

Observation No.	Date	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
12	10/26/2013	1330	Double-crested cormorant	1	SMU-1, resting on timber pier. No disturbance.
13	10/29/2013	1310	California brown pelican	1	SMU-4, over security boom, flying overhead. No disturbance.
14	10/30/2013	743	California brown pelican	1	SMU-3, flying over dredging barge. No disturbance.

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Date:** 10/10/2013
Weather: 75 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	0801	None	NA	SMU-4
2	0822	None	NA	SMU-3
3	0839	None	NA	SMU-2
4	0900	California brown pelican	1	SMU-1. Resting on timber pier; no disturbance.
5	0910	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Date:** 10/16/2013
Weather: 75 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	0750	None	NA	SMU-1
2	0810	California brown pelican	1	SMU-2. Flying over adjacent ship; no disturbance.
3	0820	California brown pelican	See above	SMU-3. Flying over adjacent ship; no disturbance. Same as above bird.
4	0830	None	NA	SMU-4
5	0852	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Calvin Douglas	**Date:** 10/26/2013
Weather: 66 degrees, mostly cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	1330	None	NA	SMU-1
2	1355	None	NA	SMU-2
3	1420	None	NA	SMU-3
4	1450	California brown pelican	1	SMU-4, flying over water more than 200 feet from shoreline.
5	1325	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Date:** 10/31/2013
Weather: 75 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	1215	None	NA	S-Lane Parcel
2	1236	None	NA	SMU-4
3	1245	None	NA	SMU-3
4	1250	None	NA	SMU-2
5	1300	None	NA	SMU-1

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Ali Meeks	**Date:** 11/5/2013
Weather: 75 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	1005	None	NA	SMU-3
2	1020	None	NA	SMU-4
3	1036	None	NA	SMU-2
4	1048	None	NA	SMU-1
5	1100	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 11/14/2013
Weather: 68 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	0815	None	NA	SMU-4
2	0825	None	NA	SMU-3
3	0842	None	NA	SMU-2
4	0853	None	NA	SMU-1
5	0920	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 11/20/2013
Weather: 63 degrees, partially cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	10:10	None	NA	SMU-4
2	10:20	None	NA	SMU-3
3	10:30	None	NA	SMU-2
4	10:40	Double-breasted cormorant	1	SMU-1, foraging activity. No disturbance noted.
5	11:15	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 11/26/2013
Weather: 65 degrees, sunny	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	09:10	None	NA	SMU-4
2	09:15	None	NA	SMU-3
3	09:25	Osprey	1	SMU-2, flying overhead. No disturbance noted.
4	09:35	None	NA	SMU-1
5	10:15	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 12/6/2013
Weather: 58 degrees, partial cloud cover	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	13:40	None	NA	S-Lane Parcel
2	13:52	None	NA	SMU-4
3	13:58	None	NA	SMU-3
4	14:03	None	NA	SMU-2
5	14:15	Double-breasted cormorant	1	SMU-1, perching. No disturbance noted.

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 12/11/2013
Weather: 68 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:42	None	NA	SMU-4
2	11:53	None	NA	SMU-3
3	12:02	None	NA	SMU-2
4	12:07	None	NA	SMU-1
5	12:30	none	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 12/17/2013
Weather: 75 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:45	None	NA	SMU-4
2	11:55	None	NA	SMU-3
3	12:05	None	NA	SMU-2
4	12:15	None	NA	SMU-1
5	12:30	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 12/24/2013
Weather: 70 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	10:15	None	NA	SMU-4
2	10:25	None	NA	SMU-3
3	10:35	None	NA	SMU-2
4	10:40	None	NA	SMU-1
5	11:00	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 1/3/2014
Weather: 58 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	09:00	None	NA	SMU-2
2	09:12	None	NA	SMU-1
3	09:23	None	NA	SMU-3
4	09:30	None	NA	SMU-4
5	09:47	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 1/9/2014
Weather: 60 degrees, partially cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:15	Double-crested cormorant	1	SMU-2, perching. No disturbance noted.
2	11:20	None	NA	SMU-1
3	11:27	None	NA	SMU-3
4	11:35	None	NA	SMU-4
5	11:52	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 1/15/2014
Weather: 80 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	12:20	Double-crested cormorant	5	SMU-4, perching on boom. No disturbance noted.
2	12:30	None	NA	SMU-3
3	12:45	None	NA	SMU-2
4	12:55	None	NA	SMU-1
5	13:15	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 1/22/2014
Weather: 68 degrees, cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	10:50	None	NA	SMU-4
2	11:00	None	NA	SMU-3
3	11:10	None	NA	SMU-2
4	11:20	Double-crested cormorants	11	SMU-1, perching on boom. No disturbance noted.
5	11:45	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 1/31/2014
Weather: 60 degrees, cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:15	None	0	S-Lane parcel
2	11:30	Double-crested cormorant	2	SMU-1, perching on silt curtain. No disturbance noted.
3	11:36	None	NA	SMU-2
4	11:45	None	NA	SMU-3
5	11:52	None	NA	SMU-4

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 2/6/2014
Weather: 61 degrees, cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	10:45	None	NA	SMU-4
2	10:50	None	NA	SMU-3
3	10:55	None	NA	SMU-2
4	11:02	Double-crested cormorant	3	SMU-1, perching on silt curtain. No disturbance noted.
		Brown pelican	1	SMU-1, perching on silt curtain. No disturbance noted.
5	11:20	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 2/11/2014
Weather: 70 degrees, partly cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	14:00	None	NA	SMU-4
2	14:11	None	NA	SMU-3
3	14:20	None	NA	SMU-2
4	14:32	Double-crested cormorant	6	SMU-1, perching on silt curtain. No disturbance noted.
5	14:45	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 2/19/2014
Weather: 60 degrees, cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	09:55	None	NA	SMU-4
2	10:05	None	NA	SMU-3
3	10:15	None	NA	SMU-2
4	10:22	Double-crested cormorant	3	SMU-1, perching on silt curtain. No disturbance noted.
5	10:40	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 2/27/2014
Weather: 58 degrees, cloudy	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	13:45	None	NA	S-Lane Parcel
2	13:55	None	NA	SMU-4
3	14:03	None	NA	SMU-3
4	14:12	None	NA	SMU-2
5	14:20	Double-crested cormorant	8	SMU-1, perching on silt curtain. No disturbance noted.

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kellee Christensen	**Date:** 3/5/2014
Weather: 52 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:40	Brown pelican	1	SMU-3, flying and swimming. No disturbance noted.
2	12:05	None	NA	S-Lane Parcel
3	12:15	None	NA	SMU-4
4	12:30	None	NA	SMU-2
5	12:40	Double-crested cormorant	5	SMU-1, perching on silt curtain. No disturbance noted.

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 3/12/2014
Weather: 70 degrees	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	10:30	None	NA	SMU-4
2	10:35	None	NA	SMU-3
3	10:45	None	NA	SMU-2
4	10:55	Double-crested cormorant	6	SMU-1, foraging (1) and perching on silt curtain (5). No disturbance noted.
5	11:15	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Kyle King	**Date:** 3/20/2014
Weather: 66 degrees	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	11:30	None	NA	SMU-4
2	11:40	None	NA	SMU-3
3	11:45	None	NA	SMU-2
4	12:05	Double-crested cormorant	2	SMU-1, perching on curtain. No disturbance noted.
5	12:15	None	NA	S-Lane Parcel

Weekly Special Status Bird Monitoring Form

San Diego Shipyard Sediment Site – South Shipyard

Biologist: Travis Merritts	**Date:** 3/24/2014
Weather: 62 degrees, clear	

Observation No.	Time	Special Status Bird Species Observed	No. of Special Status Birds Observed	Location/Behavior/Comments
1	14:10	None	N/A	S-lane parcel
2	14:15	None	N/A	SMU-4
3	14:20	None	N/A	SMU-3
4	14:30	None	N/A	SMU-2
5	14:35	Double-crested cormorant	1	SMU-1, foraging. No disturbance noted.

APPENDIX H
CAO-MANDATED ELECTRONIC REPORTING SUBMITTALS

CAO Provision G.10 (b) (1) – Laboratory Analytical Data: Analytical data (including geotechnical data) for all sediment and water samples in Electronic Data File (EDF) format. Water, sediment, and soil include analytical results of samples collected from: dredging equipment, monitoring wells, boreholes, gas and vapor wells or other collection devices, surface water, groundwater, piezometers, and stockpiles.

- Post-Dredge Confirmatory Sample Analytical Data (included in Appendix C of this report)
- Discharge Monitoring Sampling Results (included in Appendix F of this report)

CAO Provision G.10 (b) (2) – Locational Data: The latitude and longitude for any permanent monitoring location (surface water or sediment sampling location) for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.

- Post-Dredge Confirmatory Sample Locations
- Discharge Monitoring Sampling Location

CAO Provision G.10 (b) (3) – Site Map: Site map or maps which display discharge locations, streets bordering the facility, and sampling locations for all sediment, soil, and water samples. The site map is a stand-alone document that may be submitted in various electronic formats. A site map must also be uploaded to show the maximum extent of sediment and water pollution. An update to the site map may be uploaded at any time.

- Figure 1 – Site Map

CAO Provision G.10 (b) (4) – Electronic Report: A complete copy (in searchable PDF format) of all workplans, assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.

Table H-1
Electronic Reports Submitted to Geotracker

Document Title	Document Date
RAP 2012-06-12 ATTACHMENT D - SAMPLING AND ANALYSIS PLAN	6/12/2012
RAP 2012-06-12 REMEDIAL ACTION PLAN	6/12/2012
PRMP 2012-06-12 POST REMEDIAL WORK PLAN	6/12/2012
RAP 2012-06-12 ATTACHMENT F - HEALTH AND SAFETY PLAN	6/12/2012
RAP 2012-06-12 ATTACHMENT C - REMEDIAL MONITORING PLAN	6/12/2012
RAP 2012-06-12 ATTACHMENT A - DESIGN CRITERIA REPORT	6/12/2012
RAP 2012-06-12 ATTACHMENT B - QUALITY ASSURANCE PROJECT PLAN	6/12/2012
RAP 2012-06-12 ATTACHMENT E - COMMUNITY RELATIONS PLAN	6/12/2012
QUARTERLY PROGRESS REPORT # 1	6/13/2012
RAP 2012-08-17 - APPENDIX D - SAMPLING AND ANALYSIS PLAN	8/17/2012
RAP 2012-08-17 - REMEDIAL ACTION PLAN	8/17/2012
RAP 2012-08-17 - APPENDIX F - HEALTH AND SAFETY PLAN	8/17/2012
RAP 2012-08-17 - COVER LETTER	8/17/2012
RAP 2012-08-17 - APPENDIX C - REMEDIATION MONITORING PLAN	8/17/2012
RAP 2012-08-17 - APPENDIX A - DESIGN CRITERIA REPORT	8/17/2012
RAP 2012-08-17 - APPENDIX E - COMMUNITY RELATIONS PLAN	8/17/2012
RAP 2012-08-17 - APPENDIX B - QUALITY ASSURANCE PROJECT PLAN	8/17/2012
RAP 2012-09-07 AMENDED RAP COVER LETTER	9/7/2012
RAP 2012-09-07 APPENDIX A: DESIGN CRITERIA REPORT	9/7/2012
RAP 2012-09-07 AMENDED REMEDIAL ACTION PLAN (RAP)	9/7/2012
RAP 2012-09-07 APPENDIX D: SAMPLING AND ANALYSIS PLAN	9/7/2012
RAP 2012-09-07 APPENDIX E: COMMUNITY RELATIONS PLAN	9/7/2012
RAP 2012-09-07 APPENDIX B: QUALITY ASSURANCE PROJECT PLAN	9/7/2012
RAP 2012-09-07 APPENDIX F: HEALTH AND SAFETY PLAN	9/7/2012
RAP 2012-09-07 APPENDIX C: REMEDIATION MONITORING PLAN	9/7/2012
PRMP 2012-09-10 AMENDED POST RMP COVER LETTER	9/10/2012
PRMP 2012-09-10 AMENDED POST REMEDIAL MONITORING PLAN	9/10/2012
QUARTERLY PROGRESS REPORT #2	9/12/2012
RAP 2012-10-26 APPENDIX C: REMEDIATION MONITORING PLAN	10/26/2012
RAP 2012-10-26 REMEDIAL ACTION PLAN (RAP)	10/27/2012
RAP 2012-10-26 APPENDIX E: COMMUNITY RELATIONS PLAN	10/27/2012
PRMP 2012-11-02 AMENDED POST REMEDIAL MONITORING WORK PLAN	11/2/2012

Document Title	Document Date
RAP 2012-11-08 APPENDIX E - COMMUNITY RELATIONS PLAN, REVISED	11/8/2012
QUARTERLY PROGRESS REPORT # 3	12/14/2012
QUARTERLY PROGRESS REPORT # 4	3/15/2013
QUARTERLY PROGRESS REPORT # 5	6/17/2013
QUARTERLY PROGRESS REPORT # 5 WITH ATTACHMENTS	7/3/2013
SOUTH- PROJECT SCHEDULE 2013-09-03 – RAP	9/3/2013
SOUTH- HAZARDOUS MATERIAL TRANSPORTATION PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- CONTINGENCY PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- COMPREHENSIVE ENVIRONMENTAL MANAGEMENT PLAN 2013-09-03 - RAP	9/3/2013
SOUTH- SEDIMENT MANAGEMENT PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- CONSTRUCTION QUALITY CONTROL PLAN 2013-09-03 – RAP	9/3/2013
SOUTH- TECHNICAL SPECIFICATIONS 2013-07-01 – RAP	9/3/2013
SOUTH- BIOLOGICAL ASSESSMENT AND EFH EVALUATION REPORT 2013-02-01 – RA	9/3/2013
SOUTH- LETTER TO LANDFILL REGARDING IN-SITU PRE-APPROVAL 2013-08-06 – RAP	9/3/2013
SOUTH- COMMUNICATION PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- FINAL DESIGN PLANS 2013-08-27 – RAP	9/3/2013
SOUTH- TRAFFIC CONTROL PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- BASIS OF DESIGN MEMORANDUM 2013-08-01 – RAP	9/3/2013
SOUTH- NOTIFICATION OF SUBMITTAL OF DOCUMENTS 2013-09-03	9/3/2013
SOUTH-DREDGING MANAGEMENT PLAN 2013-09-03 – MMRP	9/3/2013
SOUTH- DEMOLITION PLAN 2013-09-03	9/3/2013
SOUTH- CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN FOR S LANE 2013-09-03 – MMRP	9/3/2013
SOUTH- BORROW SOURCE CHARACTERIZATION 2013-08-19 – RAP	9/3/2013
SOUTH- CONTRACTOR SITE-SPECIFIC HEALTH AND SAFETY PLAN 2013-09-03 – RAP	9/3/2013
SOUTH - NOTIFICATION OF SUBMITTAL OF DOCUMENTS 2013-09-04	9/5/2013
03-09-2013_SOUTH SHIPYARD_NOTIFICATION OF FIELD WORK_FINAL	9/5/2013
QUARTERLY PROGRESS REPORT #6 -- ATTACHMENT 1	9/16/2013
QUARTERLY PROGRESS REPORT #6	9/16/2013
TRANSMITTAL_INDUSTRIAL USER DISCHARGE PERMIT	9/24/2013
NOTIFICATION OF DREDGING START DATE	9/26/2013
DREDGING MANAGEMENT PLAN	9/27/2013
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: SEPTEMBER	10/24/2013
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: SEPTEMBER	10/24/2013

Document Title	Document Date
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: SEPTEMBER 30 TO OCTOBER 4, 2013	10/24/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: OCTOBER 7 TO 12, 2013	10/24/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: OCTOBER 14 TO 19, 2013	10/30/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: OCTOBER 21 TO 26, 2013	11/6/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: OCTOBER 28 TO NOVEMBER 2, 2013	11/13/2013
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: OCTOBER	11/13/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: NOVEMBER 4 TO 9, 2013	11/19/2013
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: OCTOBER	11/19/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: NOVEMBER 11 TO 16, 2013	11/25/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: NOVEMBER 18 TO 23, 2013	12/2/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: DECEMBER 2 TO 7, 2013	12/13/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: NOVEMBER 25 TO 30, 2013	12/13/2013
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: NOVEMBER	12/13/2013
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: NOVEMBER	12/16/2013
SOUTH SHIPYARD -- QUARTERLY PROGRESS REPORT NO. 7	12/16/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: DECEMBER 9 TO 14, 2013	12/20/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: DECEMBER 16 TO 21, 2013	12/27/2013
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: DECEMBER 23 TO 28, 2013	1/3/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: DECEMBER 30, 2013, TO JANUARY 4, 2014	1/10/2014
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: DECEMBER	1/15/2014
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: DECEMBER	1/15/2014

Document Title	Document Date
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: JANUARY 6 TO 11, 2014	1/17/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: JANUARY 13 TO 18, 2014	1/24/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: JANUARY 20 TO 25, 2014	1/31/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: JANUARY 27 TO FEBRUARY 1, 2014	2/7/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: FEBRUARY 3 TO 8, 2014	2/14/2014
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: JANUARY	2/15/2014
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: JANUARY	2/15/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: FEBRUARY 10 TO 15, 2014	2/21/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: FEBRUARY 17 TO 22, 2014	2/28/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: FEBRUARY 24 TO MARCH 1, 2014	3/7/2014
SOUTH SHIPYARD -- MONTHLY WATER QUALITY MONITORING REPORT: FEBRUARY	3/14/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: MARCH 3 TO 8, 2014	3/14/2014
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: FEBRUARY	3/14/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: MARCH 10 TO 15, 2014	3/14/2014
SOUTH SHIPYARD -- QUARTERLY PROGRESS REPORT NO. 8	3/17/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: MARCH 17 TO 22, 2014	3/28/2014
SOUTH SHIPYARD -- WEEKLY WATER QUALITY MONITORING REPORT: MARCH 24 TO 29, 2014	4/8/2014
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: MARCH	4/8/2014
SOUTH SHIPYARD – MMRP VERIFICATION LETTER	4/15/2014
SOUTH SHIPYARD -- MONTHLY BIOLOGICAL AND ENVIRONMENTAL MONITORING REPORT: MARCH	4/15/2014
SOUTH SHIPYARD – POST-CONSTRUCTION EELGRASS SURVEY REPORT	4/22/2014