PLATE 12 Area 2 Testpit 3

PLATE 13 Area 2 Borehole 5

PLATE 14 Area 2 Borehole 4

PLATE 15 Area 3 Testpit 1

PLATE 16 Area 1 Testpit 30

PLATE 17 Area 3a Testpit 9

PLATE 18 Tin can located in Area 3a Testpit 9

PLATE 19 Area 3a Testpit 8

PLATE 20 Piece of metal found in Area 3a Testpit 8

PLATE 21 Area 3a Testpit 10

PLATE 22 Area 3a Testpit 7, 10 and11 located around golf hole

Appendix E
26 Pages

Electro-Magnetic Assessment Reports

Geophysical Investigation using EM61 to Locate Buried Drums at CFA Training Grounds, Fiskville, Victoria. **GBG Australia 9 October 2012, Ref 1471_REV Report_2**

Geophysical Investigation using EM61 to Locate Buried Drums at CFA Training Grounds, Fiskville, Victoria. **GBG Australia 19 September 2012, Ref 1487_A2_Letter**

Geophysical Investigation using EM61 to Locate Buried Drums at CFA Training Grounds, Fiskville, Victoria. **GBG Australia 4 April 2013, GBGA Ref:1556**

18 Fennell Street,
North Parramatta, NSW. 2151.
Tel: 9890 2122. Fax: 9890 2922.
E-Mail: andrew.b@gbgoz.com.au.

A.B.N. 77 009 550 869.

9 October 2012

Attention: Ms. Lauren Ryan
Senior Environmental Scientist
Cardno Lane Piper
Building 2, 154 Highbury Road
Burwood, Victoria 3125

GBGA Ref: 1471_REV Report_2

SUBJECT: GEOPHYSICAL INVESTIGATION USING EM61 TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

GBG Australia carried out a non-destructive investigation using time-domain electromagnetic induction (TEM) on the grounds of the CFA Training College in Fiskville, Victoria. The data was collected over two days on the 6th & 7th August 2011.

The objective of the investigation was to locate possible buried drums in three sections of the training site as part of remediation efforts on the site.

The following report outlines the methodology of the investigation and discusses the results.

BACKGROUND

The CFA Training College Fiskville is a training site for the Country Fire Authority (CFA), a volunteer fire and emergency service that services regional Victoria. The site is used to train CFA staff & volunteers utilising in a wide range of emergency response scenarios. The site has been in operation for approximately forty (40) years.

There is concern that over the course of operations, drums of flammable liquid were buried on site. The cleanup of the site is lead by Cardno Lane Piper (the client) and as part of the investigation, GBG Australia was contracted to locate drums possibly buried on site.

The three sites investigated area is described below.

- Drum_Burial_Area 1 – Approximately 7,050m^2. Two-thirds of the site is a grove of planted trees in rows approximately two (2) metres apart, a third of the site is an open field, at the time of the investigation this was mown grass. The EM survey was undertaken parallel to these rows. Some surface scrap and training facilities are found in the open grass field.

- Drum_Burial_Area 2 – Approximately 2,520m^2, site consists of a grove of planted mixed trees arranged in non-linear rows approximately two (2) to five (5) metres apart, the site surrounded on three sites by roadway and on one by administration buildings/carpark.

- Drum_Burial_Area 3 – Approximately 1,750m^2, this site is a section of the golf course and it consists of an open field of grass, which at the time of the investigation was mown. Two concrete structures are located just outside the survey area. These structures are believed to be the anchors of a former radio tower.

Figure 1 below is an aerial image of the site outlining the investigation areas.

Figure 1. Aerial image of the three survey site: Drum_Burial_Area 1 (highlighted in red), Drum_Burial_Area 1 (highlighted in yellow) and Drum_Burial_Area 1 (highlighted in orange). Image courtesy of Google Earth (16 Aug 2012).

DATA COLLECTION

Data was collected using a time-domain electromagnetic induction (TEM) system. For more information about the TEM method, please refer to Appendix A.

The survey was undertaken using an EM61-MK2 with 1m x 0.5m sensor coils (Figure 2) that transmits a primary electromagnetic field and records up to four time-gates of secondary electromagnetic field in millivolts (mV). The sensor was mounted on a cart and pulled by

hand at walking pace in lines one (1) metre apart to ensure full coverage of the site. The sensor was configured to record five (5) readings every second.

Spatial position of the TEM data was recorded by an attached Differential Global Positioning System (DGPS) receiver with each reading having associated positional information with an accuracy of less than 1m. Both the TEM and DGPS data were combined and recorded using the EM61MK2 collection software on a field recorder by the field geophysicist.

Figure 2. EM61-MK2 set up as as a cart.

DATA PROCESSING & ANALYSIS

Processing and analysis of collected data was undertaken in a number of steps:

1. Raw data was converted from binary format to ascii format.
2. The Converted data was combined with GPS data, analysed and corrected for any errors.
3. GPS corrected data was then gridded.
4. Parts of gridded the data were blanked out to so as clip areas not surveyed.
5. Colour range and scale were altered to better highlight detected anomalies.

The first two steps were undertaken in the Geonics program DAT61MK2, while the last three steps were undertaken in Golden Software's program Surfer. The result of these steps was a colour contour image which shows changes in conductivity over the entire area.

RESULTS & DISCUSSION

The results of the investigation have been provided in the drawings GBGA1471-A1, GBGA1471-A2 & GBGA1471-A3. Drawings GBGA1471-A1 & GBGA1471-A3 contain two (2) aerial images of the surveyed area overlaid onto a colour contour map of the collected data. Due to the poor quality of the aerial image of Drum_Burial_Area 2, GBGA1471-A3 was not overlaid onto an aerial image. All drawings are geo-referenced using GDA UTM Zone 55 datum.

On the drawings, the image on the left is the gridded response of the D3 component which shows the responses of the deeper objects, while the image on the right is the gridded response of the Top (Differential) component (background variations removed) and hence shows only anomalies.

From these drawings, a number of areas of high conductivity responses can be found spread through the sites. These areas of high conductivity are interpreted as possible locations of buried drums. Comparison of these high conductivity responses with the standard response curve from a 55 Gallon Steel drum suggest that these anomalies are between 500mm and 1,000mm below the surface.

The findings from each area are as follows:

<u>Drum_Burial_Area 1</u>

High responses found in the area were correlated with the presence of monitoring wells, a military helicopter used for training (Figure3), a road sign (Figure 4), drums (Figure 5) and reinforced concrete pipes (Figure 6).

Figure 3. Military helicopter located on site Drum_Burial_Area 1.

Figure 4. Road sign located on site Drum_Burial_Area 1.

Figure 5. Drums located on site Drum_Burial_Area 1.

Figure 6. Reinforced concrete pipes located on site Drum_Burial_Area 1.

A total of twenty five (25) anomalies were found and are listed below as targets in Table 1. Targets 1 - 5 are found in the top portion of the area, targets 4 & 5 in the bottom-middle portion of the area and targets 7 - 25 are found towards the bottom-east of the area.

ID	Easting	Northing	ID	Easting	Northing
1	254738.22	5826167.66	14	254836.20	5826109.31
2	254743.46	5826149.54	15	254833.93	5826108.75
3	254769.03	5826153.57	16	254829.08	5826100.24
4	254764.34	5826163.36	17	254833.11	5826096.54
5	254778.21	5826106.51	18	254840.54	5826105.49
6	254793.47	5826106.51	19	254839.09	5826112.42
7	254815.30	5826109.37	20	254841.03	5826112.58
8	254820.11	5826108.53	21	254845.21	5826099.21
9	254823.60	5826108.37	22	254848.11	5826096.47
10	254823.60	5826110.36	23	254839.90	5826108.55
11	254825.76	5826110.36	24	254836.63	5826097.33
12	254821.78	5826102.55	25	254834.32	5826101.43
13	254836.39	5826105.34			

Table 1. Identified anomalies in site Drum_Burial_Area 1.

The area of high response found under the road is believed to be related to the construction of the road.

Due to the relatively high amount of scrap metal found in the surface, it is possible that targets in the eastern portion of the area are detected scrap metal. In particular target 10 may be scrap metal related to the helicopter.

Drum_Burial_Area 2

Due to errors with the GPS, a large portion of the area could not be gridded. As a result only approximately 60% of the results of the site could be displayed.

The most likely cause of this is the higher density of tree cover in the site preventing the GPS from maintaining a consistent lock on differential GPS (OMNISTAR) satellites. Figure 7 below displays the recorded GPS points, areas where GPS was not recorded (GPS drop outs) due to the presence of high density tree cover.

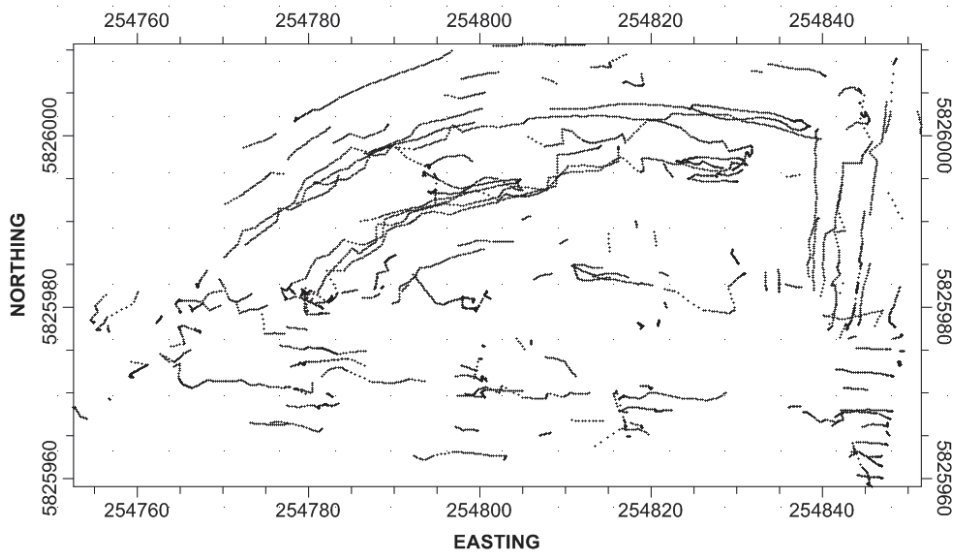


Figure 7. Recorded GPS points in site Drum_Burial_Area 2. Note large areas lacking GPS due to drop outs.

Within this area, a total of seven (7) anomalies were found and are listed below as targets in Table 2. Targets 1 and 2 are found in the northern portion of the area, while targets 3, 4, 5, 6 & 7 are in the southern portion of the area.

ID	Easting	Northing
1	254839.45	5826007.79
2	254836.59	5826007.79
3	254819.83	5826001.86
4	254811.24	5825966.71
5	254804.50	5825970.59
6	254790.20	5825971.00
7	254779.36	5825971.00

Table 2. Identified anomalies in site Drum_Burial_Area 2.

Due to their close proximity with the car park, it is possible that targets in the bottom portion of the area are related to car park construction.

Drum_Burial_Area 3

A total of seven (7) anomalies were found and are listed below as targets in Table 3. All targets are found towards the northern portion of the area. Due to the close proximity of concrete anchors of the former radio tower (Figure 8), it is possible that targets 3, 4, 5, 6 & 7 are scrap metal.

Figure 8. Former radio tower anchor located adjacent to site Drum_Burial_Area 3.

ID	Easting	Northing
1	254940.93	5825919.20
2	254937.21	5825914.55
3	254921.41	5825917.92
4	254917.69	5825919.83
5	254916.12	5825921.06
6	254915.48	5825915.01
7	254904.15	5825924.02

Table 3. Identified anomalies in site Drum_Burial_Area 3.

CONCLUSIONS

- An EM61 survey was conducted in three (3) sites in the grounds CFA Training College, Fiskville. The purpose of which was to locate any buried drums.

- The sites were surveyed over the course of two (2) days.

- Site Drum_Burial_Area 1 was found to contain twenty five (25) anomalies, the location and GPS coordinates of these anomalies can be found in this report and on drawing GBGA1471_A1.pdf.

- Site Drum_Burial_Area 2 was found to contain seven (7) anomalies, the location and GPS coordinates of these anomalies can be found in this report and on drawing GBGA1471_A2.pdf.

- Site Drum_Burial_Area 3 was found to contain seven (7) anomalies, the location and GPS coordinates of these anomalies can be found in this report and on drawing GBGA1471_A3.pdf.

- Portions of site Drum_Burial_Area 2 were unable to be gridded due to GPS drop outs caused by heavy vegetation cover.

I hope that this provides you with the information required. If you require clarification on any points arising from this investigation please contact me on (02) 9890 2122.

For and on behalf of
GBG AUSTRALIA PTY LTD

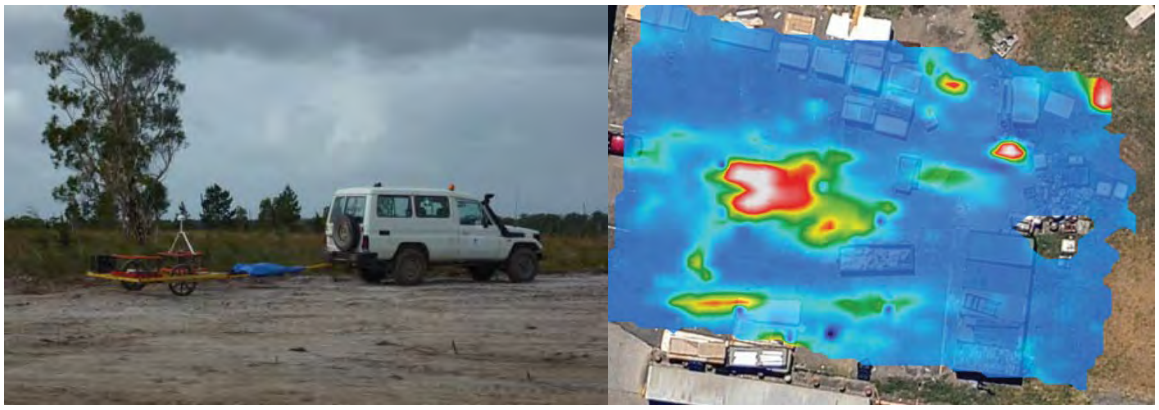
ANDREW BUCHEL
Geophysicist – B.Sc. (Hons)

APPENDIX A: TEM METHOD

Theory

Time Domain Electro-Magnetic (TEM) surveying uses the principle of electromagnetic induction to measure changes in the electrical conductivity of the subsurface. Time-Domain Electro-Magnetics (TEM) is sensitive to variations in the electrical conductivity of the subsurface. This is influenced by bulk variations in the subsurface porosity and permeability, and degree of saturation, as well as discrete variations due to buried metallic objects.

A primary electric current is passed through a transmitting coil and a produces a primary magnetic field in the space surrounding the coil including the subsurface. When the current is switched off, the magnetic field induces a turbulent electric current (eddy currents) in the ground and in nearby buried conductors. These currents decay with time and cause a decaying secondary magnetic field at the surface. Measurement of the rate of decay of the secondary magnetic field provides variation of conductivity with depth and a means of detecting buried conductive bodies.



Figures. A) Collecting TEM data with the EM61and B) Sample of processed data.

Limitations

1) The response from the drum measured by EM61 is classified as an anomaly only if the signal from the drum is more than background signal.
2) Noise (background and instrumental) can act as a dampener and therefore limits data resolution and depth of data acquisition.
3) Any significant contract at the surface will mark response from greater depths and hence limit resolution of data.
4) External metallic objects like radios, generators, power transmission lines, transportation infrastructure, and electromagnetic devices can affect the input signal.
5) Highly conductive soils can limit the effective penetration of these instruments.
6) While determining the size and depth of the drum, orientation is not taken into account; therefore the drum can be horizontal, vertical or inclined.
7) The depth of drum is determined using depth vs. intensity graphs and is an approximation.

APPENDIX B: TARGET LOCATION CHARACTERSTICS

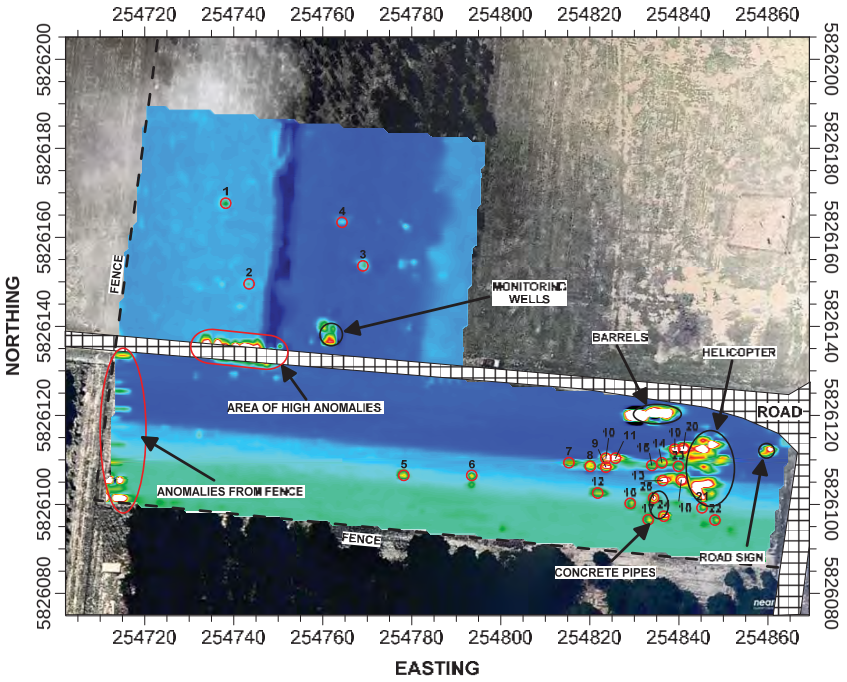
Area 1					
ID	**Easting**	**Northing**	**Size (Diameter)**	**Depth cm**	**Chance of Drum?**
1	254738.22	5826167.66	2m	80	High
2	254743.46	5826149.54	1m	95	High
3	254769.03	5826153.57	1m	90	High
4	254764.34	5826163.37	1m	110	High
5	254778.21	5826106.51	1m	55	Moderate
6	254793.47	5826106.51	1m	55	Moderate
7	254815.30	5826109.37	1m	50	Low
8	254820.11	5826108.53	2m	55	Low
9	254823.60	5826108.37	2m	<45	Low
10	254823.60	5826110.36	2m	<45	Low
11	254825.76	5826110.36	2m	<45	Low
12	254821.78	5826102.55	2m	65	Moderate
13	254836.39	5826105.34	2m	<45	Low
14	254836.20	5826109.32	2m	55	Moderate
15	254833.93	5826108.75	1m	65	Low
16	254829.08	5826100.24	1m	60	Moderate
17	254833.11	5826096.54	1m	55	Moderate
18	254840.54	5826105.49	2m	<45	Low
19	254839.09	5826112.42	2m	<45	Low
20	254841.03	5826112.58	2m	<45	Low
21	254845.21	5826099.21	1m	55	Moderate
22	254848.11	5826096.47	1m	60	Moderate
23	254839.90	5826108.55	1m	65	Low
24	254836.63	5826097.33	2m	<45	Low
25	254834.32	5826101.43	1m	<45	Low

Area 2					
ID	**Easting**	**Northing**	**Size (Diameter)**	**Depth cm**	**Chance of Drum?**
1	254839.45	5826007.79	1m	85	Moderate
2	254836.59	5826007.79	1m	80	Moderate
3	254819.83	5826001.86	2m	105	Moderate
4	254811.24	5825966.71	1m	125	Moderate
5	254804.50	5825970.59	1m	100	Moderate
6	254790.20	5825971.00	1m	95	Moderate
7	254779.36	5825971.00	1m	120	Moderate

Area 3					
ID	**Easting**	**Northing**	**Size (Diameter)**	**Depth cm**	**Chance of Drum?**
1	254940.93	5825919.20	1m	170	Moderate
2	254937.21	5825914.55	1m	175	Moderate
3	254921.41	5825917.92	1m	180	Moderate
4	254917.69	5825919.83	1m	170	Moderate
5	254916.12	5825921.06	1m	190	Moderate
6	254915.48	5825915.01	1m	165	Moderate
7	254904.15	5825924.02	2m	120	Moderate

DRUM BURIAL - AREA 1
CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

D3 (DEEPER RESPONSES)



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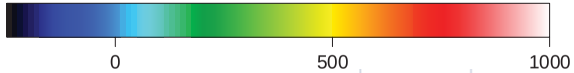
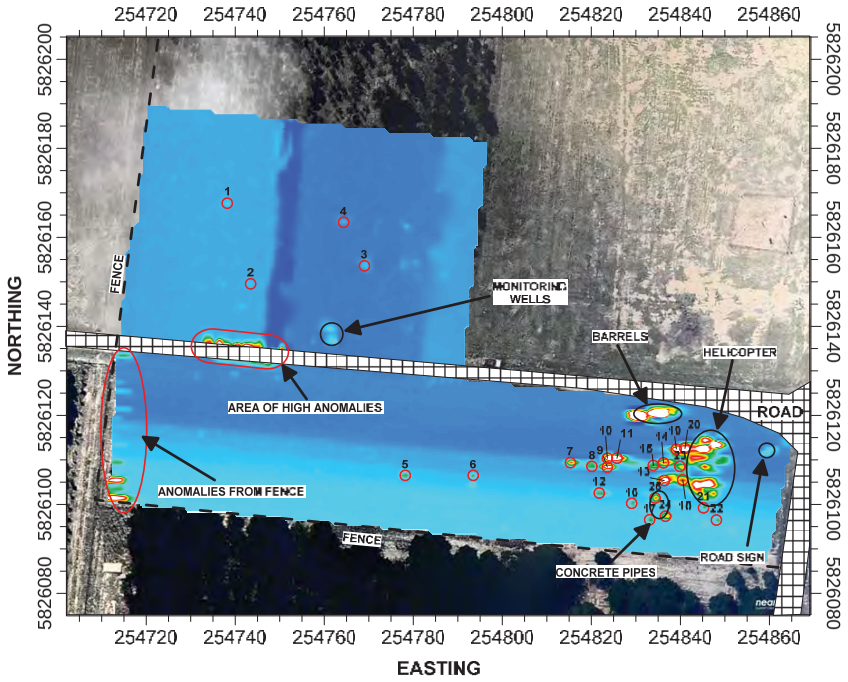


TOP (DIFFERENTIAL)



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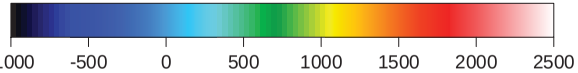

ID	Eastings	Northings
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3	254769.03	5826153.57
4	254764.34	5826163.37
5	254778.21	5826106.51
6	254793.47	5826106.51
7	254815.30	5826109.37
8	254820.11	5826108.53
9	254823.60	5826108.37

ID	Eastings	Northings
10	254823.60	5826110.36
11	254825.76	5826110.36
12	254821.78	5826102.55
13	254836.39	5826105.34
14	254836.20	5826109.32
15	254833.93	5826108.75
16	254829.08	5826100.24
17	254833.11	5826096.54
18	254840.54	5826105.49

ID	Eastings	Northings
19	254839.09	5826112.42
20	254841.03	5826112.58
21	254845.21	5826099.21
22	254848.11	5826096.47
23	254839.90	5826108.55
24	254836.63	5826097.33
25	254834.32	5826101.43

NOTES:

Most anomalies detected in the vacinity of the helicopter are interpreted as near surface scrap metal.

Scale is in millivolts (mV).

LEGEND

- ROAD
- SUBSURFACE FEATURE
- SURFACE FEATURE
- TARGET ANOMALY
- FENCE

ABN 77 009 550 869

ADVANCED SUBSURFACE INVESTIGATIONS

18 Fennell Street, NORTH PARRAMATTA NSW 2151, Australia

Telephone: (02) 9890 2122 Facsimile: (02) 9890 2922

CARDNO LANE PIPER

GEOPHYSICAL INVESTIGATION USING EM61 TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

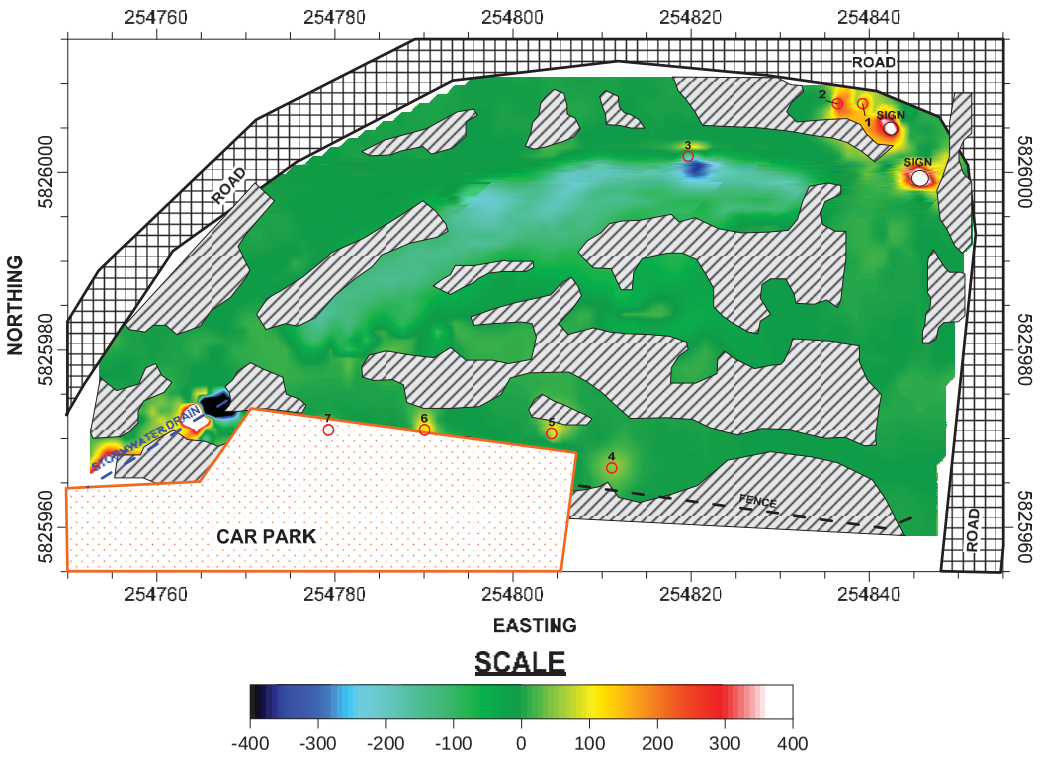
DATE: 15th AUGUST 2012 | PAPER SIZE: A3

DATUM: GDA UTM ZONE 55 | DRAWN: AB VER: 1.0

DRAWING NUMBER: GBGA1471_A1

DRUM BURIAL - AREA 2
CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

D3 (DEEPER RESPONSES)



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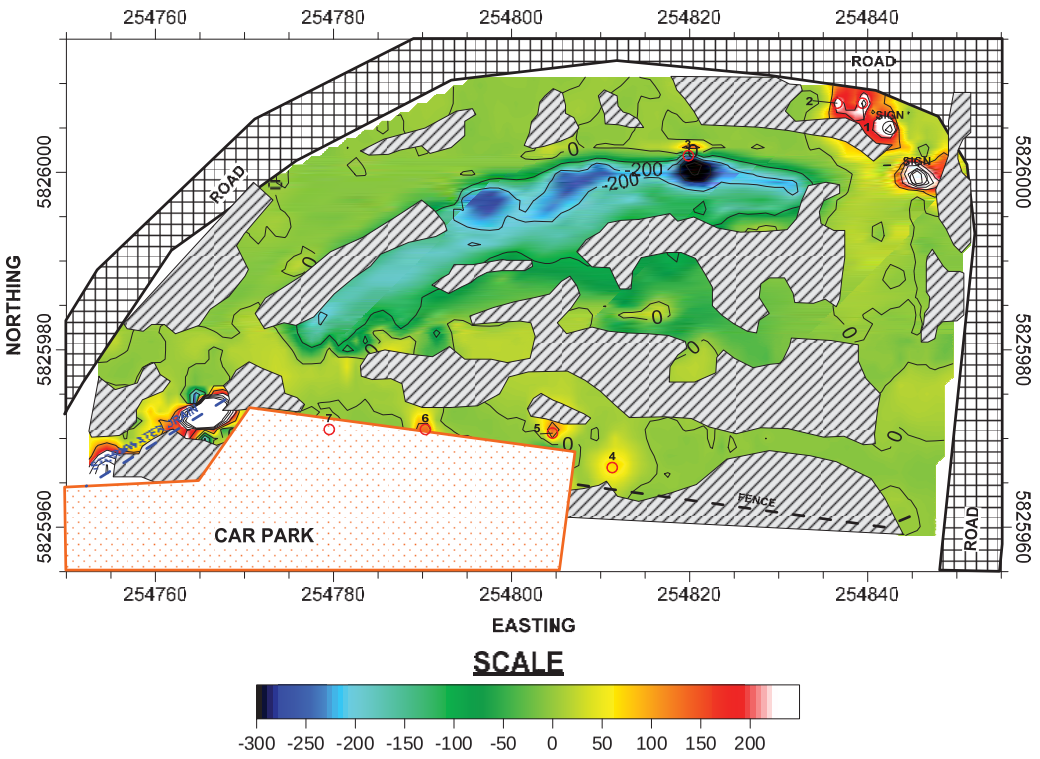
T (DIFFERENTIAL)



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4	254811.24	5825966.71
5	254804.50	5825970.59
6	254790.20	5825971.00
7	254779.36	5825971.00

NOTES:
Due to the high density of tree cover and the lower position of GPS satellites in the area, GPS data was of very poor quality for up to 40% of the area surveyed and hence data could not be gridded in these areas.

Results of the survey were not overlayed onto an aerial image due to the poor quality of availible aerial imagery.

Scale is in millivolts (mV).

LEGEND

- AREA NOT GRIDDED (GPS ERRORS)
- CAR PARK
- ROAD
- TARGET ANOMALY
- SURFACE FEATURE
- STORMWATER DRAIN
- FENCE

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ADVANCED SUBSURFACE INVESTIGATIONS
18 Fennell Street, NORTH PARRAMATTA NSW 2151, Australia
Telephone: (02) 9890 2122 Facsimile: (02) 9890 2922

CARDNO LANE PIPER

GEOPHYSICAL INVESTIGATION USING EM61 TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

DATE: 15th AUGUST 2012 | PAPER SIZE: A3
DATUM: GDA UTM ZONE 55 | DRAWN: AB
DRAWING NUMBER: GBGA1471_A2

DRUM BURIAL - AREA 3
CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

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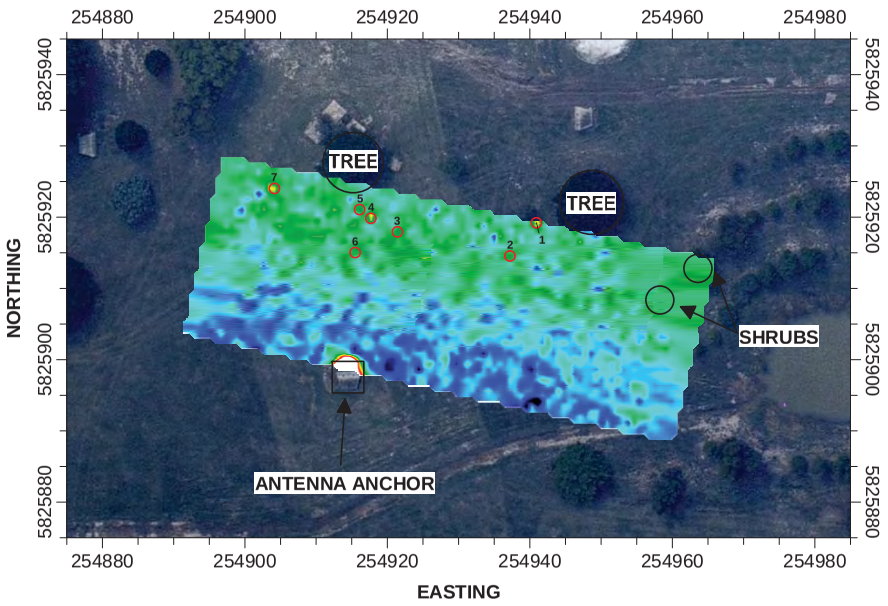

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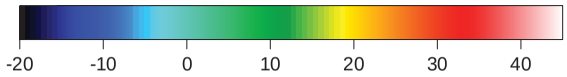
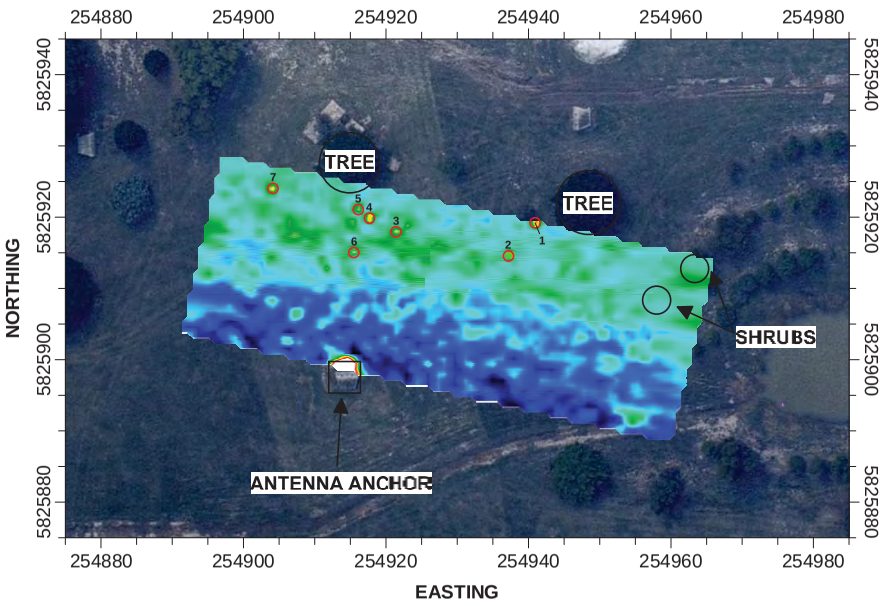


D3 (DEEPER RESPONSES)



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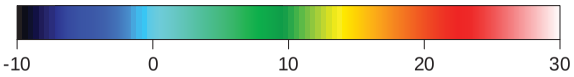

ID	Eastings	Northings
1	254940.93	5825919.20
2	254937.21	5825914.55
3	254921.41	5825917.92
4	254917.69	5825919.83
5	254916.12	5825921.06
6	254915.48	5825915.01
7	254904.15	5825924.02

NOTES:

Most features observed are believed to be related to water saturation in the ground.

Scale is in millivolts (mV).

LEGEND

✚ TARGET ANOMALY ◯ SURFACE FEATURE

ABN 77 009 550 869
ADVANCED SUBSURFACE INVESTIGATIONS
18 Fennell Street, NORTH PARRAMATTA NSW 2151, Australia
Telephone: (02) 9890 2122 Facsimile: (02) 9890 2922

CARDNO LANE PIPER

GEOPHYSICAL INVESTIGATION USING EM61 TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

DATE: 15th AUGUST 2012 | PAPER SIZE: A3

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DRAWING NUMBER: GBGA1471_A3

18 Fennell Street,
North Parramatta, NSW. 2151.
Tel: (02) 9890 2122. Fax: (02) 9890 2922.
E-Mail: andrew.b@gbgoz.com.au

A.B.N. 77 009 550 869.

19th September 2012

Attention: **Mr. Danny McDonald**
Cardno Lane Piper
Building 2, 154 Highbury Road
Burwood, Victoria 3125

GBGA Ref: 1487_A2_Letter

GEOPHYSICAL INVESTIGATION USING EM TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

Dear Mr. McDonald,

Cardno Lane Piper commissioned GBG Australia to undertake an electromagnetic (EM) investigation in Drum_Burial_Area_2. The area was previously surveyed by GBG Australia, however due to errors in the gridding process related to GPS dropouts the area was resurveyed. The following letter outlines the results of the survey.

EQUIPMENT

The instrument used during the survey was the GSSI EMP-400, a multi-channel Frequency-Domain Electromagnetic (FDEM) system. The three frequencies chosen for the survey were 3,000MHz, 6,000MHz and 10,000MHz, these frequencies were chosen to ensure depth of penetration was achieved and correspond to approximately six (6) meters, three (3) meters and one (1) meter respectively. DGPS data is recorded and combined with data in real time to ensure accuracy in the survey process.

RESULTS

The results of the EM investigation have been provided in drawing GBGA1487_A2.pdf. The results of the investigation have identified no additional targets related to potential buried drums.

If you require clarification on any points arising from this investigation, please do not hesitate to contact me on (02) 9890 2122.

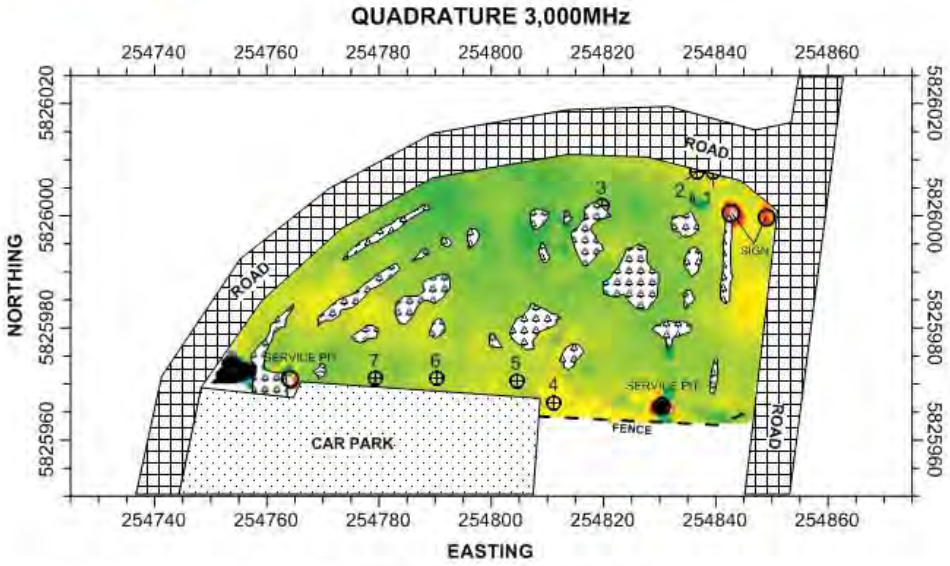
Sincerely,

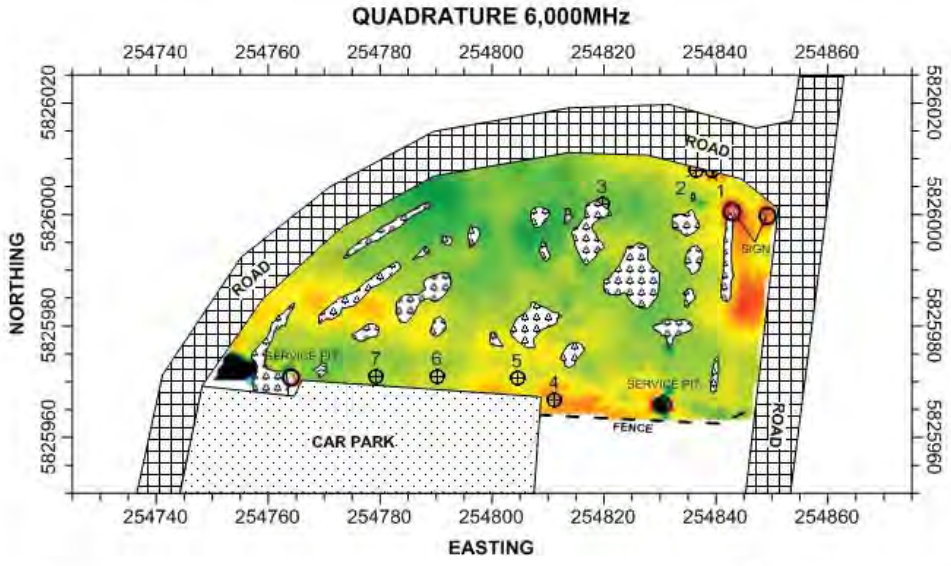
A T AL A PT LT

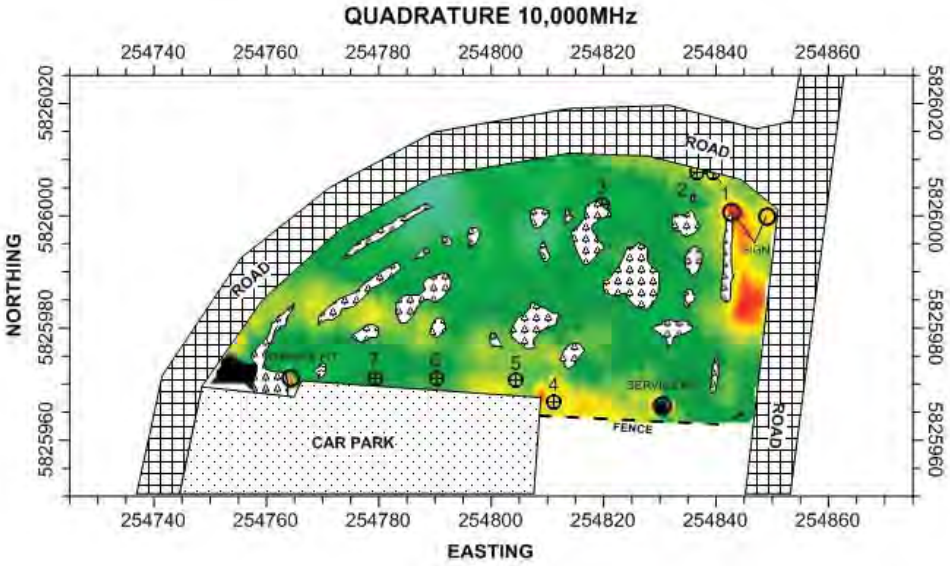
A E EL

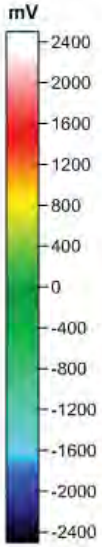
Geophysicist

DRUM BURIAL - AREA 2 (REVISITED)
CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.









ID	Easting	Northing
1	254839.45	5826007.79
2	254836.59	5826007.79
3	254819.83	5826001.86
4	254811.24	5825966.71
5	254804.50	5825970.59
6	254790.20	5825971.00
7	254779.36	5825971.00

NOTES:
Results of the survey were not overlayed onto an aerial image fue to the poor quality of availible aerial imagery.

LEGEND

- STORMWATER DRAIN
- FENCE
- TARGET ANOMALY
- SURFACE FEATURE
- CAR PARK
- ROAD
- NOT SURVEYED DUE TO TREES

ABN 77 009 550 869
ADVANCED SUBSURFACE INVESTIGATIONS
18 Fennell Street, NORTH PARRAMATTA NSW 2151, Australia
Telephone: (02) 9890 2122 Facsimile: (02) 9890 2922

CARDNO LANE PIPER

GEOPHYSICAL INVESTIGATION USING EM TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

DATE: 19th SEPTEMBER 2012 | PAPER SIZE: A3
DATUM: GDA UTM ZONE 55 | DRAWN: AB
DRAWING NUMBER: GBGA1487_A2 REV: 2

18 Fennell Street,
North Parramatta, NSW. 2151.
Tel: 9890 2122. Fax: 9890 2922.
E-Mail: andrew.b@gbgoz.com.au.

A.B.N. 77 009 550 869.

4th April 2013

Attention: Mr. Danny McDonald
Associate Environmental Geoscientist
Cardno Lane Piper
Building 2, 154 Highbury Road
Burwood, Victoria 3125

GBGA Ref: 1556

SUBJECT: GEOPHYSICALINVESTIGATION OF POSSIBLE DRUM BURIAL AT THE CFA TRAINING COLLEGE, FISKVILLE, VICTORIA.

GBG Australia carried out a non-destructive investigation using time-domain electromagnetic induction (TEM) on the grounds of the CFA Training College in Fiskville, Victoria, on Wednesday 27th March 2013.

The objective of the investigation was to locate possible buried drums in a section of the college grounds known as the "golf course" as part of remediation efforts on the site.

The following report outlines the methodology of the investigation and discusses the results.

SITE LOCATION AND CONDITIONS

The area surveyed is located directly south of Drum Burial Area 3 (surveyed previously, see *GBGA1471_A3.pdf* and *GBGA1471_Rev Report_2.pdf* for results). The area is approximately 3,000m^2 and has been designated 'Drum Burial Area 3a'. Figure 1 below is an aerial image of the site outlining the investigation area.

Figure 1. Aerial image of the survey site Drum Burial Area 3a (highlighted in green). Also shown is the location of Drum Burial Area 3 (highlighted in gray hatch) Image courtesy of Google Earth (16 Aug 2012).

The area predominately consists of an open grass field. Features of the area includes:

- A large concrete cable anchor (see Figure 2a below).
- A drainage ditch runs across part of the site (see Figure 2b below).
- A large patch of sand centred on the golf flag. Two grass mounts are located on its perimeter (see Figure 2c below).
- Raised section of grass serving as a golf tee (see Figure 2d below).

Figure 2. Major features of the Drum Burial Area 3a including: a) concrete cable anchor, b) drainage ditch, c) golf hole & surrounding mounds and d) raised golf tee.

DATA COLLECTION

Data was collected using a time-domain electromagnetic induction (TEM) system. For more information about the TEM method, please refer to Appendix A.

The survey was undertaken using an EM61-MK2 with 1m x 0.5m sensor coils (Figure 2) that transmits a primary electromagnetic field and records up to four time-gates of secondary electromagnetic field in millivolts (mV). The sensor was mounted on a cart and pulled by hand at walking pace in lines one (1) metre apart to ensure full coverage of the site. The sensor was configured to record five (5) readings every second.

Spatial position of the TEM data was recorded by an attached Differential Global Positioning System (DGPS) receiver with each reading having associated positional information with an accuracy of less than 1m. Both the TEM and DGPS data were combined and recorded using the EM61MK2 collection software on a field recorder by the field geophysicist.

Figure 2. EM61-MK2 set up as as a cart.

DATA PROCESSING & ANALYSIS

Processing and analysis of collected data was undertaken in a number of steps:

1. Raw data was converted from binary format to ascii format.
2. The Converted data was combined with GPS data, analysed and corrected for any errors.
3. GPS corrected data was then gridded.
4. Parts of the gridded data were blanked out so as to clip areas not surveyed.
5. Colour range and scale were altered to better highlight detected anomalies.

The first two steps were undertaken in the Geonics program DAT61MK2, while the last three steps were undertaken in the Golden Software program Surfer. The result of these steps was a colour contour image which shows changes in conductivity over the entire area.

RESULTS & DISCUSSION

The results of the investigation have been provided in the drawing GBGA1556-A3a. The drawing contains two (2) aerial images of the surveyed area overlaid with two (2) colour contour maps of the collected data. The drawing is geo-referenced using GDA94 UTM Zone 55 datum.

The image on the right is the gridded response of the D3 component which shows the responses of the deeper objects, while the image on the right is the gridded response of the Top (Differential) component (background variations removed) and hence shows only anomalies. A number targets (labelled 1 to 15) were identified throughout the area.

Most targets identified are discrete anomalies (nearest anomaly greater than five (5) meters away). Due to the higher responses compared to the background, most targets represent potential buried drums. Comparison of these high conductivity responses from Channel D3 with the standard response curve from a 55 Gallon Steel drum suggest that these anomalies are between 1.5m and 2m below the surface. The standard response curve can be seen in Appendix B, it should be noted that these depths assume the target anomaly is a 55 gallon steel drum buried in a vertical position.

Target 15 is a large, abnormally high response and is typically indicative of surface metal. As such it is believed that this target is the result of scrap metal on or near the surface.

An area of concentrated high conductivity anomalies can be found in the eastern end of the survey area. Targets 7, 9, 10, 11, 13, 14 are found within this area. Based on previous work on site, the concentrated nature of these anomalies suggests the presence of a large amount of buried metallic material, potentially drums.

The location of each target, the estimated depth, size and likelihood of drum is summed up in Table 1 below.

Table 1. Target Location Characteristics

ID	Easting	Northing	Size (Diameter)	Approx. Depth mm	Chance of Drum?
1	254899.91	5825883.99	1m	1800-2000	Moderate
2	254900.98	5825887.50	1m	1800-2000	Moderate
3	254905.86	5825891.01	1m	1800-2000	Low
4	254914.54	5825881.25	2m	1800-2000	Moderate
5	254927.35	5825869.36	2m	1800-2000	Moderate
6	254932.22	5825880.18	2m	1800-2000	Moderate
7	254940.15	5825874.55	3m	1500-1800	High
8	254941.52	5825866.32	2m	1800-2000	Moderate
9	254942.89	5825872.11	3m	1500-1800	High
10	254946.40	5825875.61	3m	<1500	High
11	254948.53	5825873.78	3m	<1500	High
12	254952.80	5825862.20	1m	1800-2000	Low
13	254952.95	5825874.24	2m	1500-1800	High
14	254954.78	5825871.19	3m	1500-1800	High

15	254958.89	5825883.39	5m	<1500	Low

CONCLUSIONS

- An EM61 survey was conducted on site Drum Burial Area 3a, located on the "golf course" at CFA Training College, Fiskville. The purpose of which was to locate any buried drums.

- The site was found to contain fifteen (15) anomalies consistent with potential buried drums. The location and GPS coordinates of these anomalies can be found in this report and on drawing GBGA1556_A3a.pdf.

- A concentrated area of anomalies was found in the eastern section of the survey area. This concentrated area could represent an area of buried metallic material, including possible buried drums.

I hope that this provides you with the information required. If you require clarification on any points arising from this investigation please contact me on (02) 9890 2122.

For and on behalf of
GBG AUSTRALIA PTY LTD

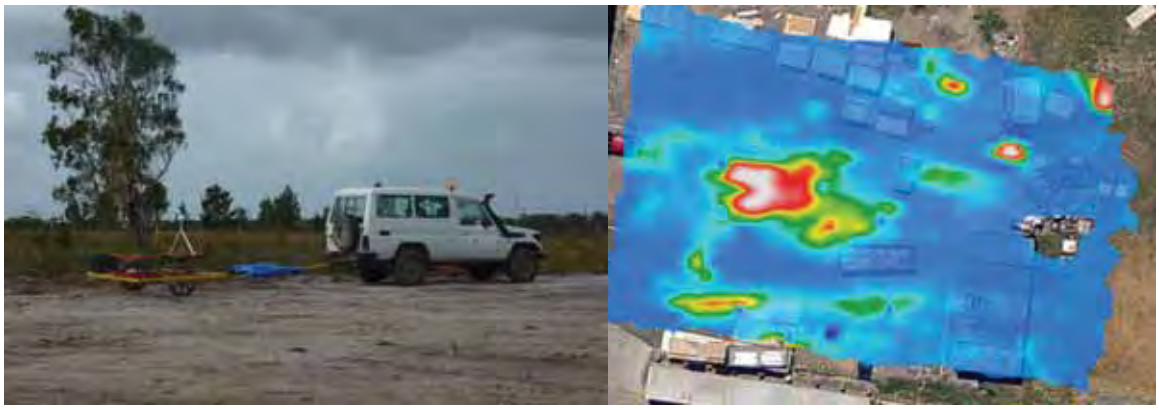
ANDREW BUCHEL
Geophysicist – B.Sc. (Hons)

APPENDIX A: TEM METHOD

Theory

Time Domain Electro-Magnetic (TEM) surveying uses the principle of electromagnetic induction to measure changes in the electrical conductivity of the subsurface. Time-Domain Electro-Magnetics (TEM) is sensitive to variations in the electrical conductivity of the subsurface. This is influenced by bulk variations in the subsurface porosity and permeability, and degree of saturation, as well as discrete variations due to buried metallic objects.

A primary electric current is passed through a transmitting coil and a produces a primary magnetic field in the space surrounding the coil including the subsurface. When the current is switched off, the magnetic field induces a turbulent electric current (eddy currents) in the ground and in nearby buried conductors. These currents decay with time and cause a decaying secondary magnetic field at the surface. Measurement of the rate of decay of the secondary magnetic field provides variation of conductivity with depth and a means of detecting buried conductive bodies.

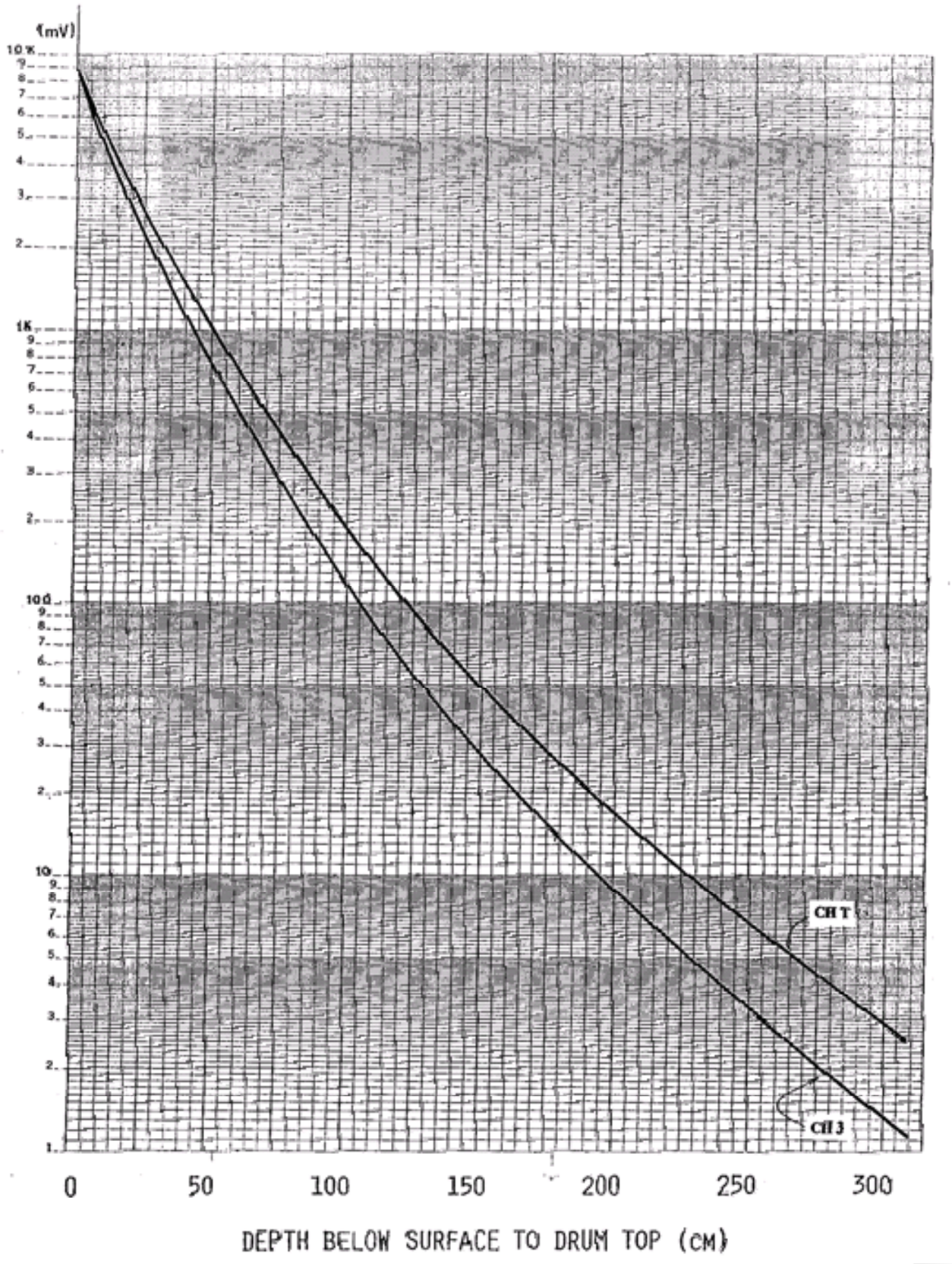


Figures. A) Collecting TEM data with the EM61and B) Sample of processed data.

Limitations

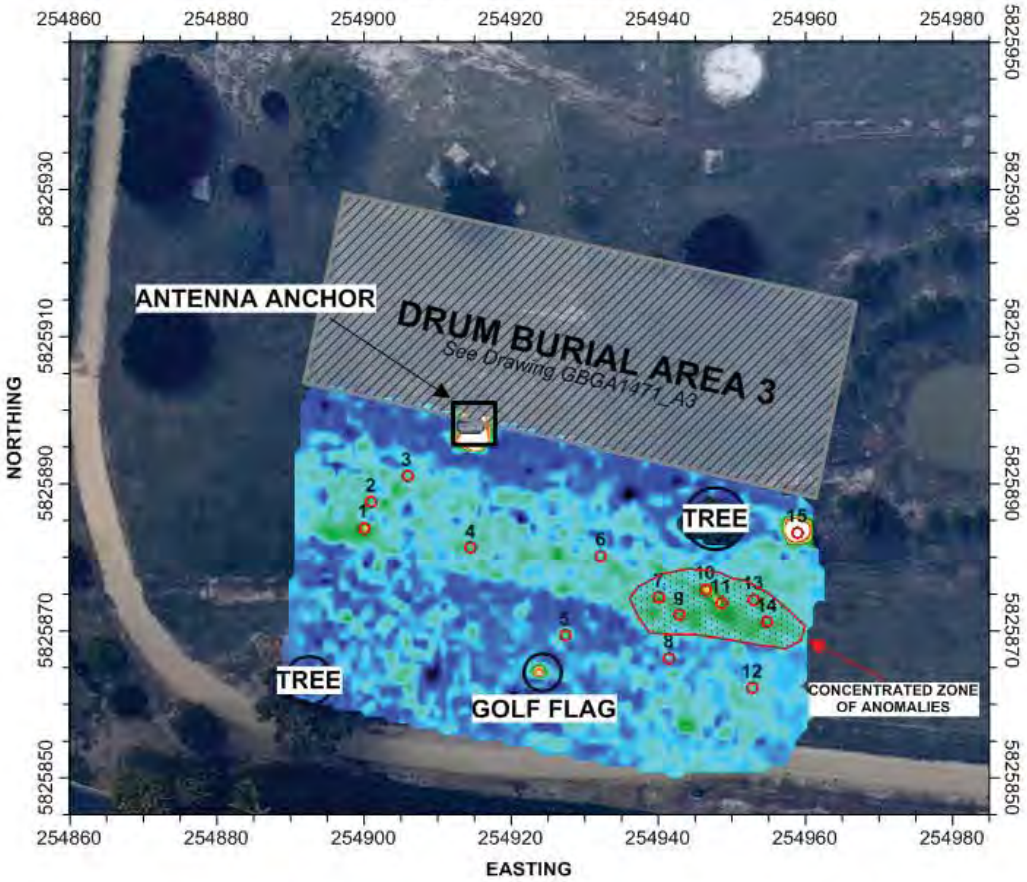
1) The response from the drum measured by EM61 is classified as an anomaly only if the signal from the drum is more than background signal.
2) Noise (background and instrumental) can act as a dampener and therefore limits data resolution and depth of data acquisition.
3) Any significant contact at the surface will mark response from greater depths and hence limit resolution of data.
4) External metallic objects like radios, generators, power transmission lines, transportation infrastructure, and electromagnetic devices can affect the input signal.
5) Highly conductive soils can limit the effective penetration of these instruments.
6) While determining the size and depth of the drum, orientation is not taken into account; therefore the drum can be horizontal, vertical or inclined.
7) The depth of drum is determined using depth vs. intensity graphs and is an approximation, these depths are only valid if the target anomaly is a 55 gallon steel drum buried vertically.

APPENDIX B: Standard Response Curve for a 55 Gallon Steel Drum

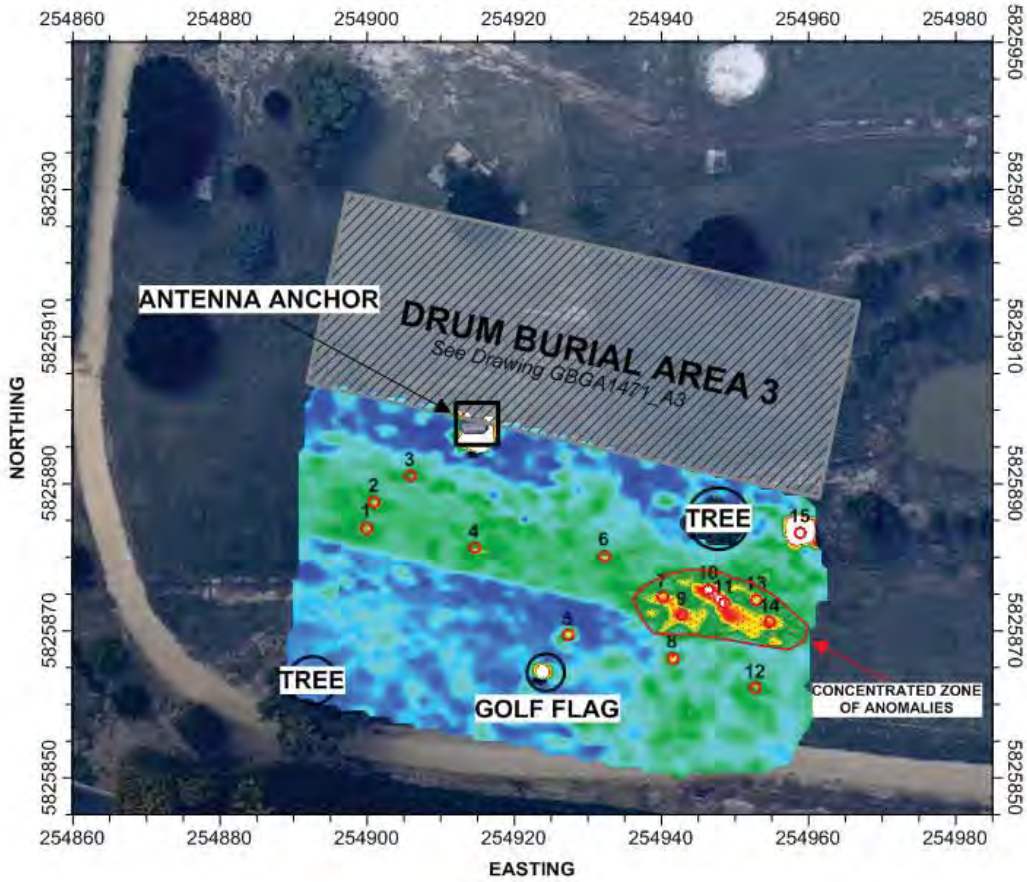


DRUM BURIAL - AREA 3a
CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

T (DIFFERENTIAL)

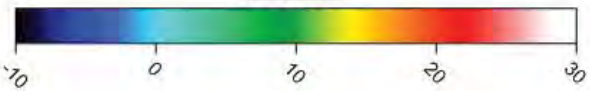


D3 (DEEPER RESPONSE)



SCALE

SCALE



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4	254914.54	5825881.25
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ID	Easting	Northing
6	254932.22	5825880.18
7	254940.15	5825874.55
8	254941.52	5825866.32
9	254942.89	5825872.11
10	254946.40	5825875.61

ID	Easting	Northing
11	254948.53	5825873.78
12	254952.80	5825862.20
13	254952.95	5825874.24
14	254954.78	5825871.19
15	254958.89	5825883.39

NOTES:

Scale is in millivolts (mV).

LEGEND

- TARGET ANOMALY
- SURFACE FEATURE
- CONCENTRATED ZONE OF ANOMALIES

ABN 77 009 550 869

ADVANCED SUBSURFACE INVESTIGATIONS

18 Fennell Street, NORTH PARRAMATTA NSW 2151, Australia

Telephone: (02) 9890 2122 Facsimile: (02) 9890 2922

CARDNO LANE PIPER

GEOPHYSICAL INVESTIGATION USING EM61 TO LOCATE BURIED DRUMS AT CFA TRAINING GROUNDS, FISKVILLE, VICTORIA.

DATE: 2nd APRIL 2013 | PAPER SIZE: A3

DATUM: GDA UTM ZONE 55 | DRAWN: AB VER: 1.0

DRAWING NUMBER: GBGA1556_A3a

Appendix F
217 Pages

Laboratory Reports & Chain of Custody Records

Chain of Custody Records

EM1210519

EM1223327

EM1303970

376257

Data Quality Validation Report

Cardno LanePiper

Chain of Custody

Sheet 1 of 3

Name: Maria Delos Reyes
Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497
Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125
Email: maria.delosreyes @cardno.com.au
Project Number: 212163.1 Site: Fiskville
Laboratory (name, phone,fax no & contact person) SARAH HODGSON

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Water	Soil	Sludge	Other (Specify)	Composite	Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	HOLD	TRH/BTEX/Pb (CL)
BH1A /0.5	1	SOIL JAR	6/09/12			X				X				X	
BH1B/0.5	2	↓	↓			↓				↓				↓	
BH1C /0.5	3	↓	↓			↓				↓				↓	
BH1D /0.5	4	↓	↓			↓				↓				↓	
TPA1.1 /0.5	5	↓	7/09/12			↓				↓				↓	
TPA1.1 /1.0	6	↓	↓			↓				↓				↓	
TPA1.1 /1.5	7	↓	↓			↓				↓				↓	
TPA1.2 /0.5	8	↓	↓			↓				↓				↓	
TPA1.2 /1.0	9	↓	↓			↓				↓				↓	
→ TPA1.2 /1.5	Not received – RJ 10.9.12		↓			↓				↓				↓	
TPA1.3 /0.5	10	↓	↓			↓				↓				↓	
TPA1.3 /0.8	11	↓	↓			↓				↓				↓	
TPA1.4 /0.5	12	↓	↓			↓				↓				↓	
TPA1.4 /1.0	13	↓	↓			↓				↓				↓	
TPA1.4 /1.5	14	↓	↓			↓				↓				↓	
TPA1.5 /0.5	15	↓	↓			↓				↓				↓	

Environmental Division
Melbourne
Work Order
EM1210519
Telephone : +61-3-8549 9600

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.
Sampler name: (print and signature) MARIA DELOS REYES. [signature] Date: 10/09/2012

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA - D REYES [signature]	10/9/2012	12:00	[signature]	10.9.12	3pm.
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ESDAT files.
Turn around time: (24 hour/48 hour/5 days) Please circle

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Cardno LanePiper

Chain of Custody

Sheet 2 of 3

Name: Maria Delos Reyes	
Phone: 03 9888 0100 **Fax:** 03 9808 3511 **Mobile:** 0424278497	
Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125	
Email: maria.delosreyes @cardno.com.au	
Project Number: 212163.1 **Site:** Fiskville	
Laboratory (name, phone,fax no & contact person) SARAH HODGSON	

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	Analysis: HOLD	TRH/BTEX/MB (C40)	Comments
TPA1.5/1.0	16 SOIL	JAR	7/09/12			X				X				X		
TPA1.5/1.5	17															
TPA1.12/0.5	18															
TPA1.12/1.0	19															
TPA1.12/1.5	20															
TPA1.13/0.5	21															
TPA1.13/1.0	22															
TPA1.13/1.5	23															
TPA2.1/0.5	24															
TPA2.1/1.0	25															
TPA2.1/1.5	26															
BH2A/0.5	27															
BHA2.3/0.5	28		5/09/12													→ 1.0 on jar reads BHB 0.5'
BHA2.5/0.5	29		5/09/12													→ 1.0 on jar reads BH5 0.5'
QC01/07092012	30		7/09/12													
QC02/07092012	31		"													

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name:(print and signature) MARIA DELOS REYES Date: 10/9/12

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA D. REYES	10/9/12	12:00			
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ~~EDDAT~~ files.

Turn around time: (24 hour/48 hour/5 days)

Please circle

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Chain of Custody

Sheet 3 of 3

Name: Maria Delos Reyes

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

Email: maria.delosreyes@cardno.com.au

Project Number: 212163.1 Site: FISKVILLE

Laboratory (name, phone, fax no & contact person): SARAH HOGBO

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Water	Soil	Sludge	Other (Specify)	Composite	Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	HOLD
QC03/07092012	32	Amber metals	7/09/12		Y					X	Y			Y
QC04/07092012	33	metals	↓		↓					↓	↓			↓
QC05/07092012	34	VIAL (AMBER)	↓		↓					↓	↓			↓

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES [signature] Date: 10/9/2012

Relinquished by (Sampler): (print and signature) MARIA D. REYES [signature] Date 10/9/12 Time 12:00 Received by (Courier/Lab): (print and signature) Date Time

Relinquished by: (print and signature) Date Time Received by: (print and signature) Date Time

Relinquished by: (print and signature) Date Time Received by: (print and signature) Date Time

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days) — 5 days circled

Please circle

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Cardno LanePiper

Chain of Custody COC Receival 12/09/12 10:50 RT

Sheet 1 of 3

Name: Maria Delos Reyes	
Phone: 03 9888 0100 **Fax:** 03 9808 3511 **Mobile:** 0424278497	
Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125	
Email: maria.delosreyes @cardno.com.au	
Project Number: 212163.1 **Site:** Fiskville	
Laboratory (name, phone,fax no & contact person) SARAH HORGAN	

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	Analysis: HOLD	TRH/BTEX/VOC/Metals	VOC/TRH/SVOC/Metals									
BH1A /0.5	1	SOIL JAR	6/09/12			X				X				X											
BH1B/0.5	2																								
BH1C /0.5	3																								
BH1D /0.5	4																								
TPA1-1 /0.5	5		7/09/12																						
TPA1-1 /1.0	6															X									
TPA1-1 /1.5	7																								
TPA1-2 /0.5	8															X									
TPA1-2 /1.0	9																								
~~TPA1-2 /1.5~~	~~10~~																								
TPA1-3 /0.5	10																								
~~TPA1-3 /DUP~~	~~11~~															X									
~~TPA1-4 /0.5~~	~~12~~																								
~~TPA1-4 /1.0~~	~~13~~															X									
~~TPA1-4 /1.5~~	~~14~~																								
TPA1-5/0.5	~~15~~																								

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name:(print and signature) MARIA DELOS REYES Date: 10/09/2012

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA - D REYES	10/9/2012	12:00			
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days)

Please circle

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Cardno LanePiper

Chain of Custody

COC Received 12/09/12 10:50 RT

Sheet 2 of 3

Name: Maria Delos Reyes

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

Email: maria.delosreyes@cardno.com.au

Project Number: 212163.1 Site: Fiskville

Laboratory (name, phone,fax no & contact person) SARAH HODGSON

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO3/HCl	Unpreserved	Other (Specify)	HOLD	TRH/BTEX/PB (CP)
TPA1.5/1.0	16 17	SOIL JAR	7/09/12			X				X				X	
TPA1.5/1.5	18 17	↓	↓			↓				↓				↓	X
TPA1.12/0.5	19 18	↓	↓			↓				↓				↓	X
TPA1.12/1.0	20 19	↓	↓			↓				↓				↓	
TPA1.12/1.5	21 20	↓	↓			↓				↓				↓	
TPA1.13/0.5	22 21	↓	↓			↓				↓				↓	
TPA1.13/1.0	23 22	↓	↓			↓				↓				↓	X
TPA1.13/1.5	24 23	↓	↓			↓				↓				↓	
TPA2.1/0.5	25 24	↓	↓			↓				↓				↓	
TPA2.1/1.0	26 25	↓	↓			↓				↓				↓	
TPA2.1/1.5	27 26	↓	↓			↓				↓				↓	X
BH2A/0.5	28 27	↓	↓			↓				↓				↓	X
BHA2.3/0.5	29 28	↓	5/09/12			↓				↓				↓	
BHA2.5/0.5	30 29	↓	5/09/12			↓				↓				↓	
QC01/07092012	31 30	↓	7/09/12			↓				↓				↓	X
QC02/07092012	31		"			↓				↓				↓	X

Sampler: I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler name:(print and signature) MARIA DELOS REYES [signature] Date: 10/9/12

Relinquished by	Date	Time	Received by	Date	Time
Relinquished by (Sampler): (print and signature) MARIA D. REYES [signature]	10/9/12	12:00	Received by (Courier/Lab): (print and signature)		
Relinquished by: (print and signature)			Received by: (print and signature)		
Relinquished by: (print and signature)			Received by: (print and signature)		

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days) Please circle

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Cardno Lane Piper

Chain of Custody COC Received 12/09/12 10:50 RT

Sheet 5 of 3

Name: Maria Delos Reyes

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424276497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

Email: maria.delosreyes@cardno.com.au

Project Number: 21263.1 Site: FISKVILLE

Laboratory (name, phone,fax no & contact person): SARAH HOCKEN

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	Analysis: HOLD
QC03/07092012	32	Amber Metals	7/09/12		X					X	X			X
QC04/07092012	33	Metals			↓					↓	↓			↓
QC05/07092012	34	VIAL (Nitrate)	↓		↓					↓	↓			↓

Sampler: I attest that the proper field sampling procedures were used during the collection of these samples

Sampler name:(print and signature): MARIA DELOS REYES Date: 10/9/2012

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA D REYES	10/9/12	12:00			
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days)

Please circle

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Raymond Thai

From: Sarah Hodgson
Sent: Wednesday, 12 September 2012 11:01 AM
To: Samples Melbourne
Subject: Cardno Lane Piper: 212163.1 COC with Analysis

Hello,

Please find attached COC for samples received yesterday, and for some more coming today, from Cardno Lane Piper on HOLD.

Please let me know if there are any issues with these samples.

Regards,

How was your customer experience? Please send us your feedback

Sarah Hodgson

PROJECT MANAGER

ALS | Environmental
Address
4 Westall Road
Springvale VIC 3171
www.alsglobal.com

PHONE +61 3 8549 9600
FAX +61 3 8549 9601

Winner of the inaugural CARE Award 2011 - Sustainable Technology & Innovation:
Reduction in Sample Volumes - Improving quality, safety, efficiency and sustainability in environmental practices

www.alsglobal.com

From: Maria De los Reyes (Cardno LP) [mailto:Maria.DelosReyes@cardno.com.au]
Sent: Wednesday, 12 September 2012 10:50 AM
To: Sarah Hodgson
Subject: 212163.1 COC with Analysis

Hi Sarah,

I sent an Esky to ALS yesterday, with all the samples on HOLD. Here are the COCs with the analysis.

There is also another ESKY coming in today from the same project. The COC will be attached to this email and you should also have a hard copy of it.

Thanks

Regards

Maria De los Reyes
ENVIRONMENTAL SCIENTIST
CARDNO LANE PIPER

Cardno LanePiper
Shaping the Future

Phone +61 3 9888 0100 Fax +61 3 9808 3511 Direct +61 3 9831 6139
Address Bldg 2, 154 Highbury Road, Burwood, Victoria 3125 Australia
Email Maria.DelosReyes@cardno.com.au Web www.lanepiper.com.au

RE: Your Reference : 212163 1. Deliverables for ALSE Workorder : EM1210519

Maria De los Reyes (Cardno LP)

Sent: Sunday, 30 September 2012 1:44 PM
To: crem@alsglobal.com

Hi Sarah,

Once again my apoligies, but we also need to rename these samples as the following.

TPA1.2/0.5=TPA1.4./0.5
TPA1.2/1.0=TPA1.4/1.0
TPA1.4/0.5=TPA1.5/0.5
TPA1.4/1.0=TPA1.5/1.0
TPA1.4/1.5=TPA1.5/1.5
TPA1.5/0.5=TPA1.6/0.5
TPA1.5/1.0=TPA1.6/1.0
TPA1.5/1.5=TPA1.6/1.5

TPA2.1/0.5=TPA2.3/0.5
TPA2.1/1.0=TPA2.3/1.0
TPA2.1/1.5=TPA2.3/1.5
BHA2.2/0.5=BHA2.4/0.5
BHA2.3/0.5=BHA2.5/0.5
BHA2.5/0.5=BHA2.7/0.5

Regards

Maria

From: alse.melbourne.aus@als.com.au [alse.melbourne.aus@als.com.au]
Sent: Tuesday, 18 September 2012 7:31 PM
To: Maria De los Reyes (Cardno LP)
Subject: Your Reference : 212163 1. Deliverables for ALSE Workorder : EM1210519

This e-mail has been automatically generated.
-- PLEASE DO NOT REPLY --

Cardno LanePiper

Chain of Custody

Received 26/09/12 16:27 RT

Butch as ES'

SCANNED

Sheet 1 of 2

Name: SRIJEETA DE

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0447 500 007

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

Email: srijeeta.de @cardno.com.au

Project Number: 21265-3 Site: CFA Fiskville

Laboratory (name, phone,fax no & contact person)

ALS

URGENT

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify) Ice	Analysis: HOLD	VOC, TPH, SVOC, Metals(LR)	TPH, 13 Metals
1	TPA2 /2-0.5		Soil Jar	26/9/12	8:30		✓							✓	X		
2	TPA2 /2-1.0														X		
~~3~~	~~TPA2 /~~																
3	TPA1 /8-0.5														X		X
4	TPA1 /8-0.8														X		
5	TPA1 /15-0.4			AM											X		
6	TPA1 /25-0.4			25/9	11:30										X		
7	TPA1 /25-1.1			25/9											X		
8	TPA1 /22-0.5			25/9/12											X		
9	TPA1 /22-0.8														X		
10	TPA1 /24-0.4 AM														X		
11	TPA1 /25-1.1 2F														X		
12	TPA1 /17-0.5														X		
13	TPA3 /1-1.0														X		
14	TPA3 /1-0.5														X		
~~15~~	~~TPA3 /1-1.5~~																

Environmental Division
Sydney
Work Order
ES1223327

Telephone : +61-2-8784 8555

Sampler: I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler name: (print and signature) SRIJEETA DE

Date: 26/9/12

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature) Frank	Date 28-9-12	Time 1100
	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days)

Please circle

3 day TAT

In accordance with your acceptance of our standard or customised Terms of Agreement between Cardno Lane Piper Pty Ltd and Service or Equipment Providers

Cardno LanePiper

Chain of Custody

Received 26/09/12 16:27 RT

Sheet 2 of 2

Name: SRIJEETA DE

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0447 500 007

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

Email: Srijeeta.de@cardno.com.au

Project Number: 212163.3 Site: CFA Fiskville

Laboratory (name, phone, fax no & contact person)

ALS

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: Water	Soil	Sludge	Other (Specify)	Composite	Sample preservation: Ice bricks	HNO_3/HCl	Unpreserved	Other (Specify)	Analysis: HOLD	BOC, SVOC, TPH, 13 Metal	TPH, 13 Metals
15	TPA3/1-1.5	25/9														X	
16	TPA3/5-0.5															X	
17	TPA3/5-1.0															X	
18	TPA3/5-1.5														X		
19	QC1	26/9															X
20	QC2														X		
21	QC3														X		
22	QC4														X		
	Extra sample																
23	TPA3/4-1.0	25/9															

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature)

Date:

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature) Frank	Date 28-9-12	Time 1100
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/5 days) Please circle

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Chain of Custody

Sheet_____of_____

(1)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 **Mobile: 0424278497**

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 **Site: Fiskville**

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL	Sample preservation: ICE	Analysis: (10) METALS 13	TPH (20)	VOC	SVOC	Hexa
1	TP-A1-28/0.1		SOIL JAR	4/04/13		X	X	X	X	X	X	X
2	TP-A1-28/0.5											X
3	TP-A1-28/0.9											X
4	TP-A1-29/0.1											X
5	TP-A1-29/0.5							[redacted]	X	[redacted]	[redacted]	
6	TP-A1-30/0.1											X
7	TP-A1-30/0.65								X	X	X	
8	TP-A1-31/0.1											X
9	TP-A1-31/0.5							X	X			
10	TP-A1-32/0.1											X
11	TPA1-32/0.5											X
12	TP-A1-32/0.65							[redacted]	X	X	X	
13	TP-A1-33/0.1											X
14	TP-A1-33/0.5							X	X	X	X	
15	TP-A1-34/0.1											X

SCANNED

Environmental Division
Melbourne
Work Order
EM1303970

R5

Telephone : +61-3-8549 9600

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOSREYES Date: 4/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DELOSREYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
			WYam ALS	18.4.13	11 AM

Please supply results electronically in spreadsheet and ESDAT files.

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Cardno LanePiper

Chain of Custody

Sheet _____ of _____ (2)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL	Sample preservation: ICE BRICKS	Analysis: METALS (13)	TPH	VOC	SVOC	HOLD
16	TP-A1-34/0.5		SOIL JAR	11/04/13		X	X					X
17	TP-A1-34/0.7							X	X	X	X	
18	TP-A1-35/0.1								X	X	X	
19	TP-A1-35/0.5											X
20	TP-A1-36/0.1							X	X	X	X	
21	TP-A1-36/0.5											X
22	TP-A1-36/0.7											X
23	TP-A1-37/0.1											X
24	TP-A1-37/0.3											X
25	TP-A1-37/0.9								X			
26	~~TP-A1-37/1.1~~			12/04/13								X
27	TP-A2a-1/0.1											X
28	TP-A3a-1/0.5											X
29	TP-A3a-1/1.0											X
30	TP-A3a-1/1.4							X	X	X	X	

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES Date: 11/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DE LOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
				18-4-13	11AM

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Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

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Chain of Custody

Sheet_____of_____ (3)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL	Sample preservation: ICE BRICK	Analysis: METALS (13)	Analysis: TPH	Analysis: VOC	Analysis: SVOC	Analysis: HOLD
31	TP-A3G-02/0.1		SOIL JAR	12/04/13		X	X					X
	~~TP-A3G-02/0.4~~											
32	TP-A3G-02/1.0											
33	TP-A3G-02/1.3											
34	TP-A3G-03/0.1											
35	TP-A3G-03/0.5											
36	TP-A3G-03/1.0											
37	TP-A3G-03/1.2											
38	TP-A3G-04/0.1							X	X	X	X	
39	TP-A3G-04/0.5											X
40	TP-A3G-04/1.0											
41	TP-A3G-04/1.3											
42	TP-A3G-05/0.1											
43	TP-A3G-05/0.5											
44	TP-A3G-05/0.9		▼	▼		▼	▼					▼

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES Date: 12/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DE LOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
				18-4-13	11Am

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

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Chain of Custody

Sheet_____of_____ (4)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL JAR	Sample preservation: ICE BRICKS	Analysis: METALS	TPH	VOC	SVOC	HOLD
45	TP-A3a -05/1.3		SOIL JAR	12/04/13		X	X		X	X	X	
46	TP-A3a -06/0.1											XX
47	TP-A3a -06/0.4											XX
48	TP-A3a -06/1.0											XX
49	TP-A3a -07/0.1								X			X
50	TP-A3a -07/0.9											X
51	TP-A3a -07/0.5											XX
52	TP-A3a -07/1.4											XX
53	TP-A3a -08/0.1							X	X	X	X	
54	TP-A3a -08/0.5											XX
55	TP-A3a -08/0.9											X
56	TP-A3a -09/0.1							X	X	X	X	
57	TP-A3a -09/0.6	missing = Not received		Run ASAP								XX
58	TP-A3a -10/0.1											XX
	TP-A3a -10/0.3											X

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DE LOS REYES Date: 12/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DE LOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature) ALS	Date 18.4.13	Time 11AM

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

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Chain of Custody

Sheet_____of_____ (5)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL	Sample preservation: ICE BRICKS	Analysis: METALS (13)	TPH	VOC	SVOC	HOLD
59	TP-A3a-10/1.0		SOIL JAR	12/04/13		X	X		X			
60	TP-A3a-10/1.2											X
61	TP-A3a-11/0.1											X
62	TP-A3a-11/0.6								X	X	X	
63	TP-A3a-12/0.1											X
64	TP-A3a-12/0.5											X
65	TP-A3a-12/1.3											X
66	TP-A3a-13/0.1							X	X	X	X	
67	TP-A3a-13/0.5											X
68	TP-A3a-13/1.0											X
69	TP-A3a-14/0.1											X
70	TP-A3a-14/0.5								X			
71	TP-A3a-15/0.1											X
72	TP-A3a-15/0.5											X
73	TP-A3a-15/1.0											X

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOSREYES Date: 12/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DELOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
			Virgan 'ALP	18-4-13	11Am

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

Cardno LanePiper

Chain of Custody

Sheet_____of_____ (6)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	Sample preservation: ICE BRICKS	HCl	Analysis: METALS (13)	TPH	VOC	SVOC	HOLD
74	TP-A3a-16/0.1		SOIL JAR	12/04/13		x		x						x
75	TP-A3a-16/0.54													x
76	TP-A3a-16/0.9													x
77	TP-A3a-16/1.84													x
	110413													
78	QC01 / ~~120413~~ 110413			11/04/13						x	x	x	x	
	QC02 / 110413									x	x	x	x	— send to MGT
79	QC03 / 110413													x
80	QC04 / 110413													
81	QC05 / 120413			12/04/13										
82	QC06 / 120413													
83	QC07 / 120413		SOIL JAR											
84	QC08 / 120413		SOIL JAR											
85	QC09 / 110413		x2 vials amber	11/04/13			x		x					x
86	QC10 / 120413		x2 vials amber	12/04/13			x	x						x

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES Date: 12/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DELOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
				18.4.13	11Am

EM130 3970

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

Cardno LanePiper

Chain of Custody

Sheet_____of_____

(7)

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

	Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: WATER	Sample Matrix:	Sample Matrix:	Sample Matrix:	Sample Matrix:	Sample preservation: HCL	Sample preservation: ICE BRICKS	Sample preservation:	Sample preservation:	Analysis: METALS (8)	Analysis: TPH	Analysis: VOC	Analysis: SVOC	Analysis: HOLD	Analysis:	Analysis:	Analysis:	Analysis:	Analysis:	Analysis:	Analysis:	Analysis:
87	QC11 / 1104 13		vial	11/04/13		x					x	Y							x								
88	QC12 / 1204.13		vial	12/04/13		x					x	x							x								
89	QC13 / 120413		vial	"	"	x					x	x							x								
90	TP-A3a- 11 / 1.0		SOIL JAR	12/04/13		SOIL						x							x								
91	TP-A3a- 11 / 1.2		↓	↓		↓						x							x								
→	TP-A3a- 15/0-1	MISSing - Not received. ↑ Purchase										x							x								
	extra sample:																										
92	TP-A3a - 02 /0.4	12/4/13	} Purchase	18/04/13																							
93	TP-A1-30/0.9	11/4/13																									
94	TP-A3a-7 /0.6	12/4/13																									
95	TP-A1-34/0.6	11/4/13																									

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES Date: 12/04/13

Relinquished by (Sampler): (print and signature) MARIA DELOS REYES	Date 18/04/13	Time	Received by (Courier/Lab): (print and signature)	Date 12/04/13		Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date		Time
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date 18-4-13		Time 11 AM

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

Raymond Thai

From: Carol Walsh
Sent: Friday, 19 April 2013 9:19 AM
To: Samples Melbourne
Cc: Peter Ravlic
Subject: ISSUES: EM1303970 - FISKVILLE - LANECON

Please see responses below from Maria at Cardno about issues with EM1303970.

See my queries to her below and her responses to these queries.

Kind Regards

Carol Walsh

Senior Client Services Officer
ALS | Environmental Division

4 Westall Rd
Springvale, VIC. 3171 Australia

T +61 3 8549 9600
F +61 3 8549 9626

www.alsglobal.com

From: Maria De los Reyes (Cardno LP) [mailto:Maria.DelosReyes@cardno.com.au]
Sent: Friday, 19 April 2013 9:13 AM
To: Carol Walsh
Subject: RE: EM1303970 - FISKVILLE - LANECON

Hi Carol,

In regards to your email.

1. Please just not samples was not received on COC, it should be ok as an analysis was not requested for these samples,
2. Yea please keep them on hold.
3. QC07 and QC08 should be 12/04/13
4. And yes that should be correct.

Thanks Carol.

Has analysis already begun, and if so when will we expect results so I can update my PM.

Regards

Maria De los Reyes
ENVIRONMENTAL SCIENTIST
CARDNO LANE PIPER

Cardno LanePiper
Shaping the Future

Phone +61 3 9888 0100 Fax +61 3 9808 3511 Direct +61 3 9831 6139
Address Bldg 2, 154 Highbury Road, Burwood, Victoria 3125 Australia
Email Maria.DelosReyes@cardno.com.au Web www.cardno.com Web www.lanepiper.com.au

---

From: Carol Walsh [mailto:Carol.Walsh@alsglobal.com]
Sent: Thursday, 18 April 2013 3:31 PM
To: Maria De los Reyes (Cardno LP)
Cc: Samples Melbourne
Subject: FW: EM1303970 - FISKVILLE - LANECON

Hi Maria

There were few issues with this attached work order - EM1303970.

Please review items below and respond at your earliest convenience.

1. Did not receive samples for TP-A3a-09/0.6 and TP-A3a-15/0.1 (indicated on the COC)

2. Received extra samples labelled as , TP-A3a-02/0.4, TP-A1-30/0.9, TP-A3a-7/0.6 and TP-A1-34/0.6. These have been added to the COC as sample 92,93,94, 95 and are currently on hold. Please advise if any analysis is required on these samples.

3.Sampling dates for sample 83 (QC07/120412)and 84 (QC08/120413) on the jars were 11/04/13. On COC it was 12/04/13. **Please confirm sampling date.**

4. Sample 19, jar was labelled as TP-A1-35/0.1. But lid was labelled as TP-A1-35/0.5. As we received correctly labelled (both lid and jar) sample for sample 18, which was TP-A1-35/0.1 assumed lid ID as the correct ID for sample number 19.

Kind Regards

Carol Walsh

Senior Client Services Officer
ALS | Environmental Division

4 Westall Rd
Springvale, VIC. 3171 Australia

How was your customer experience? Please send us your feedback

Cardno LanePiper

Chain of Custody

COURIER

Sheet_____of_____

PM Name: Danny Mcddonald

Phone: 03 9888 0100 Fax: 03 9808 3511 Mobile: 0424278497

Address: Building 2, 154 Highbury Rd, Burwood, Vic, 3125

PM Email: Maria.delosreyes@cardno.com.au

Project Number: 212163.3 Site: Fiskville

Laboratory (name, phone,fax no & contact person)

Sample ID	Laboratory ID	Container	Sampling Date	Sampling Time	Sample Matrix: SOIL JAR	Sample Matrix: WATER	Sample preservation: ICE BRICKS	Sample preservation: HCL	Analysis: METALS (13)	Analysis: TPH	Analysis: VOC	Analysis: SVOC	Analysis: HOLD	Analysis: Pugh (2)
TP-A3a-16/0.1		SOIL JAR	12/04/13		x		x						x	
TP-A3a-16/0.84													x	
TP-A3a-16/0.9													x	
TP-A3a-16/1.84													x	
110413														
QC01 / ~~110313~~			11/04/13						x	x	x	x		
QC02 / 110413									x	x	x	x	x	send to MGT
QC03 / 110413													x	
QC04 / 110413														
QC05 / 120413			12/04/13											
QC06 / 120413														
QC07 / 120413		SOIL JAR												
QC08 / 120413		SOIL JAR												
QC09 / 110413		x2 vials Amber	11/04/13			x		x					x	
QC10 / 120413		x2 vials Amber	12/04/13			x		x					x	

Sampler: I attest that the proper field sampling proceedures were used during the collection of these samples.

Sampler name: (print and signature) MARIA DELOS REYES Date: 12/04/13

Relinquished by (Sampler): (print and signature)	Date	Time	Received by (Courier/Lab): (print and signature)	Date	Time
MARIA DELOS REYES	18/04/13				
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
	18/4	11:30			
Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
				18-4-13	11Am

Tony W 18/4/13 2:11 PM

EFI MEL

Report: 376257

Please supply results electronically in spreadsheet and ESDAT files.

Turn around time: (24 hour/48 hour/3 days/5 days) Please circle

CERTIFICATE OF ANALYSIS

Work Order	: **EM1210519**	Page	: 1 of 12
Client	: **CARDNO LANE PIPER PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: MS MARIA DE LOS REYES	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: maria.delosreyes@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2012
Sampler	: MDLR	Issue Date	: 18-SEP-2012
Site	: Fiskville		
		No. of samples received	: 34
Quote number	: ME/441/12	No. of samples analysed	: 11

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Organics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EP075: EM1210519-011 Particular sample required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.**
- **EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs**

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID	TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
					EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		23.4	19.9	24.8	24.1	23.2
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	<5	----
Barium	7440-39-3	10	mg/kg		20	<10	50	230	----
Beryllium	7440-41-7	1	mg/kg		1	<1	<1	2	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg		60	39	58	63	----
Cobalt	7440-48-4	2	mg/kg		4	<2	8	94	----
Copper	7440-50-8	5	mg/kg		9	<5	9	11	----
Lead	7439-92-1	5	mg/kg		14	12	62	10	----
Manganese	7439-96-5	5	mg/kg		13	12	58	396	----
Nickel	7440-02-0	2	mg/kg		10	4	15	50	----
Vanadium	7440-62-2	5	mg/kg		98	148	106	73	----
Zinc	7440-66-6	5	mg/kg		6	<5	17	10	----
Lead	7439-92-1	5	mg/kg		----	----	----	----	10
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	<5	<5	<5	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	<5	<5	<5	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	<5	<5	<5	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
Compound	CAS Number	LOR	Unit		EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP074B: Oxygenated Compounds - Continued									
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	<5	<5	<5	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	<5	<5	<5	----
Chloromethane	74-87-3	5	mg/kg		<5	<5	<5	<5	----
Vinyl chloride	75-01-4	5	mg/kg		<5	<5	<5	<5	----
Bromomethane	74-83-9	5	mg/kg		<5	<5	<5	<5	----
Chloroethane	75-00-3	5	mg/kg		<5	<5	<5	<5	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	<5	<5	<5	----
1.1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time: 07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
				EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP074E: Halogenated Aliphatic Compounds - Continued								
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP075A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<1.0	<1.0	<3.0	<1.0	----
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	<3	<1	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
Compound	CAS Number	LOR	Unit		EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	<1	<3	<1	----
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
^ Sum of PAHs	----	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	<5.0	<15.0	<5.0	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
2.6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID	TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
					EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP075E: Nitroaromatics and Ketones - Continued									
2.4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Azobenzene	103-33-3	1	mg/kg		<1	<1	<3	<1	----
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Phenacetin	62-44-2	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Pronamide	23950-58-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
EP075G: Chlorinated Hydrocarbons									
1.3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	<2.5	<7.5	<2.5	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	<1.0	<3.0	<1.0	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	<0.5	<1.5	<0.5	----

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time: 07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
				EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP075H: Anilines and Benzidines - Continued								
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
4.4`-DDT	50-29-3	1.0	mg/kg	<1.0	<1.0	<3.0	<1.0	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	<1.5	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID	TPA1.1/1.0	TPA1.2/0.5	TPA1.3/0.8	TPA1.4/1.0	TPA1.5/1.5
				Client sampling date / time	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
					EM1210519-006	EM1210519-008	EM1210519-011	EM1210519-013	EM1210519-017
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
C6 - C10 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg		----	----	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		----	----	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg		----	----	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	----	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	----	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	----	----	----	<0.5
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg		----	----	----	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg		----	----	----	----	<0.2
Naphthalene	91-20-3	1	mg/kg		----	----	----	----	<1
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		78.4	84.8	81.8	80.0	----
Toluene-D8	2037-26-5	0.1	%		72.4	89.1	89.6	87.0	----
4-Bromofluorobenzene	460-00-4	0.1	%		78.9	96.4	93.5	85.9	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.1	%		78.7	78.6	76.5	56.0	----
Phenol-d6	13127-88-3	0.1	%		79.9	77.6	77.8	54.3	----
2-Chlorophenol-D4	93951-73-6	0.1	%		78.0	77.8	78.2	55.5	----
2.4.6-Tribromophenol	118-79-6	0.1	%		104	86.3	78.3	54.2	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.1	%		77.2	75.9	72.9	55.1	----
1.2-Dichlorobenzene-D4	2199-69-1	0.1	%		65.7	67.4	68.7	49.7	----
2-Fluorobiphenyl	321-60-8	0.1	%		81.2	77.8	76.1	56.6	----
Anthracene-d10	1719-06-8	0.1	%		106	87.8	85.6	64.3	----
4-Terphenyl-d14	1718-51-0	0.1	%		104	86.5	81.1	62.6	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		81.9	88.5	85.4	83.5	82.8
Toluene-D8	2037-26-5	0.1	%		72.4	79.7	80.2	78.0	90.8
4-Bromofluorobenzene	460-00-4	0.1	%		76.0	83.8	82.7	83.0	106

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1.12/0.5	TPA1.13/1.0	TPA2.1/1.5	BH2A/0.5	QC01/07092012
				Client sampling date / time: 07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00	07-SEP-2012 15:00
				EM1210519-018	EM1210519-022	EM1210519-026	EM1210519-027	EM1210519-030
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	19.4	20.1	27.8	28.9	22.2
EG005T: Total Metals by ICP-AES								
Lead	7439-92-1	5	mg/kg	21	12	12	12	18
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080: BTEXN								
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	76.8	72.5	79.9	92.0	71.6
Toluene-D8	2037-26-5	0.1	%	81.1	78.3	87.3	99.7	78.4
4-Bromofluorobenzene	460-00-4	0.1	%	95.4	89.7	99.6	115	87.6

Analytical Results

Sub-Matrix: SOIL				Client sample ID	QC02/07092012	----	----	----	----
				Client sampling date / time	07-SEP-2012 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EM1210519-031	----	----	----	----
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		**24.0**	----	----	----	----
EG005T: Total Metals by ICP-AES									
Lead	7439-92-1	5	mg/kg		**15**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	----	10	mg/kg		<10	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	----	----	----
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**70.4**	----	----	----	----
Toluene-D8	2037-26-5	0.1	%		**76.9**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**87.1**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP074S: VOC Surrogates			
1.2-Dichloroethane-D4	17060-07-0	62	122
Toluene-D8	2037-26-5	64	120
4-Bromofluorobenzene	460-00-4	66	124
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	14	126
Phenol-d6	13127-88-3	12.2	122
2-Chlorophenol-D4	93951-73-6	14.2	127
2.4.6-Tribromophenol	118-79-6	12.4	133
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	12.4	128
1.2-Dichlorobenzene-D4	2199-69-1	11.6	108
2-Fluorobiphenyl	321-60-8	18.7	127
Anthracene-d10	1719-06-8	28.5	142
4-Terphenyl-d14	1718-51-0	25.8	138
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	57	129
Toluene-D8	2037-26-5	58	120
4-Bromofluorobenzene	460-00-4	56	126

QUALITY CONTROL REPORT

Work Order	: **EM1210519**	Page	: 1 of 19
Client	: **CARDNO LANE PIPER PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: MS MARIA DE LOS REYES	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: maria.delosreyes@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: Fiskville		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2012
Sampler	: MDLR	Issue Date	: 18-SEP-2012
Order number	: ----		
		No. of samples received	: 34
Quote number	: ME/441/12	No. of samples analysed	: 11

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Organics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (QC Lot: 2497419)									
EM1210439-026	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	---	1.0	%	15.4	16.3	5.4	0% - 50%
EM1210519-008	TPA1.2/0.5	EA055-103: Moisture Content (dried @ 103°C)	---	1.0	%	19.9	15.7	23.6	0% - 50%
EG005T: Total Metals by ICP-AES (QC Lot: 2498206)									
EM1210519-006	TPA1.1/1.0	EG005T: Beryllium	7440-41-7	1	mg/kg	1	1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	20	30	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	60	72	18.4	0% - 20%
		EG005T: Cobalt	7440-48-4	2	mg/kg	4	4	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	10	12	16.7	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	9	10	14.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	14	16	7.3	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	13	15	16.6	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	98	110	11.1	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	6	7	17.8	No Limit
EM1210624-003	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	90	90	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	32	28	14.2	0% - 50%
		EG005T: Cobalt	7440-48-4	2	mg/kg	25	19	27.3	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	75	76	0.0	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	82	86	4.5	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	28	27	4.9	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	520	430	18.8	0% - 20%
		EG005T: Vanadium	7440-62-2	5	mg/kg	29	24	20.6	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	139	140	0.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2498207)									
EM1210519-006	TPA1.1/1.0	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1210624-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2496929) - continued									
EM1210519-006	TPA1.1/1.0	EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2496929) - continued									
EM1210519-006	TPA1.1/1.0	EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 2496929)									
EM1210519-006	TPA1.1/1.0	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2498540)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2498540) - continued									
EM1210519-006	TPA1.1/1.0	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Sum of PAHs	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	<5.0	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075D: Nitrosamines (QC Lot: 2498540) - continued									
EM1210519-006	TPA1.1/1.0	EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075F: Haloethers (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075H: Anilines and Benzidines (QC Lot: 2498540) - continued									
EM1210519-006	TPA1.1/1.0	EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 2498540)									
EM1210519-006	TPA1.1/1.0	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2496863)									
EB1223999-001	Anonymous	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EM1210519-031	QC02/07092012	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2496928)									
EM1210519-006	TPA1.1/1.0	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2496928) - continued									
EM1210635-012	Anonymous	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2498562)									
EM1210519-006	TPA1.1/1.0	EP071: C15 - C28 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	---	50	mg/kg	<50	<50	0.0	No Limit
EM1210519-031	QC02/07092012	EP071: C15 - C28 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	---	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2496863)									
EB1223999-001	Anonymous	EP080: C6 - C10 Fraction	---	10	mg/kg	11	11	0.0	No Limit
EM1210519-031	QC02/07092012	EP080: C6 - C10 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2496928)									
EM1210519-006	TPA1.1/1.0	EP080: C6 - C10 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EM1210635-012	Anonymous	EP080: C6 - C10 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2498562)									
EM1210519-006	TPA1.1/1.0	EP071: >C16 - C34 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	---	50	mg/kg	<50	<50	0.0	No Limit
EM1210519-031	QC02/07092012	EP071: >C16 - C34 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	---	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 2496863)									
EB1223999-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	445	360	21.1	0% - 20%
EM1210519-031	QC02/07092012	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 2496863) - continued									
EM1210519-031	QC02/07092012	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2498206)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	105	75	131
EG005T: Barium	7440-39-3	10	mg/kg	<10	139 mg/kg	101	77	127
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	6.2 mg/kg	96.8	73	119
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	94.1	71	123
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	99.6	79	125
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	25.4 mg/kg	92.4	71	121
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	103	79	123
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	99.1	77	125
EG005T: Manganese	7439-96-5	5	mg/kg	<5	137 mg/kg	96.0	76	126
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	98.2	78	128
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	34.9 mg/kg	97.8	78	124
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	94.4	75	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2498207)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	90.5	81	123
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2496929)								
EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	96.0	75	121
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	88.3	76	124
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	84.7	74	118
EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	84.5	75	121
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	85.2	64	120
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	86.4	77	121
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	75.9	74	120
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	80.5	65	117
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	81.9	65	117
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	81.0	67	117
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	81.3	66	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	82.0	68	116
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	79.5	64	117
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	73.4	59	115
EP074B: Oxygenated Compounds (QCLot: 2496929)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	66.2	40	138
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	74.7	61	143
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	80.2	63	137

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP074B: Oxygenated Compounds (QCLot: 2496929) - continued								
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	83.6	63	133
EP074C: Sulfonated Compounds (QCLot: 2496929)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	66.8	57	121
EP074D: Fumigants (QCLot: 2496929)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	# 48.0	51	130
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	82.7	73	121
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	# 51.5	59	109
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	# 50.4	52	110
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	82.7	68	120
EP074E: Halogenated Aliphatic Compounds (QCLot: 2496929)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	44.4	34	122
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	60.0	52	133
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	60.5	47	133
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	44.9	39	116
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	63.5	43	137
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	66.7	61	126
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	# 61.9	62	124
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	80.6	47	116
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	71.6	69	119
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	78.4	70	120
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	74.7	72	120
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	83.6	64	112
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	# 66.3	71	117
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	77.2	51	106
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	74.3	70	126
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	84.1	71	120
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	74.4	70	122
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	87.5	73	125
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	87.2	75	125
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	80.7	71	120
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	57.3	54	106
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	66.1	46	112
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	43.7	21.8	117
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	84.5	71	131
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	84.4	70	134
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	49.0	40	94
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	49.2	41	113
EP074F: Halogenated Aromatic Compounds (QCLot: 2496929)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP074F: Halogenated Aromatic Compounds (QCLot: 2496929) - continued								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	89.9	78	120
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	72.2	68	116
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	88.1	67	117
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	84.2	67	115
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	84.9	60	120
EP074G: Trihalomethanes (QCLot: 2496929)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	# 70.4	71	121
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	60.6	60	108
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	54.3	48	104
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	48.8	40	106
EP075A: Phenolic Compounds (QCLot: 2498540)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	2.5 mg/kg	83.2	38	138
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	2.5 mg/kg	82.4	39	129
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.1	33	132
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<1.0	5 mg/kg	84.8	35	131
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	2.5 mg/kg	91.9	31	131
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	2.5 mg/kg	66.4	10	135
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	2.5 mg/kg	83.8	35	133
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	2.5 mg/kg	89.9	36	132
EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	2.5 mg/kg	89.4	39	143
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	2.5 mg/kg	86.4	34	138
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	2.5 mg/kg	88.0	30.2	142
EP075: Pentachlorophenol	87-86-5	1.0	mg/kg	<1	2.5 mg/kg	84.5	14	136
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2498540)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2.5 mg/kg	82.8	39	128
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	2.5 mg/kg	84.7	40	136
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	2.5 mg/kg	72.3	29.5	137
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2.5 mg/kg	79.8	38	138
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2.5 mg/kg	85.0	45	133
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	2.5 mg/kg	87.4	47	137
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2.5 mg/kg	97.8	45	133
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	2.5 mg/kg	97.0	44	130
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2.5 mg/kg	99.2	46	138
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	2.5 mg/kg	99.5	43	145
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	2.5 mg/kg	104	43	143
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2.5 mg/kg	98.9	43	139
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	2.5 mg/kg	102	42	140
EP075: Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	5 mg/kg	106	43	139

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2498540) - continued								
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	2.5 mg/kg	122	40	154
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2.5 mg/kg	94.9	38	138
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	2.5 mg/kg	112	46	162
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2.5 mg/kg	99.8	49	159
EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2.5 mg/kg	101	49	157
EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2.5 mg/kg	99.2	48	158
EP075: Sum of PAHs	----	0.5	mg/kg	<0.5	----	----	----	----
EP075C: Phthalate Esters (QCLot: 2498540)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	2.5 mg/kg	90.2	40	142
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	2.5 mg/kg	96.9	48	140
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	2.5 mg/kg	122	38	169
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	2.5 mg/kg	103	42	140
EP075: bis(2-ethylhexyl) phthalate	117-81-7	0.5	mg/kg	<5.0	2.5 mg/kg	113	47	155
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	2.5 mg/kg	107	47	137
EP075D: Nitrosamines (QCLot: 2498540)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	2.5 mg/kg	79.3	16.2	136
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	2.5 mg/kg	89.6	33	132
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	2.5 mg/kg	89.7	27.7	130
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	2.5 mg/kg	85.6	33	131
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.0	36	127
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	2.5 mg/kg	77.9	35	128
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	2.5 mg/kg	87.6	37	139
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	2.5 mg/kg	94.4	42	134
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	2.5 mg/kg	131	24.4	143
EP075E: Nitroaromatics and Ketones (QCLot: 2498540)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	2.5 mg/kg	59.8	10	138
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	2.5 mg/kg	82.2	35	128
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	2.5 mg/kg	83.7	36	127
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	2.5 mg/kg	80.7	40	136
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	2.5 mg/kg	91.1	42	140
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	2.5 mg/kg	97.6	46	140
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	2.5 mg/kg	58.2	10	84
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	2.5 mg/kg	115	17.7	153
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	2.5 mg/kg	83.4	37	125
EP075: Azobenzene	103-33-3	1	mg/kg	<1	2.5 mg/kg	91.8	46	140
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	2.5 mg/kg	65.8	12.6	151
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	2.5 mg/kg	102	48	142
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	2.5 mg/kg	34.8	10	97

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 2498540) - continued								
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	2.5 mg/kg	98.8	47	139
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	2.5 mg/kg	84.4	45	133
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	2.5 mg/kg	98.3	42	136
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	2.5 mg/kg	98.9	41	141
EP075F: Haloethers (QCLot: 2498540)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	2.5 mg/kg	82.3	36	146
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	2.5 mg/kg	81.4	40	136
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	2.5 mg/kg	89.3	46	136
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	2.5 mg/kg	96.7	44	140
EP075G: Chlorinated Hydrocarbons (QCLot: 2498540)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	2.5 mg/kg	78.5	35	122
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	2.5 mg/kg	81.4	36	125
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	2.5 mg/kg	85.8	37	123
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	2.5 mg/kg	82.5	33	123
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	2.5 mg/kg	75.8	36	132
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	2.5 mg/kg	95.3	26.6	137
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	2.5 mg/kg	83.8	40	130
EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	<2.5	2.5 mg/kg	98.2	17.3	141
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	2.5 mg/kg	87.5	46	136
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	5 mg/kg	94.9	40	142
EP075H: Anilines and Benzidines (QCLot: 2498540)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	2.5 mg/kg	54.5	10	114
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	2.5 mg/kg	46.7	10	103
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	2.5 mg/kg	88.8	40	142
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	2.5 mg/kg	81.2	23.3	125
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	2.5 mg/kg	85.8	46	134
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	2.5 mg/kg	93.4	38	132
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	2.5 mg/kg	97.9	44	134
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	2.5 mg/kg	67.5	10	124
EP075I: Organochlorine Pesticides (QCLot: 2498540)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	2.5 mg/kg	100	50	134
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	2.5 mg/kg	103	47	135
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	2.5 mg/kg	99.5	50	137
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	2.5 mg/kg	117	48	136
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	2.5 mg/kg	107	40	138
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	2.5 mg/kg	100	44	140
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	2.5 mg/kg	95.6	45	139
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	2.5 mg/kg	106	46	142

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 2498540) - continued								
EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	2.5 mg/kg	102	70	130
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	2.5 mg/kg	105	47	139
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	2.5 mg/kg	105	42	142
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	2.5 mg/kg	97.7	47	141
EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	2.5 mg/kg	103	42	146
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	2.5 mg/kg	123	41	141
EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<1.0	2.5 mg/kg	124	19.6	148
EP075J: Organophosphorus Pesticides (QCLot: 2498540)								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	2.5 mg/kg	82.6	21.9	131
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	2.5 mg/kg	86.8	38	142
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	2.5 mg/kg	99.3	36	133
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	2.5 mg/kg	98.0	35	143
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	2.5 mg/kg	100	35	143
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	2.5 mg/kg	102	25.1	135
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	2.5 mg/kg	105	36	132
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	2.5 mg/kg	104	36	135
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	2.5 mg/kg	99.9	35	138
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	2.5 mg/kg	98.3	37	135
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	2.5 mg/kg	99.3	38	137
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2496863)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	97.7	70	133
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2496928)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	94.5	70	133
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2498562)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	544 mg/kg	91.3	55	123
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	1981 mg/kg	107	72	134
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	818 mg/kg	93.0	71	143
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2496863)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	45 mg/kg	93.8	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2496928)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	45 mg/kg	92.5	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2498562)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	870 mg/kg	101	69	123
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	2495 mg/kg	96.2	71	134
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	263 mg/kg	80.6	63	143
EP071: >C10 - C40 Fraction (sum)	----	100	mg/kg	<100	----	----	----	----
EP080: BTEXN (QCLot: 2496863)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP080: BTEXN (QCLot: 2496863) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	97.3	72	126
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	100	73	129
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	93.3	72	126
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	100	70	138
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	106	73	131
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	71.9	70	130

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	Spike Recovery (%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2498206)							
EM1210519-008	TPA1.2/0.5	EG005T: Arsenic	7440-38-2	50 mg/kg	93.2	70	130
		EG005T: Barium	7440-39-3	50 mg/kg	98.0	70	130
		EG005T: Beryllium	7440-41-7	50 mg/kg	99.9	70	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.0	70	130
		EG005T: Chromium	7440-47-3	50 mg/kg	100	70	130
		EG005T: Copper	7440-50-8	50 mg/kg	102	70	130
		EG005T: Lead	7439-92-1	50 mg/kg	89.9	70	130
		EG005T: Manganese	7439-96-5	50 mg/kg	91.2	70	130
		EG005T: Nickel	7440-02-0	50 mg/kg	87.8	70	130
		EG005T: Vanadium	7440-62-2	50 mg/kg	94.5	70	130
		EG005T: Zinc	7440-66-6	50 mg/kg	90.0	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2498207)							
EM1210519-008	TPA1.2/0.5	EG035T: Mercury	7439-97-6	5.0 mg/kg	93.7	70	120
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2496929)							
EM1210519-008	TPA1.2/0.5	EP074: Benzene	71-43-2	2 mg/kg	78.8	64	126
		EP074: Toluene	108-88-3	2 mg/kg	101	65	131
EP074E: Halogenated Aliphatic Compounds (QCLot: 2496929)							
EM1210519-008	TPA1.2/0.5	EP074: 1.1-Dichloroethene	75-35-4	2 mg/kg	110	50	124
		EP074: Trichloroethene	79-01-6	2 mg/kg	91.6	60	122
EP074F: Halogenated Aromatic Compounds (QCLot: 2496929)							
EM1210519-008	TPA1.2/0.5	EP074: Chlorobenzene	108-90-7	2 mg/kg	98.8	69	129
EP075A: Phenolic Compounds (QCLot: 2498540)							
EM1210519-008	TPA1.2/0.5	EP075: Phenol	108-95-2	5 mg/kg	86.4	23.7	119
		EP075: 2-Chlorophenol	95-57-8	5 mg/kg	76.0	31.1	116
		EP075: 2-Nitrophenol	88-75-5	5 mg/kg	71.7	16.4	115
		EP075: 4-Chloro-3-Methylphenol	59-50-7	5 mg/kg	86.2	22.3	122
		EP075: Pentachlorophenol	87-86-5	5 mg/kg	77.6	17.6	142
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2498540)							
EM1210519-008	TPA1.2/0.5	EP075: Acenaphthene	83-32-9	5 mg/kg	85.2	25.4	122
		EP075: Pyrene	129-00-0	5 mg/kg	87.1	14.6	127
EP075D: Nitrosamines (QCLot: 2498540)							
EM1210519-008	TPA1.2/0.5	EP075: N-Nitrosodi-n-propylamine	621-64-7	5 mg/kg	76.8	17.8	110
EP075E: Nitroaromatics and Ketones (QCLot: 2498540)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	Spike Recovery (%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP075E: Nitroaromatics and Ketones (QCLot: 2498540) - continued							
EM1210519-008	TPA1.2/0.5	EP075: 2.4-Dinitrotoluene	121-14-2	5 mg/kg	80.8	28.3	112
EP075G: Chlorinated Hydrocarbons (QCLot: 2498540)							
EM1210519-008	TPA1.2/0.5	EP075: 1.4-Dichlorobenzene	106-46-7	5 mg/kg	81.8	23	112
		EP075: 1.2.4-Trichlorobenzene	120-82-1	5 mg/kg	77.6	12.9	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2496863)							
EB1223999-002	Anonymous	EP080: C6 - C9 Fraction	----	28 mg/kg	109	49	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2496928)							
EM1210519-008	TPA1.2/0.5	EP080: C6 - C9 Fraction	----	28 mg/kg	78.8	49	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2498562)							
EM1210519-008	TPA1.2/0.5	EP071: C10 - C14 Fraction	----	544 mg/kg	95.6	54	123
		EP071: C15 - C28 Fraction	----	1981 mg/kg	109	74	134
		EP071: C29 - C36 Fraction	----	818 mg/kg	104	63	143
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2496863)							
EB1223999-002	Anonymous	EP080: C6 - C10 Fraction	----	33 mg/kg	102	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2496928)							
EM1210519-008	TPA1.2/0.5	EP080: C6 - C10 Fraction	----	33 mg/kg	76.5	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2498562)							
EM1210519-008	TPA1.2/0.5	EP071: >C10 - C16 Fraction	----	870 mg/kg	103	54	123
		EP071: >C16 - C34 Fraction	----	2495 mg/kg	100	74	134
		EP071: >C34 - C40 Fraction	----	263 mg/kg	137	63	143
EP080: BTEXN (QCLot: 2496863)							
EB1223999-002	Anonymous	EP080: Benzene	71-43-2	2 mg/kg	117	58	136
		EP080: Toluene	108-88-3	2 mg/kg	122	63	135

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **EM1210519**	Page	: 1 of 8
Client	: CARDNO LANE PIPER PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: MS MARIA DE LOS REYES	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: maria.delosreyes@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: Fiskville		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2012
Sampler	: MDLR	Issue Date	: 18-SEP-2012
Order number	: ----		
		No. of samples received	: 34
Quote number	: ME/441/12	No. of samples analysed	: 11

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8, TPA1.5/1.5, TPA1.13/1.0, BH2A/0.5, QC02/07092012	TPA1.2/0.5, TPA1.4/1.0, TPA1.12/0.5, TPA2.1/1.5, QC01/07092012,	**07-SEP-2012**	**----**	----	----	**13-SEP-2012**	21-SEP-2012	✓
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8, TPA1.5/1.5, TPA1.13/1.0, BH2A/0.5, QC02/07092012	TPA1.2/0.5, TPA1.4/1.0, TPA1.12/0.5, TPA2.1/1.5, QC01/07092012,	**07-SEP-2012**	**14-SEP-2012**	06-MAR-2013	✓	**17-SEP-2012**	06-MAR-2013	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8,	TPA1.2/0.5, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	05-OCT-2012	✓	**14-SEP-2012**	05-OCT-2012	✓
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8,	TPA1.2/0.5, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP074B: Oxygenated Compounds								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8,	TPA1.2/0.5, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP074C: Sulfonated Compounds								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0, TPA1.3/0.8,	TPA1.2/0.5, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074D: Fumigants							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved TPA1.1/1.0, TPA1.2/0.5, TPA1.3/0.8, TPA1.4/1.0	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075H: Anilines and Benzidines								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
TPA1.3/0.8,	TPA1.4/1.0							
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
TPA1.3/0.8,	TPA1.4/1.0							
EP075J: Organophosphorus Pesticides								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**14-SEP-2012**	21-SEP-2012	✓	**15-SEP-2012**	24-OCT-2012	✓
TPA1.3/0.8,	TPA1.4/1.0							
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
TPA1.3/0.8,	TPA1.4/1.0,							
TPA1.5/1.5,	TPA1.12/0.5,							
TPA1.13/1.0,	TPA2.1/1.5,							
BH2A/0.5,	QC01/07092012,							
QC02/07092012								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**17-SEP-2012**	21-SEP-2012	✓	**17-SEP-2012**	27-OCT-2012	✓
TPA1.3/0.8,	TPA1.4/1.0,							
TPA1.5/1.5,	TPA1.12/0.5,							
TPA1.13/1.0,	TPA2.1/1.5,							
BH2A/0.5,	QC01/07092012,							
QC02/07092012								
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
TPA1.3/0.8,	TPA1.4/1.0,							
TPA1.5/1.5,	TPA1.12/0.5,							
TPA1.13/1.0,	TPA2.1/1.5,							
BH2A/0.5,	QC01/07092012,							
QC02/07092012								
Soil Glass Jar - Unpreserved								
TPA1.1/1.0,	TPA1.2/0.5,	**07-SEP-2012**	**17-SEP-2012**	21-SEP-2012	✓	**17-SEP-2012**	27-OCT-2012	✓
TPA1.3/0.8,	TPA1.4/1.0,							
TPA1.5/1.5,	TPA1.12/0.5,							
TPA1.13/1.0,	TPA2.1/1.5,							
BH2A/0.5,	QC01/07092012,							
QC02/07092012								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEX							
Soil Glass Jar - Unpreserved TPA1.5/1.5, TPA1.12/0.5, TPA1.13/1.0, TPA2.1/1.5, BH2A/0.5, QC01/07092012, QC02/07092012	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved TPA1.5/1.5, TPA1.12/0.5, TPA1.13/1.0, TPA2.1/1.5, BH2A/0.5, QC01/07092012, QC02/07092012	**07-SEP-2012**	**13-SEP-2012**	21-SEP-2012	✓	**14-SEP-2012**	21-SEP-2012	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	4	**25.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	15	**13.3**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	4	26	**15.4**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	7	**14.3**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Semivolatile Organic Compounds	EP075	1	4	**25.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	15	**6.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	26	**7.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	7	**14.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Semivolatile Organic Compounds	EP075	1	4	**25.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	15	**6.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	26	**7.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	7	**14.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Semivolatile Organic Compounds	EP075	1	4	**25.0**	**5.0**	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	20	**5.0**	**5.0**	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	15	**6.7**	**5.0**	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	26	**7.7**	**5.0**	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	7	**14.3**	**5.0**	✓	ALS QCS3 requirement

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
Volatile Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Semivolatile Organic Compounds	EP075	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 502)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)

Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP074D: Fumigants	2959776-005	----	**2.2-Dichloropropane**	594-20-7	48.0 %	51-130%	**Recovery less than lower control limit**
EP074D: Fumigants	2959776-005	----	**cis-1.3-Dichloropropylene**	10061-01-5	51.5 %	59-109%	**Recovery less than lower control limit**
EP074D: Fumigants	2959776-005	----	**trans-1.3-Dichloropropylene**	10061-02-6	50.4 %	52-110%	**Recovery less than lower control limit**
EP074E: Halogenated Aliphatic Compounds	2959776-005	----	**1.1-Dichloroethene**	75-35-4	61.9 %	62-124%	**Recovery less than lower control limit**
EP074E: Halogenated Aliphatic Compounds	2959776-005	----	**1.1-Dichloropropylene**	563-58-6	66.3 %	71-117%	**Recovery less than lower control limit**
EP074G: Trihalomethanes	2959776-005	----	**Chloroform**	67-66-3	70.4 %	71-121%	**Recovery less than lower control limit**

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Duplicate outliers occur.**
- **For all matrices, no Matrix Spike outliers occur.**

Regular Sample Surrogates

- **For all regular sample matrices, no surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- **No Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: **ES1223327**	Page	: 1 of 17
Client	: **CARDNO LANE PIPER PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: SRIJEETA DE	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: srijeeta.de@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 3	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 28-SEP-2012
Sampler	: ----	Issue Date	: 04-OCT-2012
Site	: CFA FISKVILLE		
		No. of samples received	: 23
Quote number	: MEBQ/115/12	No. of samples analysed	: 7

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Edwandy Fadjar	Organic Coordinator	Sydney Organics
Evie.Sidarta	Inorganic Chemist	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs**

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	37.5	26.3	24.7	24.5	21.0
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	5	<5	<5
Barium	7440-39-3	10	mg/kg	80	30	30	40	50
Beryllium	7440-41-7	1	mg/kg	<1	<1	1	<1	<1
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	52	22	52	22	24
Cobalt	7440-48-4	2	mg/kg	4	2	7	3	3
Copper	7440-50-8	5	mg/kg	8	5	7	6	9
Lead	7439-92-1	5	mg/kg	11	9	26	13	21
Manganese	7439-96-5	5	mg/kg	12	11	21	20	44
Nickel	7440-02-0	2	mg/kg	8	5	15	5	6
Vanadium	7440-62-2	5	mg/kg	79	47	160	60	96
Zinc	7440-66-6	5	mg/kg	8	<5	5	<5	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	98-82-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
n-Propylbenzene	103-65-1	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	135-98-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	98-06-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	99-87-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	104-51-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	----	<5	<5	<5	<5
2-Butanone (MEK)	78-93-3	5	mg/kg	----	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	----	<5	<5	<5	<5
2-Hexanone (MBK)	591-78-6	5	mg/kg	----	<5	<5	<5	<5

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2-Dichloropropane	78-87-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	5	mg/kg	---	<5	<5	<5	<5
Chloromethane	74-87-3	5	mg/kg	---	<5	<5	<5	<5
Vinyl chloride	75-01-4	5	mg/kg	---	<5	<5	<5	<5
Bromomethane	74-83-9	5	mg/kg	---	<5	<5	<5	<5
Chloroethane	75-00-3	5	mg/kg	---	<5	<5	<5	<5
Trichlorofluoromethane	75-69-4	5	mg/kg	---	<5	<5	<5	<5
1.1-Dichloroethene	75-35-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Iodomethane	74-88-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1-Dichloroethane	75-34-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	56-23-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2-Dichloroethane	107-06-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Trichloroethene	79-01-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dibromomethane	74-95-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.3-Dichloropropane	142-28-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	127-18-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	76-01-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP074F: Halogenated Aromatic Compounds								

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP074F: Halogenated Aromatic Compounds - Continued								
Chlorobenzene	108-90-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Bromobenzene	108-86-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	95-49-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	106-43-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	75-27-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	124-48-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Bromoform	75-25-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Nitrophenol	88-75-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	1	mg/kg	---	<1	<1	<1	<1
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Methylnaphthalene	91-57-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Chloronaphthalene	91-58-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	---	<1	<1	<1	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
3-Methylcholanthrene	56-49-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
^ Sum of PAHs	---	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	84-66-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	---	<5.0	<5.0	<5.0	<5.0
Di-n-octylphthalate	117-84-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
Methapyrilene	91-80-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Acetophenone	98-86-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	98-95-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Isophorone	78-59-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2.6-Dinitrotoluene	606-20-2	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
2.4-Dinitrotoluene	121-14-2	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
1-Naphthylamine	134-32-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP075E: Nitroaromatics and Ketones - Continued								
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Azobenzene	103-33-3	1	mg/kg	---	<1	<1	<1	<1
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Phenacetin	62-44-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Aminobiphenyl	92-67-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pronamide	23950-58-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Chlorobenzilate	510-15-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Hexachloroethane	67-72-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Hexachloropropylene	1888-71-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	87-68-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	---	<2.5	<2.5	<2.5	<2.5
Pentachlorobenzene	608-93-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
EP075H: Anilines and Benzidines								
Aniline	62-53-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Chloroaniline	106-47-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
2-Nitroaniline	88-74-4	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
3-Nitroaniline	99-09-2	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
Dibenzofuran	132-64-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4-Nitroaniline	100-01-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Carbazole	86-74-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP075I: Organochlorine Pesticides								

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP075I: Organochlorine Pesticides - Continued								
alpha-BHC	319-84-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
beta-BHC	319-85-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
gamma-BHC	58-89-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
delta-BHC	319-86-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Heptachlor	76-44-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Aldrin	309-00-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dieldrin	60-57-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Endrin	72-20-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg	---	<1.0	<1.0	<1.0	<1.0
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Dimethoate	60-51-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Diazinon	333-41-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Malathion	121-75-5	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Fenthion	55-38-9	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Prothiofos	34643-46-4	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
Ethion	563-12-2	0.5	mg/kg	---	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: **SOIL**

Compound	CAS Number	LOR	Unit	Client sample ID: TPA1/8-0.5	TPA3/1-1.0	TPA3/1-0.5	TPA3/1-1.5	TPA3/5-0.5
				Client sampling date / time: 26-SEP-2012 08:30	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00	25-SEP-2012 15:00
				ES1223327-003	ES1223327-013	ES1223327-014	ES1223327-015	ES1223327-016
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	80.1	80.7	79.7	82.1
Toluene-D8	2037-26-5	0.1	%	----	84.6	83.4	86.5	86.9
4-Bromofluorobenzene	460-00-4	0.1	%	----	71.9	69.6	70.8	71.1
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.1	%	----	108	101	121	97.4
Phenol-d6	13127-88-3	0.1	%	----	101	83.7	95.6	69.9
2-Chlorophenol-D4	93951-73-6	0.1	%	----	97.9	82.7	96.2	75.9
2.4.6-Tribromophenol	118-79-6	0.1	%	----	94.0	70.7	73.1	75.6
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.1	%	----	114	87.8	102	89.6
1.2-Dichlorobenzene-D4	2199-69-1	0.1	%	----	94.2	73.5	84.7	74.2
2-Fluorobiphenyl	321-60-8	0.1	%	----	119	91.9	107	95.3
Anthracene-d10	1719-06-8	0.1	%	----	119	100	115	102
4-Terphenyl-d14	1718-51-0	0.1	%	----	127	97.9	114	99.6
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	82.9	89.2	92.3	89.6	96.0
Toluene-D8	2037-26-5	0.1	%	86.3	94.9	100	99.4	102
4-Bromofluorobenzene	460-00-4	0.1	%	75.6	81.8	86.4	83.8	85.1

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		25.2	32.5	----	----	----
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	----	----	----
Barium	7440-39-3	10	mg/kg		40	70	----	----	----
Beryllium	7440-41-7	1	mg/kg		<1	<1	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg		52	54	----	----	----
Cobalt	7440-48-4	2	mg/kg		4	4	----	----	----
Copper	7440-50-8	5	mg/kg		9	8	----	----	----
Lead	7439-92-1	5	mg/kg		16	12	----	----	----
Manganese	7439-96-5	5	mg/kg		12	11	----	----	----
Nickel	7440-02-0	2	mg/kg		8	9	----	----	----
Vanadium	7440-62-2	5	mg/kg		77	95	----	----	----
Zinc	7440-66-6	5	mg/kg		7	8	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	----	----	----
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	----	----	----
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	----	----	----
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	----	----	----
1.2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	----	----	----
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	----	----	----
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	----	----	----
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	----	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	----	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	----	----	----
Bromomethane	74-83-9	5	mg/kg		<5	----	----	----	----
Chloroethane	75-00-3	5	mg/kg		<5	----	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	----	----	----
1.1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	----	----	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	----	----	----
1.1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	----	----	----
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	----	----	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	----	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	----	----	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	----	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	----	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	----	----	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	----	----	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	----	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	----	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	----	----	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg		<0.5	----	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	----	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	----	----	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	----	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg		<0.5	----	----	----	----
EP074F: Halogenated Aromatic Compounds									

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP074F: Halogenated Aromatic Compounds - Continued									
Chlorobenzene	108-90-7	0.5	mg/kg		<0.5	----	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg		<0.5	----	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg		<0.5	----	----	----	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg		<0.5	----	----	----	----
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg		<0.5	----	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg		<0.5	----	----	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	----	----	----	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	----	----	----
EP075A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg		<0.5	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	1	mg/kg		<1	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	----	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of PAHs	----	0.5	mg/kg		<0.5	----	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	----	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	----	----	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	----	----	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	----	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	----	----	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	----	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	----	----	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	----	----	----	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	----	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	----	----	----	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	----	----	----	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	----	----	----	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	----	----	----	----
2.4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	----	----	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP075E: Nitroaromatics and Ketones - Continued									
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	----	----	----	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	----	----	----	----
Azobenzene	103-33-3	1	mg/kg		<1	----	----	----	----
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	----	----	----	----
Phenacetin	62-44-2	0.5	mg/kg		<0.5	----	----	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	----	----	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	----	----	----	----
Pronamide	23950-58-5	0.5	mg/kg		<0.5	----	----	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	----	----	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	----	----	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	----	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	----	----	----
EP075G: Chlorinated Hydrocarbons									
1.3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	----	----	----
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	----	----	----
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	----	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	----	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	----	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	----	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	----	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	----	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	----	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	----	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	----	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	----	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	----	----	----
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	----	----	----
EP075I: Organochlorine Pesticides									

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP075I: Organochlorine Pesticides - Continued									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	----	----	----
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	----	----	----
Endrin	72-20-8	0.5	mg/kg		<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	----	----	----
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	----	----	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	----	----	----
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	----	----	----
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	----	----	----
Malathion	121-75-5	0.5	mg/kg		<0.5	----	----	----	----
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	----	----	----
Ethion	563-12-2	0.5	mg/kg		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	----	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----

Analytical Results

Sub-Matrix: SOIL				Client sample ID	TPA3/5-1.0	QC1	----	----	----
				Client sampling date / time	25-SEP-2012 15:00	26-SEP-2012 15:00	----	----	----
Compound	CAS Number	LOR	Unit		ES1223327-017	ES1223327-019	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		81.4	----	----	----	----
Toluene-D8	2037-26-5	0.1	%		91.1	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		74.3	----	----	----	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.1	%		89.7	----	----	----	----
Phenol-d6	13127-88-3	0.1	%		80.2	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%		76.0	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.1	%		70.0	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.1	%		93.7	----	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.1	%		77.6	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.1	%		97.6	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%		105	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%		105	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		96.2	91.9	----	----	----
Toluene-D8	2037-26-5	0.1	%		105	104	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		88.8	87.3	----	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP074S: VOC Surrogates			
1.2-Dichloroethane-D4	17060-07-0	70.1	130.9
Toluene-D8	2037-26-5	66.3	137.7
4-Bromofluorobenzene	460-00-4	60.3	136.3
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	10.0	147.0
Phenol-d6	13127-88-3	12.5	110.6
2-Chlorophenol-D4	93951-73-6	10.0	116.8
2.4.6-Tribromophenol	118-79-6	10.0	120.1
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	13.3	124.5
1.2-Dichlorobenzene-D4	2199-69-1	11.9	103.9
2-Fluorobiphenyl	321-60-8	11.3	126.1
Anthracene-d10	1719-06-8	13.1	128.1
4-Terphenyl-d14	1718-51-0	10.0	134.7
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72.8	133.2
Toluene-D8	2037-26-5	73.9	132.1
4-Bromofluorobenzene	460-00-4	71.6	130.0

Environmental Division

QUALITY CONTROL REPORT

Work Order	: **ES1223327**	Page	: 1 of 20
Client	: **CARDNO LANE PIPER PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: SRIJEETA DE	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: srijeeta.de@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 3	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: CFA FISKVILLE		
C-O-C number	: ----	Date Samples Received	: 28-SEP-2012
Sampler	: ----	Issue Date	: 04-OCT-2012
Order number	: ----		
		No. of samples received	: 23
Quote number	: MEBQ/115/12	No. of samples analysed	: 7

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Edwandy Fadjar	Organic Coordinator	Sydney Organics
Evie.Sidarta	Inorganic Chemist	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (QC Lot: 2526238)									
ES1223188-002	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	---	1.0	%	64.5	64.0	0.8	0% - 20%
ES1223327-017	TPA3/5-1.0	EA055-103: Moisture Content (dried @ 103°C)	---	1.0	%	25.2	23.3	7.9	0% - 20%
EG005T: Total Metals by ICP-AES (QC Lot: 2524772)									
ES1223103-040	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	100	100	0.0	0% - 50%
		EG005T: Chromium	7440-47-3	2	mg/kg	8	9	0.0	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	13	0.0	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	87	64	29.4	0% - 50%
		EG005T: Vanadium	7440-62-2	5	mg/kg	19	23	20.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	19	13	35.2	No Limit
ES1223154-003	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	2	1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	440	440	0.0	0% - 20%
		EG005T: Chromium	7440-47-3	2	mg/kg	4	4	0.0	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	4	4	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	12	10	13.6	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	13	12	10.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	85	87	2.9	0% - 50%
		EG005T: Vanadium	7440-62-2	5	mg/kg	10	11	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	5	<5	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2524771)									
ES1222932-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES1223154-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 2523833) - continued									
ES1223049-001	Anonymous	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES1223049-010	Anonymous	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
ES1223049-010	Anonymous	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES1223049-010	Anonymous	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074D: Fumigants (QC Lot: 2523833) - continued									
ES1223049-001	Anonymous	EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES1223049-010	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
ES1223049-010	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 2523833) - continued									
ES1223049-010	Anonymous	EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	1.2	<0.5	79.8	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES1223049-010	Anonymous	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 2523833)									
ES1223049-001	Anonymous	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES1223049-010	Anonymous	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP074G: Trihalomethanes (QC Lot: 2523833) - continued									
ES1223049-010	Anonymous	EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(b) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075C: Phthalate Esters (QC Lot: 2524940) - continued									
ES1223327-013	TPA3/1-1.0	EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	<5.0	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075F: Haloethers (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 2524940)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075G: Chlorinated Hydrocarbons (QC Lot: 2524940) - continued									
ES1223327-013	TPA3/1-1.0	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	1.0	mg/kg	<1.0	<1.0	0.0	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 2524940)									
ES1223327-013	TPA3/1-1.0	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075J: Organophosphorus Pesticides (QC Lot: 2524940) - continued									
ES1223327-013	TPA3/1-1.0	EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2523832)									
ES1223049-001	Anonymous	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
ES1223049-010	Anonymous	EP080: C6 - C9 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2524752)									
ES1223010-042	Anonymous	EP071: C15 - C28 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
ES1223013-011	Anonymous	EP071: C15 - C28 Fraction	---	100	mg/kg	120	120	0.0	No Limit
		EP071: C29 - C36 Fraction	---	100	mg/kg	150	130	12.9	No Limit
		EP071: C10 - C14 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2523832)									
ES1223049-001	Anonymous	EP080: C6 - C10 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
ES1223049-010	Anonymous	EP080: C6 - C10 Fraction	---	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2524752)									
ES1223010-042	Anonymous	EP071: >C16 - C34 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	---	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit
ES1223013-011	Anonymous	EP071: >C16 - C34 Fraction	---	100	mg/kg	200	180	5.8	No Limit
		EP071: >C34 - C40 Fraction	---	100	mg/kg	180	160	14.6	No Limit
		EP071: >C10 - C16 Fraction	---	50	mg/kg	<50	<50	0.0	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2524772)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	118	----	----
EG005T: Barium	7440-39-3	10	mg/kg	<10	143 mg/kg	113	----	----
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	5.63 mg/kg	116	----	----
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	110	----	----
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	105	----	----
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	16.0 mg/kg	111	----	----
EG005T: Copper	7440-50-8	5	mg/kg	<5	32.0 mg/kg	113	----	----
EG005T: Lead	7439-92-1	5	mg/kg	<5	40.0 mg/kg	106	----	----
EG005T: Manganese	7439-96-5	5	mg/kg	<5	130 mg/kg	110	----	----
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.0 mg/kg	111	----	----
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	29.6 mg/kg	118	----	----
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	110	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2524771)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	98.1	----	----
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2523833)								
EP074: Benzene	71-43-2	0.5	mg/kg	<0.5	1 mg/kg	95.6	68	128
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	98.3	65	133
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	92.0	65	127
EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	92.4	69	127
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	86.5	64	126
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	93.8	70	128
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	89.5	66	128
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	85.8	63	129
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	87.4	63	129
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	86.2	64	130
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	86.9	63	129
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	86.0	63	129
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	84.8	62	130
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	84.1	61	131
EP074B: Oxygenated Compounds (QCLot: 2523833)								
EP074: Vinyl Acetate	108-05-4	1	mg/kg	----	10 mg/kg	78.1	29.6	156
		5	mg/kg	<5	----	----	----	----

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP074B: Oxygenated Compounds (QCLot: 2523833) - continued								
EP074: 2-Butanone (MEK)	78-93-3	1	mg/kg	----	10 mg/kg	104	44	158
		5	mg/kg	<5	----	----	----	----
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	1	mg/kg	----	10 mg/kg	97.8	54	138
		5	mg/kg	<5	----	----	----	----
EP074: 2-Hexanone (MBK)	591-78-6	1	mg/kg	----	10 mg/kg	99.6	54	136
		5	mg/kg	<5	----	----	----	----
EP074C: Sulfonated Compounds (QCLot: 2523833)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	75.6	54	126
EP074D: Fumigants (QCLot: 2523833)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	75.5	55	133
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	96.2	69	127
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	71.1	54	124
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	78.8	51	125
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	89.0	66	126
EP074E: Halogenated Aliphatic Compounds (QCLot: 2523833)								
EP074: Dichlorodifluoromethane	75-71-8	1	mg/kg	----	10 mg/kg	102	30	148
		5	mg/kg	<5	----	----	----	----
EP074: Chloromethane	74-87-3	1	mg/kg	----	10 mg/kg	100	41	141
		5	mg/kg	<5	----	----	----	----
EP074: Vinyl chloride	75-01-4	1	mg/kg	----	10 mg/kg	121	43	147
		5	mg/kg	<5	----	----	----	----
EP074: Bromomethane	74-83-9	1	mg/kg	----	10 mg/kg	117	47	141
		5	mg/kg	<5	----	----	----	----
EP074: Chloroethane	75-00-3	1	mg/kg	----	10 mg/kg	98.9	47	143
		5	mg/kg	<5	----	----	----	----
EP074: Trichlorofluoromethane	75-69-4	1	mg/kg	----	10 mg/kg	93.6	49	135
		5	mg/kg	<5	----	----	----	----
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	88.2	54	136
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	61.9	43	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	84.3	62	130
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	94.1	66	132
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	94.5	66	132
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	71.8	62	126
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	86.0	64	128
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	73.8	59	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	93.7	70	132
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	91.8	65	131
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	89.8	65	127
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	100	70	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 2523833) - continued								
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	100	72	128
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	93.5	67	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	72.4	62	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	82.5	54	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	85.6	55	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	99.5	56	132
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	96.5	65	135
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	61.2	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	70.0	53	129
EP074F: Halogenated Aromatic Compounds (QCLot: 2523833)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	99.4	70	128
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	89.6	67	127
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	91.8	64	130
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	87.8	62	130
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	93.1	60	132
EP074G: Trihalomethanes (QCLot: 2523833)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	89.8	65	131
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	89.7	61	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	64.6	63	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	86.5	60	126
EP075A: Phenolic Compounds (QCLot: 2524940)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.25 mg/kg	97.0	66.9	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.25 mg/kg	85.2	58.5	108
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.25 mg/kg	90.6	43	103
EP075: 3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1.0	2.5 mg/kg	89.1	35.9	109
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.25 mg/kg	77.6	49.4	109
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.25 mg/kg	66.6	.15	116
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.25 mg/kg	70.7	52.5	106
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.25 mg/kg	83.8	48.2	98.6
EP075: 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	1.25 mg/kg	79.3	59	106
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.25 mg/kg	73.0	44.4	101
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.25 mg/kg	85.0	48	107
EP075: Pentachlorophenol	87-86-5	1.0	mg/kg	<1	2.5 mg/kg	49.4	4.43	89.2
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2524940)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.25 mg/kg	90.7	63.7	108
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.25 mg/kg	86.4	60.8	110
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.25 mg/kg	83.9	59.1	110
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.25 mg/kg	84.8	58.8	106

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2524940) - continued								
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.25 mg/kg	86.6	61.7	110
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	1.25 mg/kg	85.2	59.2	110
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.25 mg/kg	89.8	61.9	108
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	1.25 mg/kg	81.9	58.3	107
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.25 mg/kg	86.4	58.5	110
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	1.25 mg/kg	85.8	60.4	109
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.25 mg/kg	82.6	59.5	110
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.25 mg/kg	89.1	57.2	111
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	1.25 mg/kg	92.2	58.4	113
EP075: Benzo(b) & Benzo(k)fluoranthene	205-99-2	1	mg/kg	----	2.5 mg/kg	89.0	57.1	112
	207-08-9	1.0	mg/kg	<1	----	----	----	----
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.25 mg/kg	# 109	48.1	106
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.25 mg/kg	84.2	56.6	108
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.25 mg/kg	74.0	52.7	108
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.25 mg/kg	73.4	56.8	110
EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.25 mg/kg	71.4	54.7	110
EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	1.25 mg/kg	70.7	55	112
EP075C: Phthalate Esters (QCLot: 2524940)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.25 mg/kg	89.6	60.1	111
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.25 mg/kg	94.0	62.3	114
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.25 mg/kg	96.8	65.5	122
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.25 mg/kg	90.8	61.6	112
EP075: bis(2-ethylhexyl) phthalate	117-81-7	5	mg/kg	----	1.25 mg/kg	89.6	66.6	135
		5.0	mg/kg	<5.0	----	----	----	----
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.25 mg/kg	92.0	59	116
EP075D: Nitrosamines (QCLot: 2524940)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.25 mg/kg	91.5	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.25 mg/kg	93.4	62.7	112
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	----	1.25 mg/kg	87.4	42.8	102
		1.0	mg/kg	<1.0	----	----	----	----
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.25 mg/kg	91.9	52.4	112
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.25 mg/kg	91.3	60.6	107
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.25 mg/kg	85.4	59.6	108
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.25 mg/kg	86.1	59.4	106
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6	1.0	mg/kg	<1.0	2.5 mg/kg	77.4	38	110
	122-39-4							
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.25 mg/kg	103	16.3	123
EP075E: Nitroaromatics and Ketones (QCLot: 2524940)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.25 mg/kg	89.4	27.3	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 2524940) - continued								
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.25 mg/kg	88.3	62.6	110
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.25 mg/kg	94.8	64.4	112
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.25 mg/kg	92.5	64	110
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	----	1.25 mg/kg	87.1	58	114
		1.0	mg/kg	<1.0	----	----	----	----
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	----	1.25 mg/kg	99.7	55.8	113
		1.0	mg/kg	<1.0	----	----	----	----
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.25 mg/kg	31.3	2.24	93
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.25 mg/kg	37.0	3.12	108
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.25 mg/kg	69.2	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	----	1.25 mg/kg	90.4	61.4	113
		1.0	mg/kg	<1	----	----	----	----
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.25 mg/kg	55.0	33	108
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.25 mg/kg	90.3	58.1	110
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.25 mg/kg	# 32.9	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.25 mg/kg	82.8	55.8	106
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.25 mg/kg	89.0	49.4	105
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.25 mg/kg	65.2	53.5	105
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.25 mg/kg	# 49.8	57.4	112
EP075F: Haloethers (QCLot: 2524940)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.25 mg/kg	68.1	63.1	113
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.25 mg/kg	90.0	62.4	111
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.25 mg/kg	85.3	59	111
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.25 mg/kg	83.9	56.4	109
EP075G: Chlorinated Hydrocarbons (QCLot: 2524940)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.25 mg/kg	85.6	60.4	106
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.25 mg/kg	86.5	62.1	107
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.25 mg/kg	80.9	61.3	107
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.25 mg/kg	84.0	53.8	107
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.25 mg/kg	79.2	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.25 mg/kg	85.6	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.25 mg/kg	87.3	59.3	110
EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	----	1.25 mg/kg	80.5	17.2	106
		2.5	mg/kg	<2.5	----	----	----	----
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.25 mg/kg	84.6	60	110
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	----	1.25 mg/kg	86.1	59.9	111
		1.0	mg/kg	<1.0	----	----	----	----
EP075H: Anilines and Benzidines (QCLot: 2524940)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.25 mg/kg	78.7	13.2	108

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075H: Anilines and Benzidines (QCLot: 2524940) - continued								
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.25 mg/kg	92.2	19.9	114
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	----	1.25 mg/kg	80.4	57.4	109
		1.0	mg/kg	<1.0	----	----	----	----
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	----	1.25 mg/kg	65.9	31.5	93.7
		1.0	mg/kg	<1.0	----	----	----	----
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.25 mg/kg	86.9	60.2	111
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.25 mg/kg	74.8	48.6	97.6
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.25 mg/kg	85.1	61	109
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.25 mg/kg	24.8	15.6	101
EP075I: Organochlorine Pesticides (QCLot: 2524940)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	1.25 mg/kg	90.6	59.5	110
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	1.25 mg/kg	92.1	53.4	113
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	1.25 mg/kg	81.2	58.2	112
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	1.25 mg/kg	91.0	56.9	114
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	1.25 mg/kg	79.0	52	108
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	1.25 mg/kg	90.7	54.9	112
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	1.25 mg/kg	87.1	54.6	113
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	1.25 mg/kg	101	51.7	115
EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	1.25 mg/kg	89.4	60.3	112
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	1.25 mg/kg	95.0	61.9	116
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	1.25 mg/kg	64.1	49	110
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	1.25 mg/kg	93.4	59.5	112
EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	1.25 mg/kg	104	58.5	116
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	1.25 mg/kg	97.3	52.6	114
EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	----	1.25 mg/kg	66.3	39.2	113
		1.0	mg/kg	<1.0	----	----	----	----
EP075J: Organophosphorus Pesticides (QCLot: 2524940)								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	1.25 mg/kg	82.7	24.6	109
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	1.25 mg/kg	86.7	46.4	118
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	1.25 mg/kg	110	50.3	116
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	1.25 mg/kg	89.4	41.7	119
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	1.25 mg/kg	100	52.1	121
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	1.25 mg/kg	83.0	43	116
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	1.25 mg/kg	89.8	51.1	115
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	1.25 mg/kg	89.4	50.9	115
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	----	----	----	----
		0.55	mg/kg	----	1.375 mg/kg	74.2	45.3	104
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	1.25 mg/kg	75.7	51.5	116
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	1.25 mg/kg	88.6	47.3	115

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	LCS: Spike Recovery (%)	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2523832)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	95.0	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2524752)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	200 mg/kg	120	59	131
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	300 mg/kg	126	74	138
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	200 mg/kg	116	63	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2523832)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	31 mg/kg	100	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2524752)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	250 mg/kg	110	59	131
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	350 mg/kg	120	74	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
		50	mg/kg	----	150 mg/kg	117	63	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	MS: Spike Recovery (%)	Recovery Limits (%): Low	Recovery Limits (%): High
EG005T: Total Metals by ICP-AES (QCLot: 2524772)							
ES1223103-040	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	106	70	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	105	70	130
		EG005T: Chromium	7440-47-3	50 mg/kg	102	70	130
		EG005T: Copper	7440-50-8	250 mg/kg	109	70	130
		EG005T: Lead	7439-92-1	250 mg/kg	103	70	130
		EG005T: Nickel	7440-02-0	50 mg/kg	101	70	130
		EG005T: Zinc	7440-66-6	250 mg/kg	101	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2524771)							
ES1222932-002	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	110	70	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2523833)							
ES1223049-001	Anonymous	EP074: Benzene	71-43-2	2.5 mg/kg	85.4	70	130
		EP074: Toluene	108-88-3	2.5 mg/kg	85.2	70	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 2523833)							
ES1223049-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	83.0	70	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	84.3	70	130
EP074F: Halogenated Aromatic Compounds (QCLot: 2523833)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	Spike Recovery (%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 2523833) - continued							
ES1223049-001	Anonymous	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	89.8	70	130
EP075A: Phenolic Compounds (QCLot: 2524940)							
ES1223327-013	TPA3/1-1.0	EP075: Phenol	108-95-2	5 mg/kg	106	60	130
		EP075: 2-Chlorophenol	95-57-8	5 mg/kg	100	60	130
		EP075: 2-Nitrophenol	88-75-5	5 mg/kg	93.5	50	130
		EP075: 4-Chloro-3-Methylphenol	59-50-7	5 mg/kg	101	50	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	38.9	5	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2524940)							
ES1223327-013	TPA3/1-1.0	EP075: Acenaphthene	83-32-9	5 mg/kg	116	50	130
		EP075: Pyrene	129-00-0	5 mg/kg	109	50	130
EP075D: Nitrosamines (QCLot: 2524940)							
ES1223327-013	TPA3/1-1.0	EP075: N-Nitrosodi-n-propylamine	621-64-7	5 mg/kg	99.9	50	130
EP075E: Nitroaromatics and Ketones (QCLot: 2524940)							
ES1223327-013	TPA3/1-1.0	EP075: 2.4-Dinitrotoluene	121-14-2	5 mg/kg	98.5	40	130
EP075G: Chlorinated Hydrocarbons (QCLot: 2524940)							
ES1223327-013	TPA3/1-1.0	EP075: 1.4-Dichlorobenzene	106-46-7	5 mg/kg	109	60	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	5 mg/kg	100	50	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2523832)							
ES1223049-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	77.6	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2524752)							
ES1223010-042	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	85.6	73	137
		EP071: C15 - C28 Fraction	----	3140 mg/kg	97.0	53	131
		EP071: C29 - C36 Fraction	----	2860 mg/kg	78.6	52	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2523832)							
ES1223049-001	Anonymous	EP080: C6 - C10 Fraction	----	37.5 mg/kg	80.8	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2524752)							
ES1223010-042	Anonymous	EP071: >C10 - C16 Fraction	----	850 mg/kg	109	73	137
		EP071: >C16 - C34 Fraction	----	4800 mg/kg	90.2	53	131
		EP071: >C34 - C40 Fraction	----	2400 mg/kg	64.8	52	132

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

The quality control term Matrix Spike (MS) and Matrix Spike Duplicate (MSD) refers to intralaboratory split samples spiked with a representative set of target analytes. The purpose of these QC parameters are to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report			
Spike	Spike Recovery (%)	Recovery Limits (%)	RPDs (%)

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2523832)										
ES1223049-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	77.6	----	70	130	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2523832)										
ES1223049-001	Anonymous	EP080: C6 - C10 Fraction	----	37.5 mg/kg	80.8	----	70	130	----	----
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 2523833)										
ES1223049-001	Anonymous	EP074: Benzene	71-43-2	2.5 mg/kg	85.4	----	70	130	----	----
		EP074: Toluene	108-88-3	2.5 mg/kg	85.2	----	70	130	----	----
EP074E: Halogenated Aliphatic Compounds (QCLot: 2523833)										
ES1223049-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	83.0	----	70	130	----	----
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	84.3	----	70	130	----	----
EP074F: Halogenated Aromatic Compounds (QCLot: 2523833)										
ES1223049-001	Anonymous	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	89.8	----	70	130	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2524752)										
ES1223010-042	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	85.6	----	73	137	----	----
		EP071: C15 - C28 Fraction	----	3140 mg/kg	97.0	----	53	131	----	----
		EP071: C29 - C36 Fraction	----	2860 mg/kg	78.6	----	52	132	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2524752)										
ES1223010-042	Anonymous	EP071: >C10 - C16 Fraction	----	850 mg/kg	109	----	73	137	----	----
		EP071: >C16 - C34 Fraction	----	4800 mg/kg	90.2	----	53	131	----	----
		EP071: >C34 - C40 Fraction	----	2400 mg/kg	64.8	----	52	132	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2524771)										
ES1222932-002	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	110	----	70	130	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2524772)										
ES1223103-040	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	106	----	70	130	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	105	----	70	130	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	102	----	70	130	----	----
		EG005T: Copper	7440-50-8	250 mg/kg	109	----	70	130	----	----
		EG005T: Lead	7439-92-1	250 mg/kg	103	----	70	130	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	101	----	70	130	----	----
		EG005T: Zinc	7440-66-6	250 mg/kg	101	----	70	130	----	----
EP075A: Phenolic Compounds (QCLot: 2524940)										
ES1223327-013	TPA3/1-1.0	EP075: Phenol	108-95-2	5 mg/kg	106	----	60	130	----	----
		EP075: 2-Chlorophenol	95-57-8	5 mg/kg	100	----	60	130	----	----
		EP075: 2-Nitrophenol	88-75-5	5 mg/kg	93.5	----	50	130	----	----
		EP075: 4-Chloro-3-Methylphenol	59-50-7	5 mg/kg	101	----	50	130	----	----
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	38.9	----	5	130	----	----
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2524940)										
ES1223327-013	TPA3/1-1.0	EP075: Acenaphthene	83-32-9	5 mg/kg	116	----	50	130	----	----

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 2524940) - continued										
ES1223327-013	TPA3/1-1.0	EP075: Pyrene	129-00-0	5 mg/kg	109	----	50	130	----	----
EP075D: Nitrosamines (QCLot: 2524940)										
ES1223327-013	TPA3/1-1.0	EP075: N-Nitrosodi-n-propylamine	621-64-7	5 mg/kg	99.9	----	50	130	----	----
EP075E: Nitroaromatics and Ketones (QCLot: 2524940)										
ES1223327-013	TPA3/1-1.0	EP075: 2.4-Dinitrotoluene	121-14-2	5 mg/kg	98.5	----	40	130	----	----
EP075G: Chlorinated Hydrocarbons (QCLot: 2524940)										
ES1223327-013	TPA3/1-1.0	EP075: 1.4-Dichlorobenzene	106-46-7	5 mg/kg	109	----	60	130	----	----
		EP075: 1.2.4-Trichlorobenzene	120-82-1	5 mg/kg	100	----	50	130	----	----

Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **ES1223327**	Page	: 1 of 7
Client	: CARDNO LANE PIPER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: SRIJEETA DE	Contact	: Sarah Hodgson
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: srijeeta.de@lanepiper.com.au	E-mail	: sarah.hodgson@alsenviro.com
Telephone	: +61 03 98880100	Telephone	: 03 8549 9652
Facsimile	: +61 03 98083511	Facsimile	: 03 8549 9626
Project	: 212163 3	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: CFA FISKVILLE		
C-O-C number	: ----	Date Samples Received	: 28-SEP-2012
Sampler	: ----	Issue Date	: 04-OCT-2012
Order number	: ----		
		No. of samples received	: 23
Quote number	: MEBQ/115/12	No. of samples analysed	: 7

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non -volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content								
Soil Glass Jar - Unpreserved (EA055-103)								
TPA3/1-1.0, TPA3/1-1.5, TPA3/5-1.0	TPA3/1-0.5, TPA3/5-0.5,	**25-SEP-2012**	**----**	----	----	**02-OCT-2012**	09-OCT-2012	✓
Soil Glass Jar - Unpreserved (EA055-103)								
TPA1/8-0.5,	QC1	**26-SEP-2012**	**----**	----	----	**02-OCT-2012**	10-OCT-2012	✓
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TPA3/1-1.0, TPA3/1-1.5, TPA3/5-1.0	TPA3/1-0.5, TPA3/5-0.5,	**25-SEP-2012**	**02-OCT-2012**	24-MAR-2013	✓	**03-OCT-2012**	24-MAR-2013	✓
Soil Glass Jar - Unpreserved (EG005T)								
TPA1/8-0.5,	QC1	**26-SEP-2012**	**02-OCT-2012**	25-MAR-2013	✓	**03-OCT-2012**	25-MAR-2013	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
TPA3/1-1.0, TPA3/1-1.5, TPA3/5-1.0	TPA3/1-0.5, TPA3/5-0.5,	**25-SEP-2012**	**02-OCT-2012**	23-OCT-2012	✓	**02-OCT-2012**	23-OCT-2012	✓
Soil Glass Jar - Unpreserved (EG035T)								
TPA1/8-0.5,	QC1	**26-SEP-2012**	**02-OCT-2012**	24-OCT-2012	✓	**02-OCT-2012**	24-OCT-2012	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Soil Glass Jar - Unpreserved (EP071)								
TPA3/1-1.0, TPA3/1-1.5, TPA3/5-1.0	TPA3/1-0.5, TPA3/5-0.5,	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**03-OCT-2012**	11-NOV-2012	✓
Soil Glass Jar - Unpreserved (EP071)								
TPA1/8-0.5,	QC1	**26-SEP-2012**	**02-OCT-2012**	10-OCT-2012	✓	**03-OCT-2012**	11-NOV-2012	✓
EP074D: Fumigants								
Soil Glass Jar - Unpreserved (EP074)								
TPA3/1-1.0, TPA3/1-1.5, TPA3/5-1.0	TPA3/1-0.5, TPA3/5-0.5,	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved (EP074)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**02-OCT-2012**	09-OCT-2012	✓	**02-OCT-2012**	11-NOV-2012	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
TPA3/1-1.0, TPA3/1-0.5, TPA3/1-1.5, TPA3/5-0.5, TPA3/5-1.0	**25-SEP-2012**	**30-SEP-2012**	09-OCT-2012	✓	**03-OCT-2012**	09-OCT-2012	✓
Soil Glass Jar - Unpreserved (EP080)							
TPA1/8-0.5, QC1	**26-SEP-2012**	**30-SEP-2012**	10-OCT-2012	✓	**03-OCT-2012**	10-OCT-2012	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	15	**13.3**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	1	5	**20.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	19	**10.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	19	**10.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	19	**10.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	2	17	**11.8**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Semivolatile Organic Compounds	EP075	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	17	**5.9**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Semivolatile Organic Compounds	EP075	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	17	**5.9**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Semivolatile Organic Compounds	EP075	1	5	**20.0**	**5.0**	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	20	**5.0**	**5.0**	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	19	**5.3**	**5.0**	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	17	**5.9**	**5.0**	✓	ALS QCS3 requirement

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
Volatile Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Semivolatile Organic Compounds	EP075	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 502)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)

Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	* ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075B: Polynuclear Aromatic Hydrocarbons	2993398-002	----	**7.12-Dimethylbenz(a)anthracene**	57-97-6	109 %	48.1-106%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	2993398-002	----	**4-Aminobiphenyl**	92-67-1	32.9 %	36.1-102%	**Recovery less than lower control limit**
EP075E: Nitroaromatics and Ketones	2993398-002	----	**Chlorobenzilate**	510-15-6	49.8 %	57.4-112%	**Recovery less than lower control limit**

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Duplicate outliers occur.**
- **For all matrices, no Matrix Spike outliers occur.**

Regular Sample Surrogates

- **For all regular sample matrices, no surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- **No Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: **EM1303970**	: aoe	f 1 LbT2
nlvemC	f **CARDNO LANE PIPER PTY LTD**	tayLPaCLP	f EmDPLmc emCal SvDsvLmMelyLgPme
n LmCaAC	f MR SI OOY MnSh Ol t S	n LmCaAC	f naPLI H alsd
l 44Pess	f 1GT BUWBV, RY Rh l S V, RH h h S 3Uhpl , 7uRI t UI 21- G	l 44Pess	f T H esCall R4 7 . PmoDale 3Uh l gsCalva 2191
E@av	f 4ammi rc A4Lmal4+ lame. v. ePALc rag	E@av	f AaPLIn6 alsd+ alsolLyalrALc
uele. dLme	f 8j 1 02 5QQQ0100	uele. dLme	f 8j 1@@GT5 5j 0Q
FaAsvc ve	f 8j 1 02 5Q0Q2G11	FaAsvc ve	f 8j 1@@GT5 5j 01
: PLNsAC	f - 1- 1j 2 2	(n t eDel	f OE: M 1555 7Ade4gle V)2qam4 l t 7 (n72 PekgvPec emC
h P4ePmgc yeP	f @@@		
n@@ mgc yeP	f @@@	SaCe 7ac . les ReAevDe4	f 1Q@: R@012
7ac . leP	f MSR	Usge SaCe	f - T@: R@012
7 vCe	f Fvs/ DMle		
		OLr Lbsac . les PeAevDe4	f 5T
(gLCe mgc yeP	f MEV(vt1GVt-	OLr Lbsac . les amali se4	f - 1

udvs Pe. LPC sg. ePse4es ami . PeDLgs Pe. LPQsq 6 vCl Cdvs PebePemAer ResglCs a. . li C. Cde sac . le)sq as sgyc vCe4r l ll . aoes Lb Cdvs Pe. LPC daDe yeem AdeA/ e4 am4 a. . PLDe4 bLF Peleaser

udvs n ePCbAaCe LbI mali svs ALmCavms Cde bLIlL6 vmo vmbLPc aQLmf

- WemePal n Lc c emCs
- I mali CAal ResglCs
- 7 gPPLoaCe n LmCPLI t vc vCs

NATA
WORLD RECOGNISED ACCREDITATION

Ol ul I AAPe4 vCe4 t ayLPaCLP Q. G

I AAPe4 vCe4 bLPALc . lvamAe 6 vCl U7 h wEn 190- G

Signatories

udvs 4LAgc emC das yeem eleACPLmAalli svome4 yi Cde agCLPze4 svomaCLRes vm4vAaCe4 yelL6 r EleACPLmA svommo das yeem AaPPe4 LgCvmALc . lvamAe 6 vCl . PLAe4 gPes s. eAbe4 vm- 1 n FR : aPC11r

Signatories	*Position*	*Accreditation Category*
OamAi H amo	7 emLP7 ec vDLlaCde UnsCPgc emCn dec vsC	MelyLgPme h PoamAs
OamAi H amo	7 emLP7 ec vDLlaCde UnsCPgc emCn dec vsC	MelyLgPme h PoamAs
Ov / v7 Ce. me6 s/ v	7 emLPUhLPoamA UnsCPgc emCn dec vsC	MelyLgPme UhLPoamAs
Ov / v7 Ce. me6 s/ v	7 emLPUhLPoamA UnsCPgc emCn dec vsC	MelyLgPme UhLPoamAs

: aoe	f - LbT2
H LP? h P4eP	f EM1202590
n lvemC	f n I RSOh t I OE : U ER : uY t uS
: PLNsAC	f - 1- 1j 2 2

General Comments

ude amali OAal . PLAe4gPes gse4 yi Cde EmDPLmc emCal SvDsvLm daDe yeem 4eDelL. e4 bPLc esCaylvsde4 vmCePmaOLmalli PeALomze4 . PLAe4gPes sgAd as CdLse . gylvsde4 yi Cde , 7E: I p I : BI p I 7 am4 OE: Mr Un dLgse 4eDelL. e4 . PLAe4gPes aPe ec . lLi e4 vmCde aysemAe Lb4LAgc emCe4 sCam4aP4s LPyi AlvemCPekgesC

H dePe c LvsCgPe 4eCePc vmaOLmdas yeem. ePbLPc e4pPesglCs aPe Pe. LPCe4 Lma 4P 6 evodCyasvsr

H dePe a Pe. LPCe4 less Cdam)xqPesglCOs dvodePCdamCde t h RpCdvs c ai ye 4ge C. . Pc aP sac . le e<CPaACAvoesCaCe 4VgOLmam4WLPvmsgbbAvemCsac . le bLPamali svsr

H dePe Cde t h R Lba Pe. LPCe4 PesglC4VdePs bPLc sCam4aP4 t h RpCdvs c ai ye 4ge C. dvod c LvsCgPe ALmCemCpvmsgbbAvemCsac . le)Pe4gAe4 6 evodCec . lLi e4qLPc aCPv vmCePemAer

H demsac . lvmo Cc e vmbLPc aOLmvs mLC. PLDA4e4 yi Cde AlvemCpsac . lvmo 4aCes aPe sdL6 m6 vCdLgCa Cc e ALc . LmemC UnCdese vmsCamAespCde Cc e ALc . LmemCdas yeemassgc e4 yi Cde layLPaCLP bLP. PLAessvmo . gP Lsesr

Kei f n I 7 Ogc yeP= n I 7 PeovsCP mgc yePbPLc 4aCayase c avmCavme4 yi n dec vAal I ysCPaAGs 7 ePDAesr ude n dec vAal I ysCPaAGs 7 ePDAe vs a 4vDsvLmLbCde I c ePAamn dec vAal 7 LAveCr
t h R = t vc vOLbPe. LPCmo
^ = udvs PesglCOs ALc . gCe4 bPLc vm4vDA4gal amali Ce 4eCeAOLms aOLPayLDe Cde leDel LbPe. LPCmo

- **EP074: Particular sample (EM-1303970-025) shows poor surrogates recovery due to the high moisture content.**
- **EP075: Sample EM1303970-001 & duplicate required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.**
- **EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs**

Analytical Results

7gy@aGk: SOIL (MaGk: SOIL)			Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	@@@@	1r0	%	9.2	7.2	20.8	19.1	18.2
EG005T: Total Metals by ICP-AES								
Arsenic	9TT0@Q@	G	c owo	xG	@@@@	@@@@	xG	@@@@
Barium	9TT0@5@	10	c owo	630	@@@@	@@@@	40	@@@@
Beryllium	9TT0@1@	1	c owo	1	@@@@	@@@@	1	@@@@
Cadmium	9TT0@2@	1	c owo	x1	@@@@	@@@@	x1	@@@@
Chromium	9TT0@9@	-	c owo	63	@@@@	@@@@	72	@@@@
Cobalt	9TT0@Q@	-	c owo	8	@@@@	@@@@	8	@@@@
Copper	9TT0@0@	G	c owo	8	@@@@	@@@@	12	@@@@
Lead	9T25@- @	G	c owo	27	@@@@	@@@@	12	@@@@
Manganese	9T25@j @	G	c owo	74	@@@@	@@@@	25	@@@@
Nickel	9TT0@- @	-	c owo	17	@@@@	@@@@	20	@@@@
Vanadium	9TT0@- @	G	c owo	129	@@@@	@@@@	95	@@@@
Zinc	9TT0@j @	G	c owo	19	@@@@	@@@@	12	@@@@
EG035T: Total Recoverable Mercury by FIMS								
Mercury	9T25@9@	0r1	c owo	x0r1	@@@@	@@@@	x0r1	@@@@
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	91@2@	0r-	c owo	x0r-	@@@@	x0r-	@@@@	x0r-
Toluene	10Q@Q@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
Ethylbenzene	100@1@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
meta- & para-Xylene	10Q@Q@ 10j @- @	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
Styrene	100@- @	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
ortho-Xylene	5G@9@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
Isopropylbenzene	5Q@- @	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
n-Propylbenzene	102@G@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
1.3.5-Trimethylbenzene	10Q@9@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
sec-Butylbenzene	12G@Q@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
1.2.4-Trimethylbenzene	5G@2@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
tert-Butylbenzene	5Q@j @	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
p-Isopropyltoluene	55@9@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
n-Butylbenzene	10T@1@	0rG	c owo	x0rG	@@@@	x0rG	@@@@	x0rG
EP074B: Oxygenated Compounds								
Vinyl Acetate	10Q@G@	G	c owo	xG	@@@@	xG	@@@@	xG

Analytical Results

7gy@MaCBK: SOIL (MaCBK: SOIL)			Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	9Q@2@	G	c o/wo	xG	@@@	xG	@@@	xG
4-Methyl-2-pentanone (MIBK)	10Q@0@	G	c o/wo	xG	@@@	xG	@@@	xG
2-Hexanone (MBK)	G51@Q@	G	c o/wo	xG	@@@	xG	@@@	xG
EP074C: Sulfonated Compounds								
Carbon disulfide	9G@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
EP074D: Fumigants								
2.2-Dichloropropane	G5T@0@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2-Dichloropropane	9Q@9@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
cis-1.3-Dichloropropylene	100j 1@1@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
trans-1.3-Dichloropropylene	100j 1@- @	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2-Dibromoethane (EDB)	10j @2@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	9G@1@	G	c o/wo	xG	@@@	xG	@@@	xG
Chloromethane	9T@9@	G	c o/wo	xG	@@@	xG	@@@	xG
Vinyl chloride	9G@1@	G	c o/wo	xG	@@@	xG	@@@	xG
Bromomethane	9T@2@	G	c o/wo	xG	@@@	xG	@@@	xG
Chloroethane	9G@0@	G	c o/wo	xG	@@@	xG	@@@	xG
Trichlorofluoromethane	9G@5@	G	c o/wo	xG	@@@	xG	@@@	xG
1.1-Dichloroethene	9G@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Iodomethane	9T@Q@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
trans-1.2-Dichloroethene	1G j @0@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1-Dichloroethane	9G@T@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
cis-1.2-Dichloroethene	1G j @5@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1.1-Trichloroethane	91@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1-Dichloropropylene	G j 2@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Carbon Tetrachloride	G j @2@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2-Dichloroethane	109@j @	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Trichloroethene	95@1@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Dibromomethane	9T@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1.2-Trichloroethane	95@0@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.3-Dichloropropane	1T- @G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Tetrachloroethene	1- 9@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1.1.2-Tetrachloroethane	j 20@0@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG

Analytical Results

7gy@laCB<: SOIL (MaCB<: SOIL)			Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP074E: Halogenated Aliphatic Compounds - Continued								
trans-1.4-Dichloro-2-butene	110@9@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
cis-1.4-Dichloro-2-butene	1T9j @1@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.1.2.2-Tetrachloroethane	95@T@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2.3-Trichloropropane	5j @C@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Pentachloroethane	9j @1@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2-Dibromo-3-chloropropane	5j @- @	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	10C@0@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Bromobenzene	10C@j @	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
2-Chlorotoluene	5G@5@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
4-Chlorotoluene	10j @2@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
1.2.3-Trichlorobenzene	C9@1@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
EP074G: Trihalomethanes								
Chloroform	j 9@j @	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Bromodichloromethane	9G@9@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Dibromochloromethane	1- T@C@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
Bromoform	9G@G@	0rG	c o/wo	x0rG	@@@	x0rG	@@@	x0rG
EP075A: Phenolic Compounds								
Phenol	10C@G@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2-Chlorophenol	5G@9@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2-Methylphenol	5G@C@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
3- & 4-Methylphenol	1215@9@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2-Nitrophenol	C@G@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.4-Dimethylphenol	10G@9@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.4-Dichlorophenol	1- 0@2@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.6-Dichlorophenol	C9@G@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
4-Chloro-3-Methylphenol	G5@0@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.4.6-Trichlorophenol	C@j @	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.4.5-Trichlorophenol	5G@G@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Pentachlorophenol	C9@j @	1	c o/wo	xj	@@@	x1	@@@	x1
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	51@0@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2-Methylnaphthalene	51@9@	0rG	c o/wo	x2r0	@@@	x0rG	@@@	x0rG

Analytical Results

7gy@laCR<: SOIL (MaCR<: SOIL)

Compound	CAS Number	LOR	Unit	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
				EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
2-Chloronaphthalene	51@Q@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Acenaphthylene	- 0Q@j @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Acenaphthene	Q2@- @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Fluorene	Gj @2@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Phenanthrene	QG@1@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Anthracene	1- 0@- @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Fluoranthene	- 0j @T@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Pyrene	1- 5@0@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
N-2-Fluorenyl Acetamide	G2@j @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Benz(a)anthracene	Gj @G@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Chrysene	- 1Q@1@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Benzo(b) & Benzo(k)fluoranthene	- 0G@5@ - 09@Q@	1	c owo	xj	@@@@	x1	@@@@	x1
7.12-Dimethylbenz(a)anthracene	G9@9@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Benzo(a)pyrene	G0@- @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
3-Methylcholanthrene	Gj @5@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Indeno(1.2.3.cd)pyrene	152@5@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Dibenz(a.h)anthracene	G2@0@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Benzo(g.h.i)perylene	151@T@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
^ Sum of PAHs	@@@@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
EP075C: Phthalate Esters								
Dimethyl phthalate	121@1@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Diethyl phthalate	QT@j @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Di-n-butyl phthalate	QT@T@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Butyl benzyl phthalate	QG@Q@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
bis(2-ethylhexyl) phthalate	119@1@	G0	c owo	x20r0	@@@@	xG0	@@@@	xG0
Di-n-octylphthalate	119@T@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10G5G@G@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
N-Nitrosodiethylamine	GG@Q@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
N-Nitrosopyrrolidine	520@G@	1r0	c owo	xj r0	@@@@	x1r0	@@@@	x1r0
N-Nitrosomorpholine	G5@5@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
N-Nitrosodi-n-propylamine	j - 1@T@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
N-Nitrosopiperidine	100@G@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
	Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP075D: Nitrosamines - Continued						
N-Nitrosodibutylamine	5- T@j @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
N-Nitrosodiphenyl & Diphenylamine	Cj @0@ 1- - @5@ / 1r0 / c o/wo	xj r0	@@@	x1r0	@@@	x1r0
Methapyrilene	51@0@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
EP075E: Nitroaromatics and Ketones						
2-Picoline	105@j @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Acetophenone	5Q@j @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Nitrobenzene	5Q@G@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Isophorone	9Q@5@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
2.6-Dinitrotoluene	j 0j @0@ / 1r0 / c o/wo	xj r0	@@@	x1r0	@@@	x1r0
2.4-Dinitrotoluene	1- 1@T@ / 1r0 / c o/wo	xj r0	@@@	x1r0	@@@	x1r0
1-Naphthylamine	12T@- @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
4-Nitroquinoline-N-oxide	Cj @9@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
5-Nitro-o-toluidine	55@G@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Azobenzene	102@2@ / 1 / c o/wo	xj	@@@	x1	@@@	x1
1.3.5-Trinitrobenzene	55@G@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Phenacetin	j - @T@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
4-Aminobiphenyl	5- @9@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Pentachloronitrobenzene	Q- @Q@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Pronamide	-25G0@Q@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Dimethylaminoazobenzene	j 0@1@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Chlorobenzilate	G10@G@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
EP075F: Haloethers						
Bis(2-chloroethyl) ether	111@T@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Bis(2-chloroethoxy) methane	111@1@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
4-Chlorophenyl phenyl ether	900G@- @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
4-Bromophenyl phenyl ether	101@G@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
EP075G: Chlorinated Hydrocarbons						
1.3-Dichlorobenzene	GT1@2@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
1.4-Dichlorobenzene	10j @j @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
1.2-Dichlorobenzene	5G@0@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Hexachloroethane	j 9@- @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
1.2.4-Trichlorobenzene	1- 0@- @ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG
Hexachloropropylene	1QQQ@1@ / 0rG / c o/wo	x2r0	@@@	x0rG	@@@	x0rG

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
	Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP075G: Chlorinated Hydrocarbons - Continued						
Hexachlorobutadiene	Q9@Q@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Hexachlorocyclopentadiene	99@9@ / - rG / c ow/o	x1G0	@@@	x- rG	@@@	x- rG
Pentachlorobenzene	j 0Q@2@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Hexachlorobenzene (HCB)	11Q@T@ / 1r0 / c ow/o	xj r0	@@@	x1r0	@@@	x1r0
EP075H: Anilines and Benzidines						
Aniline	j - @2@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
4-Chloroaniline	10j @9@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
2-Nitroaniline	QQ@T@ / 1r0 / c ow/o	xj r0	@@@	x1r0	@@@	x1r0
3-Nitroaniline	55@5@ / 1r0 / c ow/o	xj r0	@@@	x1r0	@@@	x1r0
Dibenzofuran	12- @T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
4-Nitroaniline	100@1@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Carbazole	Qj @T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
3.3`-Dichlorobenzidine	51@T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
EP075I: Organochlorine Pesticides						
alpha-BHC	215@T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
beta-BHC	215@G@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
gamma-BHC	GQ@5@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
delta-BHC	215@j @ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Heptachlor	9j @T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Aldrin	205@0@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Heptachlor epoxide	10- T@9@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
alpha-Endosulfan	5G5@Q@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
4.4`-DDE	9- @G@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Dieldrin	j 0@9@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Endrin	9- @0@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
beta-Endosulfan	22- 12@G@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
4.4`-DDD	9- @T@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Endosulfan sulfate	1021@9@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
4.4`-DDT	G0@5@ / 1r0 / c ow/o	xj r0	@@@	x1r0	@@@	x1r0
EP075J: Organophosphorus Pesticides						
Dichlorvos	j - @2@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Dimethoate	j 0@1@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG
Diazinon	222@1@ / 0rG / c ow/o	x2r0	@@@	x0rG	@@@	x0rG

Analytical Results

7gy@laC: SOIL (MaC: SOIL)			Client sample ID	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP075J: Organophosphorus Pesticides - Continued								
Chlorpyrifos-methyl	GG5Q@2@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Malathion	1-1@GG	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Fenthion	GG@Q@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Chlorpyrifos	-5-1@Q@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Pirimphos-ethyl	-2G0G@1@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Chlorfenvinphos	T90@0@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Prothiofos	2Tj T2@j @	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
Ethion	Gj 2@-@	0rG	c owo	x2r0	@@@@	x0rG	@@@@	x0rG
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	@@@@	10	c owo	x10	x10	x10	x10	x10
C10 - C14 Fraction	@@@@	G0	c owo	xG0	xG0	xG0	xG0	xG0
C15 - C28 Fraction	@@@@	100	c owo	**2580**	x100	x100	x100	x100
C29 - C36 Fraction	@@@@	100	c owo	**1150**	x100	x100	x100	x100
^ C10 - C36 Fraction (sum)	@@@@	G0	c owo	**3730**	xG0	xG0	xG0	xG0
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	@@@@	10	c owo	x10	x10	x10	x10	x10
>C10 - C16 Fraction	@@@@	G0	c owo	**200**	xG0	xG0	xG0	xG0
>C16 - C34 Fraction	@@@@	100	c owo	**3480**	x100	x100	x100	x100
>C34 - C40 Fraction	@@@@	100	c owo	**370**	x100	x100	x100	x100
^ >C10 - C40 Fraction (sum)	@@@@	G0	c owo	**4050**	xG0	xG0	xG0	xG0
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	190j 0@9@	0r1	%	**62.6**	@@@@	**71.6**	@@@@	**67.4**
Toluene-D8	-029@j @	0r1	%	**72.0**	@@@@	**83.1**	@@@@	**79.1**
4-Bromofluorobenzene	Tj 0@0@	0r1	%	**69.0**	@@@@	**80.1**	@@@@	**74.5**
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	2j 9@-@	0r1	%	**98.7**	@@@@	**93.8**	@@@@	**97.6**
Phenol-d6	121-9@Q@	0r1	%	**95.3**	@@@@	**66.9**	@@@@	**76.9**
2-Chlorophenol-D4	525G1@2@	0r1	%	**86.7**	@@@@	**64.9**	@@@@	**73.6**
2.4.6-Tribromophenol	11Q@5@	0r1	%	**79.1**	@@@@	**61.8**	@@@@	**70.8**
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	T1j G@0@	0r1	%	**94.4**	@@@@	**67.2**	@@@@	**75.4**
1.2-Dichlorobenzene-D4	-155@5@	0r1	%	**84.9**	@@@@	**62.2**	@@@@	**67.3**
2-Fluorobiphenyl	2-1@0@	0r1	%	**83.0**	@@@@	**51.9**	@@@@	**64.4**

Analytical Results

7gy@la@<: SOIL (Ma@<: SOIL)

Compound	CAS Number	LOR	Unit	TP-A1-28/0.1	TP-A1-29/0.5	TP-A1-30/0.5	TP-A1-31/0.5	TP-A1-32/0.65
Client sampling date / time				11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
				EM1303970-001	EM1303970-005	EM1303970-007	EM1303970-009	EM1303970-012
EP075T: Base/Neutral Extractable Surrogates - Continued								
Anthracene-d10	1915@j @	0r1	%	102	@@@	96.4	@@@	109
4-Terphenyl-d14	191Q@1@	0r1	%	101	@@@	89.7	@@@	98.2
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	190j 0@9@	0r1	%	61.3	66.5	70.1	63.8	66.9
Toluene-D8	- 029@j @	0r1	%	67.1	70.8	77.4	67.1	74.1
4-Bromofluorobenzene	Tj 0@0@	0r1	%	65.3	71.3	79.4	68.0	70.6

: aoe f 11 LbT2
H LP? h P4eP f EM1202590
n lvemC f n I RSOh t I OE : U ER : uY t uS
: PLNAC f - 1- 1j 2 2

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
Client sampling date / time				11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00
				EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	@@@	1r0	%	5.5	23.2	7.0	8.0	21.8
EG005T: Total Metals by ICP-AES								
Arsenic	9TT0@C@	G	c o/w o	xG	xG	@@@	xG	@@@
Barium	9TT0@5@	10	c o/w o	20	50	@@@	20	@@@
Beryllium	9TT0@1@	1	c o/w o	x1	2	@@@	x1	@@@
Cadmium	9TT0@2@	1	c o/w o	x1	x1	@@@	x1	@@@
Chromium	9TT0@9@	-	c o/w o	38	89	@@@	54	@@@
Cobalt	9TT0@C@	-	c o/w o	x-	22	@@@	4	@@@
Copper	9TT0@0@	G	c o/w o	xG	14	@@@	xG	@@@
Lead	9T25@- @	G	c o/w o	13	9	@@@	13	@@@
Manganese	9T25@j @	G	c o/w o	36	30	@@@	60	@@@
Nickel	9TT0@- @	-	c o/w o	5	45	@@@	8	@@@
Vanadium	9TT0@- @	G	c o/w o	122	76	@@@	104	@@@
Zinc	9TT0@j @	G	c o/w o	xG	15	@@@	5	@@@
EG035T: Total Recoverable Mercury by FIMS								
Mercury	9T25@9@	0r1	c o/w o	x0r1	0.1	@@@	x0r1	@@@
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	91@2@	0r-	c o/w o	x0r-	x0r-	x0r-	x0r-	x0r-
Toluene	10C@C@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Ethylbenzene	100@1@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
meta- & para-Xylene	10C@C@	10j @- @	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG
Styrene	100@- @	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
ortho-Xylene	5G@9@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Isopropylbenzene	5C@- @	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
n-Propylbenzene	102@G@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.3.5-Trimethylbenzene	10C@9@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
sec-Butylbenzene	12G@C@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2.4-Trimethylbenzene	5G@2@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
tert-Butylbenzene	5C@j @	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
p-Isopropyltoluene	55@9@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
n-Butylbenzene	10T@1@	0rG	c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP074B: Oxygenated Compounds								
Vinyl Acetate	10C@G@	G	c o/w o	xG	xG	xG	xG	xG

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP074B: Oxygenated Compounds - Continued						
2-Butanone (MEK)	9Q@2@ G c o/w o	xG	xG	xG	xG	xG
4-Methyl-2-pentanone (MIBK)	10Q@0@ G c o/w o	xG	xG	xG	xG	xG
2-Hexanone (MBK)	G51@Q@ G c o/w o	xG	xG	xG	xG	xG
EP074C: Sulfonated Compounds						
Carbon disulfide	9G@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP074D: Fumigants						
2.2-Dichloropropane	G5T@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2-Dichloropropane	9Q@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
cis-1.3-Dichloropropylene	100j 1@1@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
trans-1.3-Dichloropropylene	100j 1@- @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2-Dibromoethane (EDB)	10j @2@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP074E: Halogenated Aliphatic Compounds						
Dichlorodifluoromethane	9G@1@ G c o/w o	xG	xG	xG	xG	xG
Chloromethane	9T@9@ G c o/w o	xG	xG	xG	xG	xG
Vinyl chloride	9G@1@ G c o/w o	xG	xG	xG	xG	xG
Bromomethane	9T@2@ G c o/w o	xG	xG	xG	xG	xG
Chloroethane	9G@0@ G c o/w o	xG	xG	xG	xG	xG
Trichlorofluoromethane	9G@5@ G c o/w o	xG	xG	xG	xG	xG
1.1-Dichloroethene	9G@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Iodomethane	9T@Q@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
trans-1.2-Dichloroethene	1Gj @0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1-Dichloroethane	9G@T@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
cis-1.2-Dichloroethene	1Gj @5@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1.1-Trichloroethane	91@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1-Dichloropropylene	Gj 2@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Carbon Tetrachloride	Gj @2@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2-Dichloroethane	109@j @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Trichloroethene	95@1@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Dibromomethane	9T@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1.2-Trichloroethane	95@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.3-Dichloropropane	1T- @G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Tetrachloroethene	1- 9@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1.1.2-Tetrachloroethane	j 20@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG

: aoe f 12 LbT2
H LP? h P4eP f EM1202590
n lvemC f n I RSOh t I OE : U ER : uY t uS
: PLNAC f - 1- 1j 2 2

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP074E: Halogenated Aliphatic Compounds - Continued						
trans-1.4-Dichloro-2-butene	110@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
cis-1.4-Dichloro-2-butene	1T9j @1@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.1.2.2-Tetrachloroethane	95@T@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2.3-Trichloropropane	5j @0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Pentachloroethane	9j @1@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2-Dibromo-3-chloropropane	5j @- @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP074F: Halogenated Aromatic Compounds						
Chlorobenzene	10Q@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Bromobenzene	10Q@j @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Chlorotoluene	5G@5@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
4-Chlorotoluene	10j @2@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
1.2.3-Trichlorobenzene	Q9@1@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP074G: Trihalomethanes						
Chloroform	j 9@j @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Bromodichloromethane	9G@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Dibromochloromethane	1- T@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Bromoform	9G@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
EP075A: Phenolic Compounds						
Phenol	10Q@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Chlorophenol	5G@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Methylphenol	5G@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
3- & 4-Methylphenol	1215@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Nitrophenol	00@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2.4-Dimethylphenol	10G@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2.4-Dichlorophenol	1- 0@2@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2.6-Dichlorophenol	Q9@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
4-Chloro-3-Methylphenol	G5@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2.4.6-Trichlorophenol	00@j @ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2.4.5-Trichlorophenol	5G@G@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
Pentachlorophenol	Q9@j @ 1 c o/w o	x1	x1	x1	x1	x1
EP075B: Polynuclear Aromatic Hydrocarbons						
Naphthalene	51@0@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Methylnaphthalene	51@9@ 0rG c o/w o	x0rG	x0rG	x0rG	x0rG	x0rG

: aoe f 1T LbT2
H LP? h P4eP f EM1202590
n lvemC f n I RSOh t I OE : U ER : uY t uS
: PLNAC f - 1- 1j 2 2

Analytical Results

7gy@MaCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP075B: Polynuclear Aromatic Hydrocarbons - Continued						
2-Chloronaphthalene	51@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Acenaphthylene	-0C@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Acenaphthene	C2@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Fluorene	Cj @2@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Phenanthrene	CC@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Anthracene	1-0@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Fluoranthene	-0j @T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Pyrene	1-5@0@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-2-Fluorenyl Acetamide	C2@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Benz(a)anthracene	Cj @C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Chrysene	-1C@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Benzo(b) & Benzo(k)fluoranthene	-0C@5@-09@C@ / 1 / c o/wo	x1	x1	x1	x1	x1
7.12-Dimethylbenz(a)anthracene	C9@9@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Benzo(a)pyrene	C0@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
3-Methylcholanthrene	Cj @5@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Indeno(1.2.3.cd)pyrene	152@5@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Dibenz(a.h)anthracene	C2@0@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Benzo(g.h.i)perylene	151@T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
^ Sum of PAHs	@@@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
EP075C: Phthalate Esters						
Dimethyl phthalate	121@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Diethyl phthalate	CT@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Di-n-butyl phthalate	CT@T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Butyl benzyl phthalate	CC@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
bis(2-ethylhexyl) phthalate	119@1@ / G0 / c o/wo	xG0	xG0	xG0	xG0	xG0
Di-n-octylphthalate	119@T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
EP075D: Nitrosamines						
N-Nitrosomethylethylamine	10G5G@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-Nitrosodiethylamine	CC@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-Nitrosopyrrolidine	520@C@ / 1r0 / c o/wo	x1r0	x1r0	x1r0	x1r0	x1r0
N-Nitrosomorpholine	C5@5@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-Nitrosodi-n-propylamine	j-1@T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-Nitrosopiperidine	100@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)			Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
			Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP075D: Nitrosamines - Continued								
N-Nitrosodibutylamine	5- T@j @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
N-Nitrosodiphenyl & Diphenylamine	Cj @0@ 1- - @5@	1r0	c o/wo	x1r0	x1r0	x1r0	x1r0	x1r0
Methapyrilene	51@0@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
EP075E: Nitroaromatics and Ketones								
2-Picoline	105@j @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Acetophenone	5Q@j @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Nitrobenzene	5Q@G@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Isophorone	9Q@5@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
2.6-Dinitrotoluene	j 0j @0@	1r0	c o/wo	x1r0	x1r0	x1r0	x1r0	x1r0
2.4-Dinitrotoluene	1- 1@T@	1r0	c o/wo	x1r0	x1r0	x1r0	x1r0	x1r0
1-Naphthylamine	12T@- @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
4-Nitroquinoline-N-oxide	Cj @9@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
5-Nitro-o-toluidine	55@G@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Azobenzene	102@2@	1	c o/wo	x1	x1	x1	x1	x1
1.3.5-Trinitrobenzene	55@G@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Phenacetin	j - @T@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
4-Aminobiphenyl	5- @9@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Pentachloronitrobenzene	Q- @Q@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Pronamide	- 25G0@Q@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Dimethylaminoazobenzene	j 0@1@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Chlorobenzilate	G10@G@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111@T@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Bis(2-chloroethoxy) methane	111@1@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
4-Chlorophenyl phenyl ether	900G@- @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
4-Bromophenyl phenyl ether	101@G@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	GT1@2@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
1.4-Dichlorobenzene	10j @j @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
1.2-Dichlorobenzene	5G@0@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Hexachloroethane	j 9@- @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
1.2.4-Trichlorobenzene	1- 0@- @	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG
Hexachloropropylene	1QQQ@1@	0rG	c o/wo	x0rG	x0rG	x0rG	x0rG	x0rG

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00	11@: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP075G: Chlorinated Hydrocarbons - Continued						
Hexachlorobutadiene	Q9@QQ@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Hexachlorocyclopentadiene	99@99@ / - rG / c o/o	x- rG	x- rG	x- rG	x- rG	x- rG
Pentachlorobenzene	j 0Q@52@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Hexachlorobenzene (HCB)	11Q@T@ / 1r0 / c o/o	x1r0	x1r0	x1r0	x1r0	x1r0
EP075H: Anilines and Benzidines						
Aniline	j - @2@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
4-Chloroaniline	10j @99@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
2-Nitroaniline	QQ@T@ / 1r0 / c o/o	x1r0	x1r0	x1r0	x1r0	x1r0
3-Nitroaniline	55@5@ / 1r0 / c o/o	x1r0	x1r0	x1r0	x1r0	x1r0
Dibenzofuran	12- @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
4-Nitroaniline	100@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Carbazole	Qj @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
3.3`-Dichlorobenzidine	51@T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
EP075I: Organochlorine Pesticides						
alpha-BHC	215@T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
beta-BHC	215@G@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
gamma-BHC	QQ@5@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
delta-BHC	215@j @ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Heptachlor	9j @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Aldrin	205@0@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Heptachlor epoxide	10- T@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
alpha-Endosulfan	5G5@QQ@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
4.4`-DDE	9- @G@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Dieldrin	j 0@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Endrin	9- @0@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
beta-Endosulfan	22- 12@G@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
4.4`-DDD	9- @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Endosulfan sulfate	1021@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
4.4`-DDT	Q0@5@ / 1r0 / c o/o	x1r0	x1r0	x1r0	x1r0	x1r0
EP075J: Organophosphorus Pesticides						
Dichlorvos	j - @2@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Dimethoate	j 0@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG
Diazinon	222@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	x0rG	x0rG

Analytical Results

7gy@laCB<: SOIL (MaCB<: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP075J: Organophosphorus Pesticides - Continued						
Chlorpyrifos-methyl	GG5Q@2@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Malathion	1- 1@C@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Fenthion	GC@C@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Chlorpyrifos	- 5- 1@C@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Pirimphos-ethyl	- 2G0G@1@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Chlorfenvinphos	T90@0@ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Prothiofos	2Tj T2@j @ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
Ethion	Gj 2@- @ / 0rG / c ow/o	x0rG	x0rG	x0rG	x0rG	x0rG
EP080/071: Total Petroleum Hydrocarbons						
C6 - C9 Fraction	@@@ / 10 / c ow/o	x10	x10	x10	x10	x10
C10 - C14 Fraction	@@@ / G0 / c ow/o	xG0	xG0	xG0	xG0	xG0
C15 - C28 Fraction	@@@ / 100 / c ow/o	x100	x100	x100	x100	x100
C29 - C36 Fraction	@@@ / 100 / c ow/o	x100	x100	x100	x100	x100
^ C10 - C36 Fraction (sum)	@@@ / G0 / c ow/o	xG0	xG0	xG0	xG0	xG0
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft						
C6 - C10 Fraction	@@@ / 10 / c ow/o	x10	x10	x10	x10	x10
>C10 - C16 Fraction	@@@ / G0 / c ow/o	xG0	xG0	xG0	xG0	xG0
>C16 - C34 Fraction	@@@ / 100 / c ow/o	x100	x100	x100	x100	x100
>C34 - C40 Fraction	@@@ / 100 / c ow/o	x100	x100	x100	x100	x100
^ >C10 - C40 Fraction (sum)	@@@ / G0 / c ow/o	xG0	xG0	xG0	xG0	xG0
EP074S: VOC Surrogates						
1.2-Dichloroethane-D4	190j 0@9@ / 0r1 / %	**64.2**	**78.8**	**71.8**	**65.9**	**61.6**
Toluene-D8	- 029@j @ / 0r1 / %	**74.7**	**92.6**	**75.8**	**71.5**	**64.8**
4-Bromofluorobenzene	Tj 0@0@ / 0r1 / %	**70.4**	**87.8**	**75.0**	**70.5**	**64.7**
EP075S: Acid Extractable Surrogates						
2-Fluorophenol	2j 9@- @ / 0r1 / %	**89.7**	**94.9**	**83.2**	**76.4**	**75.3**
Phenol-d6	121- 9@C@ / 0r1 / %	**83.3**	**70.3**	**75.8**	**72.7**	**63.5**
2-Chlorophenol-D4	525G1@2@ / 0r1 / %	**81.1**	**66.6**	**70.1**	**71.2**	**64.9**
2.4.6-Tribromophenol	11Q@5@ / 0r1 / %	**87.2**	**71.0**	**70.1**	**72.2**	**68.6**
EP075T: Base/Neutral Extractable Surrogates						
Nitrobenzene-D5	T1j G@0@ / 0r1 / %	**72.6**	**69.9**	**65.5**	**63.8**	**54.3**
1.2-Dichlorobenzene-D4	- 155@5@ / 0r1 / %	**74.2**	**63.3**	**63.1**	**61.7**	**61.6**
2-Fluorobiphenyl	2- 1@0@ / 0r1 / %	**83.7**	**59.6**	**65.2**	**69.6**	**66.5**

Analytical Results

7gy@laCBx<: SOIL (MaCBx<: SOIL)	Client sample ID	TP-A1-33/0.5	TP-A1-34/0.7	TP-A1-35/0.1	TP-A1-36/0.1	TP-A1-37/0.9
	Client sampling date / time	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00	11@: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-014	EM1303970-017	EM1303970-018	EM1303970-020	EM1303970-025
EP075T: Base/Neutral Extractable Surrogates - Continued						
Anthracene-d10	1915@j @ / 0r1 / %	114	105	97.8	111	112
4-Terphenyl-d14	191O@G1@ / 0r1 / %	119	92.2	106	96.2	91.1
EP080S: TPH(V)/BTEX Surrogates						
1.2-Dichloroethane-D4	190j 0@09@ / 0r1 / %	63.3	77.0	70.5	64.8	67.4
Toluene-D8	- 029@j @: / 0r1 / %	70.2	86.8	71.2	66.7	74.2
4-Bromofluorobenzene	Tj 0@0@ / 0r1 / %	66.9	84.8	74.6	69.8	73.8

: aoe f 15 LbT2
H LP? h P4eP f EM1202590
n lvemC f n I RSOh t I OE : U ER : uY t uS
: PLNAC f - 1- 1j 2 2

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
				Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
					EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	@@@	1r0	%		27.7	9.0	28.7	21.8	10.8
EG005T: Total Metals by ICP-AES									
Arsenic	9TT0@C@	G	c o/wo		xG	xG	@@@	@@@	5
Barium	9TT0@5@	10	c o/wo		180	30	@@@	@@@	20
Beryllium	9TT0@1@	1	c o/wo		2	x1	@@@	@@@	x1
Cadmium	9TT0@2@	1	c o/wo		x1	x1	@@@	@@@	x1
Chromium	9TT0@9@	-	c o/wo		60	22	@@@	@@@	58
Cobalt	9TT0@C@	-	c o/wo		14	3	@@@	@@@	4
Copper	9TT0@0@	G	c o/wo		10	11	@@@	@@@	xG
Lead	9T25@- @	G	c o/wo		14	23	@@@	@@@	20
Manganese	9T25@j @	G	c o/wo		36	40	@@@	@@@	22
Nickel	9TT0@- @	-	c o/wo		27	5	@@@	@@@	9
Vanadium	9TT0@- @	G	c o/wo		90	96	@@@	@@@	163
Zinc	9TT0@j @	G	c o/wo		8	8	@@@	@@@	xG
EG035T: Total Recoverable Mercury by FIMS									
Mercury	9T25@9@	0r1	c o/wo		x0r1	x0r1	@@@	@@@	x0r1
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	91@2@	0r-	c o/wo		x0r-	x0r-	x0r-	@@@	x0r-
Toluene	10C@C@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
Ethylbenzene	100@1@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
meta- & para-Xylene	10C@C@ 10j @- @	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
Styrene	100@- @	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
ortho-Xylene	5G@9@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
Isopropylbenzene	5C@- @	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
n-Propylbenzene	102@G@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
1.3.5-Trimethylbenzene	10C@9@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
sec-Butylbenzene	12G@C@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
1.2.4-Trimethylbenzene	5G@2@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
tert-Butylbenzene	5C@j @	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
p-Isopropyltoluene	55@9@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
n-Butylbenzene	10T@1@	0rG	c o/wo		x0rG	x0rG	x0rG	@@@	x0rG
EP074B: Oxygenated Compounds									
Vinyl Acetate	10C@C@	G	c o/wo		xG	xG	xG	@@@	xG

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)			Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
			Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	9Q@2@	G	c o/o	xG	xG	xG	@@@	xG
4-Methyl-2-pentanone (MIBK)	10Q@0@	G	c o/o	xG	xG	xG	@@@	xG
2-Hexanone (MBK)	G51@Q@	G	c o/o	xG	xG	xG	@@@	xG
EP074C: Sulfonated Compounds								
Carbon disulfide	9G@G@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
EP074D: Fumigants								
2.2-Dichloropropane	G5T@0@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2-Dichloropropane	9Q@9@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
cis-1.3-Dichloropropylene	100j 1@1@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
trans-1.3-Dichloropropylene	100j 1@- @	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2-Dibromoethane (EDB)	10j @2@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	9G@1@	G	c o/o	xG	xG	xG	@@@	xG
Chloromethane	9T@9@	G	c o/o	xG	xG	xG	@@@	xG
Vinyl chloride	9G@1@	G	c o/o	xG	xG	xG	@@@	xG
Bromomethane	9T@2@	G	c o/o	xG	xG	xG	@@@	xG
Chloroethane	9G@0@	G	c o/o	xG	xG	xG	@@@	xG
Trichlorofluoromethane	9G@5@	G	c o/o	xG	xG	xG	@@@	xG
1.1-Dichloroethene	9G@G@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Iodomethane	9T@Q@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
trans-1.2-Dichloroethene	1G @0@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1-Dichloroethane	9G@T@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
cis-1.2-Dichloroethene	1G @5@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1.1-Trichloroethane	91@G@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1-Dichloropropylene	G 2@Q@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Carbon Tetrachloride	G @2@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2-Dichloroethane	109@ @	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Trichloroethene	95@1@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Dibromomethane	9T@G@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1.2-Trichloroethane	95@0@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.3-Dichloropropane	1T- @Q@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Tetrachloroethene	1- 9@Q@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1.1.2-Tetrachloroethane	j 20@0@	0rG	c o/o	x0rG	x0rG	x0rG	@@@	x0rG

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP074E: Halogenated Aliphatic Compounds - Continued						
trans-1.4-Dichloro-2-butene	110@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
cis-1.4-Dichloro-2-butene	1T9j @1@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
1.1.2.2-Tetrachloroethane	95@T@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2.3-Trichloropropane	5j @0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Pentachloroethane	9j @1@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2-Dibromo-3-chloropropane	5j @- @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
EP074F: Halogenated Aromatic Compounds						
Chlorobenzene	10Q@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Bromobenzene	10Q@j @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Chlorotoluene	5G@5@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
4-Chlorotoluene	10j @2@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
1.2.3-Trichlorobenzene	Q9@1@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
EP074G: Trihalomethanes						
Chloroform	j 9@j @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Bromodichloromethane	9G@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Dibromochloromethane	1- T@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Bromoform	9G@G@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
EP075A: Phenolic Compounds						
Phenol	10Q@G@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Chlorophenol	5G@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Methylphenol	5G@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
3- & 4-Methylphenol	1215@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Nitrophenol	00@G@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2.4-Dimethylphenol	10G@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2.4-Dichlorophenol	1- 0@2@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2.6-Dichlorophenol	Q9@G@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
4-Chloro-3-Methylphenol	G5@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2.4.6-Trichlorophenol	00@j @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2.4.5-Trichlorophenol	5G@G@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Pentachlorophenol	Q9@j @ 1 c ow/o	x1	x1	x1	@@@	x1
EP075B: Polynuclear Aromatic Hydrocarbons						
Naphthalene	51@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Methylnaphthalene	51@9@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG

Analytical Results

7gy@laOk: SOIL (MaOk: SOIL)

Compound	CAS Number	LOR	Unit	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
			Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
				EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
2-Chloronaphthalene	51@Q@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Acenaphthylene	- 0Q@j @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Acenaphthene	Q2@- @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Fluorene	Gj @2@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Phenanthrene	QG@1@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Anthracene	1- 0@- @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Fluoranthene	- 0j @T@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Pyrene	1- 5@0@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
N-2-Fluorenyl Acetamide	G2@j @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Benz(a)anthracene	Gj @G@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Chrysene	- 1Q@1@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Benzo(b) & Benzo(k)fluoranthene	- 0G@5@ - 09@Q@	1	c owo	x1	x1	x1	[illegible]	x1
7.12-Dimethylbenz(a)anthracene	G9@9@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Benzo(a)pyrene	G0@- @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
3-Methylcholanthrene	Gj @5@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Indeno(1.2.3.cd)pyrene	152@5@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Dibenz(a.h)anthracene	G2@0@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Benzo(g.h.i)perylene	151@T@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
^ Sum of PAHs	@@@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
EP075C: Phthalate Esters								
Dimethyl phthalate	121@1@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Diethyl phthalate	QT@j @	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Di-n-butyl phthalate	QT@T@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
Butyl benzyl phthalate	QG@Q@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
bis(2-ethylhexyl) phthalate	119@1@	G0	c owo	xG0	xG0	xG0	[illegible]	xG0
Di-n-octylphthalate	119@T@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10G5G@G@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
N-Nitrosodiethylamine	GG@Q@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
N-Nitrosopyrrolidine	520@G@	1r0	c owo	x1r0	x1r0	x1r0	[illegible]	x1r0
N-Nitrosomorpholine	G5@5@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
N-Nitrosodi-n-propylamine	j - 1@T@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG
N-Nitrosopiperidine	100@G@	0rG	c owo	x0rG	x0rG	x0rG	[illegible]	x0rG

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP075D: Nitrosamines - Continued						
N-Nitrosodibutylamine	5- T@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
N-Nitrosodiphenyl & Diphenylamine	Cj @0@ 1- - @5@ / 1r0 / c o/wo	x1r0	x1r0	x1r0	@@@	x1r0
Methapyrilene	51@0@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
EP075E: Nitroaromatics and Ketones						
2-Picoline	105@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Acetophenone	5Q@j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Nitrobenzene	5Q@G@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Isophorone	9Q@5@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
2.6-Dinitrotoluene	j 0j @0@ / 1r0 / c o/wo	x1r0	x1r0	x1r0	@@@	x1r0
2.4-Dinitrotoluene	1- 1@T@ / 1r0 / c o/wo	x1r0	x1r0	x1r0	@@@	x1r0
1-Naphthylamine	12T@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
4-Nitroquinoline-N-oxide	Cj @9@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
5-Nitro-o-toluidine	55@G@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Azobenzene	102@2@ / 1 / c o/wo	x1	x1	x1	@@@	x1
1.3.5-Trinitrobenzene	55@G@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Phenacetin	j - @T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
4-Aminobiphenyl	5- @9@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Pentachloronitrobenzene	Q- @Q@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Pronamide	-25G0@Q@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Dimethylaminoazobenzene	j 0@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Chlorobenzilate	G10@C@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
EP075F: Haloethers						
Bis(2-chloroethyl) ether	111@T@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Bis(2-chloroethoxy) methane	111@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
4-Chlorophenyl phenyl ether	900G@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
4-Bromophenyl phenyl ether	101@G@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
EP075G: Chlorinated Hydrocarbons						
1.3-Dichlorobenzene	GT1@2@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
1.4-Dichlorobenzene	10j @j @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
1.2-Dichlorobenzene	5G@0@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Hexachloroethane	j 9@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
1.2.4-Trichlorobenzene	1- 0@- @ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG
Hexachloropropylene	1QQQ@1@ / 0rG / c o/wo	x0rG	x0rG	x0rG	@@@	x0rG

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP075G: Chlorinated Hydrocarbons - Continued						
Hexachlorobutadiene	Q9@QQ@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Hexachlorocyclopentadiene	99@99@ / - rG / c o/o	x- rG	x- rG	x- rG	@@@	x- rG
Pentachlorobenzene	j 0Q@52@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Hexachlorobenzene (HCB)	11Q@T@ / 1r0 / c o/o	x1r0	x1r0	x1r0	@@@	x1r0
EP075H: Anilines and Benzidines						
Aniline	j - @2@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
4-Chloroaniline	10j @99@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
2-Nitroaniline	QQ@T@ / 1r0 / c o/o	x1r0	x1r0	x1r0	@@@	x1r0
3-Nitroaniline	55@5@ / 1r0 / c o/o	x1r0	x1r0	x1r0	@@@	x1r0
Dibenzofuran	12- @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
4-Nitroaniline	100@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Carbazole	Qj @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
3.3`-Dichlorobenzidine	51@T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
EP075I: Organochlorine Pesticides						
alpha-BHC	215@T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
beta-BHC	215@G@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
gamma-BHC	GQ@5@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
delta-BHC	215@j @ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Heptachlor	9j @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Aldrin	205@0@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Heptachlor epoxide	10- T@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
alpha-Endosulfan	5G5@QQ@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
4.4`-DDE	9- @G@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Dieldrin	j 0@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Endrin	9- @0@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
beta-Endosulfan	22- 12@G@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
4.4`-DDD	9- @T@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Endosulfan sulfate	1021@9@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
4.4`-DDT	G0@5@ / 1r0 / c o/o	x1r0	x1r0	x1r0	@@@	x1r0
EP075J: Organophosphorus Pesticides						
Dichlorvos	j - @2@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Dimethoate	j 0@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG
Diazinon	222@1@ / 0rG / c o/o	x0rG	x0rG	x0rG	@@@	x0rG

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)

	Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP075J: Organophosphorus Pesticides - Continued						
Chlorpyrifos-methyl	GG5Q@2@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Malathion	1- 1@C@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Fenthion	GC@C@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Chlorpyrifos	- 5- 1@C@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Pirimphos-ethyl	- 2G0G@1@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Chlorfenvinphos	T90@0@ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Prothiofos	2Tj T2@j @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
Ethion	Gj 2@- @ 0rG c ow/o	x0rG	x0rG	x0rG	@@@	x0rG
EP080/071: Total Petroleum Hydrocarbons						
C6 - C9 Fraction	@@@ 10 c ow/o	x10	x10	x10	x10	x10
C10 - C14 Fraction	@@@ G0 c ow/o	xG0	xG0	xG0	xG0	xG0
C15 - C28 Fraction	@@@ 100 c ow/o	x100	x100	x100	x100	x100
C29 - C36 Fraction	@@@ 100 c ow/o	x100	x100	x100	x100	x100
^ C10 - C36 Fraction (sum)	@@@ G0 c ow/o	xG0	xG0	xG0	xG0	xG0
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft						
C6 - C10 Fraction	@@@ 10 c ow/o	x10	x10	x10	x10	x10
>C10 - C16 Fraction	@@@ G0 c ow/o	xG0	xG0	xG0	xG0	xG0
>C16 - C34 Fraction	@@@ 100 c ow/o	x100	x100	x100	x100	x100
>C34 - C40 Fraction	@@@ 100 c ow/o	x100	x100	x100	x100	x100
^ >C10 - C40 Fraction (sum)	@@@ G0 c ow/o	xG0	xG0	xG0	xG0	xG0
EP074S: VOC Surrogates						
1.2-Dichloroethane-D4	190j 0@9@ 0r1 %	**72.1**	**83.8**	**83.9**	@@@	**84.2**
Toluene-D8	- 029@j @ 0r1 %	**82.6**	**95.9**	**97.4**	@@@	**93.8**
4-Bromofluorobenzene	Tj 0@0@ 0r1 %	**79.9**	**92.6**	**96.8**	@@@	**91.6**
EP075S: Acid Extractable Surrogates						
2-Fluorophenol	2j 9@- @ 0r1 %	**75.3**	**82.6**	**78.2**	@@@	**87.8**
Phenol-d6	121- 9@C@ 0r1 %	**62.5**	**67.8**	**61.8**	@@@	**74.8**
2-Chlorophenol-D4	525G1@2@ 0r1 %	**61.2**	**66.4**	**61.1**	@@@	**70.6**
2.4.6-Tribromophenol	11C@5@ 0r1 %	**57.2**	**71.5**	**46.5**	@@@	**68.8**
EP075T: Base/Neutral Extractable Surrogates						
Nitrobenzene-D5	T1j G@0@ 0r1 %	**58.0**	**57.4**	**58.8**	@@@	**69.9**
1.2-Dichlorobenzene-D4	- 155@5@ 0r1 %	**54.7**	**60.2**	**54.1**	@@@	**65.8**
2-Fluorobiphenyl	2- 1@0@ 0r1 %	**55.4**	**75.2**	**51.4**	@@@	**58.5**

Analytical Results

7gy@laCBx<: SOIL (MaCBx<: SOIL)			Client sample ID	TP-A3a-01/1.4	TP-A3a-04/0.1	TP-A3a-05/1.3	TP-A3a-07/0.9	TP-A3a-08/0.1
			Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-030	EM1303970-038	EM1303970-045	EM1303970-050	EM1303970-053
EP075T: Base/Neutral Extractable Surrogates - Continued								
Anthracene-d10	1915@j @	0r1	%	112	99.0	103	@@@	104
4-Terphenyl-d14	191O@G1@	0r1	%	90.8	94.9	76.6	@@@	103
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	190j 0@9@	0r1	%	70.8	81.8	82.9	63.7	82.2
Toluene-D8	- 029@j @	0r1	%	76.8	89.1	91.1	72.1	87.3
4-Bromofluorobenzene	Tj 0@0@	0r1	%	76.4	90.1	96.6	69.9	85.6

Analytical Results

7gy@laGk: SOIL (MaGk: SOIL)

Compound	CAS Number	LOR	Unit	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
			Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
				EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	@@@@	1r0	%	6.9	23.4	22.5	7.1	19.8
EG005T: Total Metals by ICP-AES								
Arsenic	9TT0@Q@	G	c owo	xG	@@@@	@@@@	xG	@@@@
Barium	9TT0@5@	10	c owo	30	@@@@	@@@@	20	@@@@
Beryllium	9TT0@1@	1	c owo	x1	@@@@	@@@@	x1	@@@@
Cadmium	9TT0@2@	1	c owo	x1	@@@@	@@@@	x1	@@@@
Chromium	9TT0@9@	-	c owo	32	@@@@	@@@@	20	@@@@
Cobalt	9TT0@Q@	-	c owo	3	@@@@	@@@@	2	@@@@
Copper	9TT0@0@	G	c owo	6	@@@@	@@@@	xG	@@@@
Lead	9T25@- @	G	c owo	19	@@@@	@@@@	12	@@@@
Manganese	9T25@j @	G	c owo	51	@@@@	@@@@	54	@@@@
Nickel	9TT0@- @	-	c owo	6	@@@@	@@@@	4	@@@@
Vanadium	9TT0@- @	G	c owo	100	@@@@	@@@@	59	@@@@
Zinc	9TT0@j @	G	c owo	9	@@@@	@@@@	7	@@@@
EG035T: Total Recoverable Mercury by FIMS								
Mercury	9T25@9@	0r1	c owo	x0r1	@@@@	@@@@	x0r1	@@@@
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	91@2@	0r-	c owo	x0r-	@@@@	x0r-	x0r-	@@@@
Toluene	10Q@Q@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
Ethylbenzene	100@1@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
meta- & para-Xylene	10Q@Q@ 10j @- @	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
Styrene	100@- @	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
ortho-Xylene	5G@9@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
Isopropylbenzene	5Q@- @	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
n-Propylbenzene	102@G@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
1.3.5-Trimethylbenzene	10Q@9@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
sec-Butylbenzene	12G@Q@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
1.2.4-Trimethylbenzene	5G@2@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
tert-Butylbenzene	5Q@j @	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
p-Isopropyltoluene	55@9@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
n-Butylbenzene	10T@1@	0rG	c owo	x0rG	@@@@	x0rG	x0rG	@@@@
EP074B: Oxygenated Compounds								
Vinyl Acetate	10Q@G@	G	c owo	xG	@@@@	xG	xG	@@@@

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
	Client sampling date / time	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP074B: Oxygenated Compounds - Continued						
2-Butanone (MEK)	9Q@2@ / G / c ow/o	xG	@@@	xG	xG	@@@
4-Methyl-2-pentanone (MIBK)	10Q@0@ / G / c ow/o	xG	@@@	xG	xG	@@@
2-Hexanone (MBK)	G51@Q@ / G / c ow/o	xG	@@@	xG	xG	@@@
EP074C: Sulfonated Compounds						
Carbon disulfide	9G@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
EP074D: Fumigants						
2.2-Dichloropropane	G5T@0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.2-Dichloropropane	9Q@9@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
cis-1.3-Dichloropropylene	100j 1@1@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
trans-1.3-Dichloropropylene	100j 1@- @ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.2-Dibromoethane (EDB)	10j @2@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
EP074E: Halogenated Aliphatic Compounds						
Dichlorodifluoromethane	9G@1@ / G / c ow/o	xG	@@@	xG	xG	@@@
Chloromethane	9T@9@ / G / c ow/o	xG	@@@	xG	xG	@@@
Vinyl chloride	9G@1@ / G / c ow/o	xG	@@@	xG	xG	@@@
Bromomethane	9T@2@ / G / c ow/o	xG	@@@	xG	xG	@@@
Chloroethane	9G@0@ / G / c ow/o	xG	@@@	xG	xG	@@@
Trichlorofluoromethane	9G@5@ / G / c ow/o	xG	@@@	xG	xG	@@@
1.1-Dichloroethene	9G@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Iodomethane	9T@Q@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
trans-1.2-Dichloroethene	1G @0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.1-Dichloroethane	9G@T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
cis-1.2-Dichloroethene	1G @5@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.1.1-Trichloroethane	91@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.1-Dichloropropylene	G 2@Q@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Carbon Tetrachloride	G @2@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.2-Dichloroethane	109@ @ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Trichloroethene	95@1@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Dibromomethane	9T@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.1.2-Trichloroethane	95@0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.3-Dichloropropane	1T- @Q@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Tetrachloroethene	1- 9@Q@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
1.1.1.2-Tetrachloroethane	j 20@0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@

Analytical Results

7gy@laCB<: SOIL (MaCB<: SOIL)	Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP074E: Halogenated Aliphatic Compounds - Continued						
trans-1.4-Dichloro-2-butene	110@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
cis-1.4-Dichloro-2-butene	1T9j @1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.1.2.2-Tetrachloroethane	95@T@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.2.3-Trichloropropane	5j @C@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Pentachloroethane	9j @1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.2-Dibromo-3-chloropropane	5j @- @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP074F: Halogenated Aromatic Compounds						
Chlorobenzene	10C@0@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Bromobenzene	10C@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2-Chlorotoluene	5G@5@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Chlorotoluene	10j @2@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.2.3-Trichlorobenzene	C9@1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP074G: Trihalomethanes						
Chloroform	j 9@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Bromodichloromethane	9G@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Dibromochloromethane	1- T@C@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Bromoform	9G@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP075A: Phenolic Compounds						
Phenol	10C@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2-Chlorophenol	5G@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2-Methylphenol	5G@C@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
3- & 4-Methylphenol	1215@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2-Nitrophenol	CC@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.4-Dimethylphenol	10G@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.4-Dichlorophenol	1- 0@2@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.6-Dichlorophenol	C9@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Chloro-3-Methylphenol	G5@0@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.4.6-Trichlorophenol	CC@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.4.5-Trichlorophenol	5G@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Pentachlorophenol	C9@j @ / 1 / c o/wo	x1	@@@	x1	x1	@@@
EP075B: Polynuclear Aromatic Hydrocarbons						
Naphthalene	51@0@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2-Methylnaphthalene	51@9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@

: aoe f 20 LbT2
H LP? h P4eP f EM1202590
n lvemC f n I RSOh t I OE : U ER : uY t uS
: PLNAC f - 1- 1j 2 2

Analytical Results

7gy@laC: SOIL (MaC: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
				Client sampling date / time: 1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
				EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
2-Chloronaphthalene	51@C@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Acenaphthylene	-0C@j @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Acenaphthene	C2@- @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Fluorene	Cj @2@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Phenanthrene	CC@1@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Anthracene	1-0@- @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Fluoranthene	-0j @T@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Pyrene	1-5@0@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
N-2-Fluorenyl Acetamide	C2@j @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Benz(a)anthracene	Cj @C@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Chrysene	-1C@1@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Benzo(b) & Benzo(k)fluoranthene	-0C@5@-09@C@	1	c o/w o	x1	@@@	x1	x1	@@@
7.12-Dimethylbenz(a)anthracene	C9@9@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Benzo(a)pyrene	C0@- @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
3-Methylcholanthrene	Cj @5@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Indeno(1.2.3.cd)pyrene	152@5@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Dibenz(a.h)anthracene	C2@0@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Benzo(g.h.i)perylene	151@T@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
^ Sum of PAHs	@@@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
EP075C: Phthalate Esters								
Dimethyl phthalate	121@1@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Diethyl phthalate	CT@j @	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Di-n-butyl phthalate	CT@T@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
Butyl benzyl phthalate	CC@C@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
bis(2-ethylhexyl) phthalate	119@1@	G0	c o/w o	xG0	@@@	xG0	xG0	@@@
Di-n-octylphthalate	119@T@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10G5G@G@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
N-Nitrosodiethylamine	GG@C@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
N-Nitrosopyrrolidine	520@G@	1r0	c o/w o	x1r0	@@@	x1r0	x1r0	@@@
N-Nitrosomorpholine	G5@5@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
N-Nitrosodi-n-propylamine	j-1@T@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@
N-Nitrosopiperidine	100@G@	0rG	c o/w o	x0rG	@@@	x0rG	x0rG	@@@

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
	Client sampling date / time	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00	1- @: R@012 1G:00
Compound	CAS Number / LOR / Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP075D: Nitrosamines - Continued						
N-Nitrosodibutylamine	5- T@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
N-Nitrosodiphenyl & Diphenylamine	Cj @0@ 1- - @5@ / 1r0 / c o/wo	x1r0	@@@	x1r0	x1r0	@@@
Methapyrilene	51@0@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP075E: Nitroaromatics and Ketones						
2-Picoline	105@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Acetophenone	5Q@j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Nitrobenzene	5Q@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Isophorone	9Q@5@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
2.6-Dinitrotoluene	j 0j @0@ / 1r0 / c o/wo	x1r0	@@@	x1r0	x1r0	@@@
2.4-Dinitrotoluene	1- 1@T@ / 1r0 / c o/wo	x1r0	@@@	x1r0	x1r0	@@@
1-Naphthylamine	12T@- @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Nitroquinoline-N-oxide	Cj @9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
5-Nitro-o-toluidine	55@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Azobenzene	102@2@ / 1 / c o/wo	x1	@@@	x1	x1	@@@
1.3.5-Trinitrobenzene	55@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Phenacetin	j - @T@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Aminobiphenyl	5- @9@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Pentachloronitrobenzene	Q- @Q@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Pronamide	- 25G0@Q@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Dimethylaminoazobenzene	j 0@1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Chlorobenzilate	G10@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP075F: Haloethers						
Bis(2-chloroethyl) ether	111@T@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Bis(2-chloroethoxy) methane	111@1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Chlorophenyl phenyl ether	900G@- @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
4-Bromophenyl phenyl ether	101@G@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP075G: Chlorinated Hydrocarbons						
1.3-Dichlorobenzene	GT1@2@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.4-Dichlorobenzene	10j @j @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.2-Dichlorobenzene	5G@0@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Hexachloroethane	j 9@- @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
1.2.4-Trichlorobenzene	1- 0@- @ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Hexachloropropylene	1QQQ@1@ / 0rG / c o/wo	x0rG	@@@	x0rG	x0rG	@@@

Analytical Results

7gy@MaCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP075G: Chlorinated Hydrocarbons - Continued						
Hexachlorobutadiene	Q9@QQ@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Hexachlorocyclopentadiene	99@99@ / - rG / c ow/o	x- rG	@@@	x- rG	x- rG	@@@
Pentachlorobenzene	j 0Q@52@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Hexachlorobenzene (HCB)	11Q@T@ / 1r0 / c ow/o	x1r0	@@@	x1r0	x1r0	@@@
EP075H: Anilines and Benzidines						
Aniline	j - @2@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
4-Chloroaniline	10j @9@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
2-Nitroaniline	QQ@T@ / 1r0 / c ow/o	x1r0	@@@	x1r0	x1r0	@@@
3-Nitroaniline	55@5@ / 1r0 / c ow/o	x1r0	@@@	x1r0	x1r0	@@@
Dibenzofuran	12- @T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
4-Nitroaniline	100@1@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Carbazole	Qj @T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
3.3`-Dichlorobenzidine	51@T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
EP075I: Organochlorine Pesticides						
alpha-BHC	215@T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
beta-BHC	215@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
gamma-BHC	GQ@5@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
delta-BHC	215@j @ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Heptachlor	9j @T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Aldrin	205@0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Heptachlor epoxide	10- T@9@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
alpha-Endosulfan	5G5@QQ@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
4.4`-DDE	9- @G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Dieldrin	j 0@9@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Endrin	9- @0@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
beta-Endosulfan	22- 12@G@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
4.4`-DDD	9- @T@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Endosulfan sulfate	1021@9@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
4.4`-DDT	G0@5@ / 1r0 / c ow/o	x1r0	@@@	x1r0	x1r0	@@@
EP075J: Organophosphorus Pesticides						
Dichlorvos	j - @2@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Dimethoate	j 0@1@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@
Diazinon	222@1@ / 0rG / c ow/o	x0rG	@@@	x0rG	x0rG	@@@

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)			Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
			Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number	LOR	Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP075J: Organophosphorus Pesticides - Continued								
Chlorpyrifos-methyl	GG5Q@2@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Malathion	1- 1@C@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Fenthion	GC@C@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Chlorpyrifos	- 5- 1@C@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Pirimphos-ethyl	- 2G0G@1@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Chlorfenvinphos	T90@0@	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Prothiofos	2Tj T2@j @	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
Ethion	Gj 2@- @	0rG	c o/wo	x0rG	@@@	x0rG	x0rG	@@@
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	@@@	10	c o/wo	x10	x10	x10	x10	x10
C10 - C14 Fraction	@@@	G0	c o/wo	xG0	xG0	xG0	xG0	xG0
C15 - C28 Fraction	@@@	100	c o/wo	x100	x100	x100	x100	x100
C29 - C36 Fraction	@@@	100	c o/wo	x100	x100	x100	x100	x100
^ C10 - C36 Fraction (sum)	@@@	G0	c o/wo	xG0	xG0	xG0	xG0	xG0
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	@@@	10	c o/wo	x10	x10	x10	x10	x10
>C10 - C16 Fraction	@@@	G0	c o/wo	xG0	xG0	xG0	xG0	xG0
>C16 - C34 Fraction	@@@	100	c o/wo	x100	x100	x100	x100	x100
>C34 - C40 Fraction	@@@	100	c o/wo	x100	x100	x100	x100	x100
^ >C10 - C40 Fraction (sum)	@@@	G0	c o/wo	xG0	xG0	xG0	xG0	xG0
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	190j 0@9@	0r1	%	**75.9**	@@@	**82.7**	**80.2**	@@@
Toluene-D8	- 029@j @	0r1	%	**84.6**	@@@	**95.2**	**84.8**	@@@
4-Bromofluorobenzene	Tj 0@0@	0r1	%	**82.6**	@@@	**89.4**	**82.6**	@@@
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	2j 9@- @	0r1	%	**80.3**	@@@	**68.2**	**54.2**	@@@
Phenol-d6	121- 9@C@	0r1	%	**64.2**	@@@	**62.3**	**57.6**	@@@
2-Chlorophenol-D4	525G1@2@	0r1	%	**64.8**	@@@	**61.8**	**51.9**	@@@
2.4.6-Tribromophenol	11C@5@	0r1	%	**78.6**	@@@	**58.1**	**54.9**	@@@
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	T1j G@0@	0r1	%	**59.1**	@@@	**62.1**	**51.8**	@@@
1.2-Dichlorobenzene-D4	- 155@5@	0r1	%	**59.4**	@@@	**58.3**	**49.5**	@@@
2-Fluorobiphenyl	2- 1@0@	0r1	%	**69.0**	@@@	**61.9**	**55.0**	@@@

Analytical Results

7gy@laCBK: SOIL (MaCBK: SOIL)	Client sample ID	TP-A3a-09/0.1	TP-A3a-10/1.0	TP-A3a-11/0.6	TP-A3a-13/0.1	TP-A3a-14/0.5
	Client sampling date / time	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00	1- @: R@012 1G00
Compound	CAS Number / LOR / Unit	EM1303970-056	EM1303970-059	EM1303970-062	EM1303970-066	EM1303970-070
EP075T: Base/Neutral Extractable Surrogates - Continued						
Anthracene-d10	1915@j @ / 0r1 / %	99.2	@@@@	107	102	@@@@
4-Terphenyl-d14	191O@G1@ / 0r1 / %	92.5	@@@@	84.3	82.0	@@@@
EP080S: TPH(V)/BTEX Surrogates						
1.2-Dichloroethane-D4	190j 0@09@ / 0r1 / %	74.2	65.3	80.1	78.6	78.2
Toluene-D8	- 029@j @@ / 0r1 / %	79.1	72.1	89.0	78.7	84.4
4-Bromofluorobenzene	Tj 0@0@ / 0r1 / %	82.4	73.1	85.8	82.7	86.5

Analytical Results

7gy@la@r: SOIL (Ma@r: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
				EM1303970-078	----	----	----	----
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	@@@@	1r0	%	7.2	@@@@	@@@@	@@@@	@@@@
EG005T: Total Metals by ICP-AES								
Arsenic	9TT0@Q@	G	c owo	xG	@@@@	@@@@	@@@@	@@@@
Barium	9TT0@5@	10	c owo	20	@@@@	@@@@	@@@@	@@@@
Beryllium	9TT0@1@	1	c owo	x1	@@@@	@@@@	@@@@	@@@@
Cadmium	9TT0@2@	1	c owo	x1	@@@@	@@@@	@@@@	@@@@
Chromium	9TT0@9@	-	c owo	38	@@@@	@@@@	@@@@	@@@@
Cobalt	9TT0@Q@	-	c owo	3	@@@@	@@@@	@@@@	@@@@
Copper	9TT0@0@	G	c owo	xG	@@@@	@@@@	@@@@	@@@@
Lead	9T25@- @	G	c owo	11	@@@@	@@@@	@@@@	@@@@
Manganese	9T25@j @	G	c owo	46	@@@@	@@@@	@@@@	@@@@
Nickel	9TT0@- @	-	c owo	7	@@@@	@@@@	@@@@	@@@@
Vanadium	9TT0@- @	G	c owo	104	@@@@	@@@@	@@@@	@@@@
Zinc	9TT0@j @	G	c owo	xG	@@@@	@@@@	@@@@	@@@@
EG035T: Total Recoverable Mercury by FIMS								
Mercury	9T25@9@	0r1	c owo	x0r1	@@@@	@@@@	@@@@	@@@@
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	91@2@	0r-	c owo	x0r-	@@@@	@@@@	@@@@	@@@@
Toluene	10Q@Q@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Ethylbenzene	100@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
meta- & para-Xylene	10Q@Q@ 10j @- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Styrene	100@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
ortho-Xylene	5G@9@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Isopropylbenzene	5Q@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
n-Propylbenzene	102@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
1.3.5-Trimethylbenzene	10Q@9@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
sec-Butylbenzene	12G@Q@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
1.2.4-Trimethylbenzene	5G@2@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
tert-Butylbenzene	5Q@j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
p-Isopropyltoluene	55@9@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
n-Butylbenzene	10T@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
EP074B: Oxygenated Compounds								
Vinyl Acetate	10Q@G@	G	c owo	xG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@laC?<: SOIL (MaC?<: SOIL)	Client sample ID	QC01/110413	@@@@	@@@@	@@@@	@@@@
	Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
Compound *CAS Number*	*LOR* *Unit*	EM1303970-078	----	----	----	----
EP074B: Oxygenated Compounds - Continued						
2-Butanone (MEK) 9Q@2@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
4-Methyl-2-pentanone (MIBK) 10Q@0@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
2-Hexanone (MBK) G51@Q@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
EP074C: Sulfonated Compounds						
Carbon disulfide 9G@G@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
EP074D: Fumigants						
2.2-Dichloropropane G5T@0@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2-Dichloropropane 9Q@9@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
cis-1.3-Dichloropropylene 100j 1@1@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
trans-1.3-Dichloropropylene 100j 1@- @	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2-Dibromoethane (EDB) 10j @2@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
EP074E: Halogenated Aliphatic Compounds						
Dichlorodifluoromethane 9G@1@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
Chloromethane 9T@9@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
Vinyl chloride 9G@1@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
Bromomethane 9T@2@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
Chloroethane 9G@0@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
Trichlorofluoromethane 9G@5@	G c o/w o	xG	@@@@	@@@@	@@@@	@@@@
1.1-Dichloroethene 9G@G@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
Iodomethane 9T@Q@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
trans-1.2-Dichloroethene 1G @0@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1-Dichloroethane 9G@T@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
cis-1.2-Dichloroethene 1G @5@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1.1-Trichloroethane 91@G@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1-Dichloropropylene G 2@Q@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
Carbon Tetrachloride G @2@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2-Dichloroethane 109@ @	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
Trichloroethene 95@1@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
Dibromomethane 9T@G@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1.2-Trichloroethane 95@0@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.3-Dichloropropane 1T- @Q@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
Tetrachloroethene 1- 9@Q@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1.1.2-Tetrachloroethane j 20@0@	0rG c o/w o	x0rG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@laCB<: SOIL (MaCB<: SOIL)	Client sample ID	QC01/110413	@@@@	@@@@	@@@@	@@@@
	Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
Compound	CAS Number	LOR	Unit	EM1303970-078	----	----	----	----
EP074E: Halogenated Aliphatic Compounds - Continued								
trans-1.4-Dichloro-2-butene	110@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
cis-1.4-Dichloro-2-butene	1T9j @1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
1.1.2.2-Tetrachloroethane	95@T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2.3-Trichloropropane	5j @Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Pentachloroethane	9j @1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2-Dibromo-3-chloropropane	5j @- @	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	10Q@0@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Bromobenzene	10Q@j @	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Chlorotoluene	5G@5@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4-Chlorotoluene	10j @2@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
1.2.3-Trichlorobenzene	Q9@1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
EP074G: Trihalomethanes								
Chloroform	j 9@j @	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Bromodichloromethane	9G@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Dibromochloromethane	1- T@Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Bromoform	9G@G@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
EP075A: Phenolic Compounds								
Phenol	10Q@G@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Chlorophenol	5G@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Methylphenol	5G@Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
3- & 4-Methylphenol	1215@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Nitrophenol	QQ@G@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2.4-Dimethylphenol	10G@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2.4-Dichlorophenol	1- 0@2@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2.6-Dichlorophenol	Q9@G@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4-Chloro-3-Methylphenol	G5@0@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2.4.6-Trichlorophenol	QQ@j @	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2.4.5-Trichlorophenol	5G@G@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Pentachlorophenol	Q9@j @	1	c ow/o	x1	@@@@	@@@@	@@@@	@@@@
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	51@0@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Methylnaphthalene	51@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@a@k: SOIL (Ma@k: SOIL)

Compound	CAS Number	LOR	Unit	QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
				EM1303970-078	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
2-Chloronaphthalene	51@Q@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Acenaphthylene	- 0Q@j @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Acenaphthene	Q2@- @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Fluorene	G @2@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Phenanthrene	QG@1@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Anthracene	1- 0@- @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Fluoranthene	- 0j @T@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Pyrene	1- 5@0@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
N-2-Fluorenyl Acetamide	G2@j @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Benz(a)anthracene	G @G@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Chrysene	- 1Q@1@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Benzo(b) & Benzo(k)fluoranthene	- 0G@5@ - 09@Q@	1	c o₩o	x1	@@@@	@@@@	@@@@	@@@@
7.12-Dimethylbenz(a)anthracene	G@9@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Benzo(a)pyrene	G0@- @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
3-Methylcholanthrene	G @5@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Indeno(1.2.3.cd)pyrene	152@5@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Dibenz(a.h)anthracene	G2@0@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Benzo(g.h.i)perylene	151@T@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
^ Sum of PAHs	@@@@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
EP075C: Phthalate Esters								
Dimethyl phthalate	121@1@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Diethyl phthalate	QT@j @	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Di-n-butyl phthalate	QT@T@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
Butyl benzyl phthalate	QG@Q@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
bis(2-ethylhexyl) phthalate	119@1@	G0	c o₩o	xG0	@@@@	@@@@	@@@@	@@@@
Di-n-octylphthalate	119@T@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10G5G@G@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
N-Nitrosodiethylamine	GG@Q@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
N-Nitrosopyrrolidine	520@G@	1r0	c o₩o	x1r0	@@@@	@@@@	@@@@	@@@@
N-Nitrosomorpholine	G5@5@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
N-Nitrosodi-n-propylamine	j - 1@T@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@
N-Nitrosopiperidine	100@G@	0rG	c o₩o	x0rG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@la@k: SOIL (Ma@k: SOIL)

Compound	CAS Number	LOR	Unit	QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
				EM1303970-078	----	----	----	----
EP075D: Nitrosamines - Continued								
N-Nitrosodibutylamine	5- T@j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
N-Nitrosodiphenyl & Diphenylamine	Q @0@ 1- - @5@	1r0	c owo	x1r0	@@@@	@@@@	@@@@	@@@@
Methapyrilene	51@0@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
EP075E: Nitroaromatics and Ketones								
2-Picoline	105@j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Acetophenone	5Q@j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Nitrobenzene	5Q@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Isophorone	9Q@5@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
2.6-Dinitrotoluene	j 0j @0@	1r0	c owo	x1r0	@@@@	@@@@	@@@@	@@@@
2.4-Dinitrotoluene	1- 1@T@	1r0	c owo	x1r0	@@@@	@@@@	@@@@	@@@@
1-Naphthylamine	12T@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
4-Nitroquinoline-N-oxide	G @9@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
5-Nitro-o-toluidine	55@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Azobenzene	102@2@	1	c owo	x1	@@@@	@@@@	@@@@	@@@@
1.3.5-Trinitrobenzene	55@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Phenacetin	j - @T@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
4-Aminobiphenyl	5- @9@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Pentachloronitrobenzene	Q @Q@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Pronamide	- 25G0@Q@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Dimethylaminoazobenzene	j 0@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Chlorobenzilate	G10@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111@T@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Bis(2-chloroethoxy) methane	111@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
4-Chlorophenyl phenyl ether	900G@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
4-Bromophenyl phenyl ether	101@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	GT1@2@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
1.4-Dichlorobenzene	10j @j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
1.2-Dichlorobenzene	5G@0@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Hexachloroethane	j 9@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
1.2.4-Trichlorobenzene	1- 0@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Hexachloropropylene	1QQ@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@MaCBK: SOIL (MaCBK: SOIL)			Client sample ID	QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
Compound	CAS Number	LOR	Unit	EM1303970-078	----	----	----	----
EP075G: Chlorinated Hydrocarbons - Continued								
Hexachlorobutadiene	Q9@QQ@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Hexachlorocyclopentadiene	99@99@	- rG	c ow/o	x- rG	@@@@	@@@@	@@@@	@@@@
Pentachlorobenzene	j 0Q@2@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Hexachlorobenzene (HCB)	11Q@T@	1r0	c ow/o	x1r0	@@@@	@@@@	@@@@	@@@@
EP075H: Anilines and Benzidines								
Aniline	j - @2@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4-Chloroaniline	10j @9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
2-Nitroaniline	QQ@T@	1r0	c ow/o	x1r0	@@@@	@@@@	@@@@	@@@@
3-Nitroaniline	55@5@	1r0	c ow/o	x1r0	@@@@	@@@@	@@@@	@@@@
Dibenzofuran	12- @T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4-Nitroaniline	100@1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Carbazole	Qj @T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
3.3`-Dichlorobenzidine	51@T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
EP075I: Organochlorine Pesticides								
alpha-BHC	215@T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
beta-BHC	215@Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
gamma-BHC	QQ@5@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
delta-BHC	215@j @	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Heptachlor	9j @T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Aldrin	205@0@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Heptachlor epoxide	10- T@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
alpha-Endosulfan	5G5@QQ@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4.4`-DDE	9- @Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Dieldrin	j 0@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Endrin	9- @0@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
beta-Endosulfan	22- 12@Q@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4.4`-DDD	9- @T@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Endosulfan sulfate	1021@9@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
4.4`-DDT	Q0@5@	1r0	c ow/o	x1r0	@@@@	@@@@	@@@@	@@@@
EP075J: Organophosphorus Pesticides								
Dichlorvos	j - @2@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Dimethoate	j 0@1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@
Diazinon	222@1@	0rG	c ow/o	x0rG	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@laGk: SOIL (MaGk: SOIL)

Compound	CAS Number	LOR	Unit	QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
				EM1303970-078	----	----	----	----
EP075J: Organophosphorus Pesticides - Continued								
Chlorpyrifos-methyl	GG5Q@2@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Malathion	1- 1@G@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Fenthion	GG@Q5	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Chlorpyrifos	- 5- 1@Q@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Pirimphos-ethyl	- 2G0G@1@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Chlorfenvinphos	T90@0@	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Prothiofos	2Tj T2@j @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
Ethion	Gj 2@- @	0rG	c owo	x0rG	@@@@	@@@@	@@@@	@@@@
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	@@@@	10	c owo	x10	@@@@	@@@@	@@@@	@@@@
C10 - C14 Fraction	@@@@	G0	c owo	xG0	@@@@	@@@@	@@@@	@@@@
C15 - C28 Fraction	@@@@	100	c owo	x100	@@@@	@@@@	@@@@	@@@@
C29 - C36 Fraction	@@@@	100	c owo	x100	@@@@	@@@@	@@@@	@@@@
^ C10 - C36 Fraction (sum)	@@@@	G0	c owo	xG0	@@@@	@@@@	@@@@	@@@@
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	@@@@	10	c owo	x10	@@@@	@@@@	@@@@	@@@@
>C10 - C16 Fraction	@@@@	G0	c owo	xG0	@@@@	@@@@	@@@@	@@@@
>C16 - C34 Fraction	@@@@	100	c owo	x100	@@@@	@@@@	@@@@	@@@@
>C34 - C40 Fraction	@@@@	100	c owo	x100	@@@@	@@@@	@@@@	@@@@
^ >C10 - C40 Fraction (sum)	@@@@	G0	c owo	xG0	@@@@	@@@@	@@@@	@@@@
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	190j 0@9@	0r1	%	**78.8**	@@@@	@@@@	@@@@	@@@@
Toluene-D8	- 029@j @	0r1	%	**91.9**	@@@@	@@@@	@@@@	@@@@
4-Bromofluorobenzene	Tj 0@0@	0r1	%	**90.1**	@@@@	@@@@	@@@@	@@@@
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	2j 9@- @	0r1	%	**59.3**	@@@@	@@@@	@@@@	@@@@
Phenol-d6	121- 9@Q@	0r1	%	**62.7**	@@@@	@@@@	@@@@	@@@@
2-Chlorophenol-D4	525G1@2@	0r1	%	**58.4**	@@@@	@@@@	@@@@	@@@@
2.4.6-Tribromophenol	11Q@5@	0r1	%	**68.0**	@@@@	@@@@	@@@@	@@@@
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	T1j G@0@	0r1	%	**56.4**	@@@@	@@@@	@@@@	@@@@
1.2-Dichlorobenzene-D4	- 155@5@	0r1	%	**52.5**	@@@@	@@@@	@@@@	@@@@
2-Fluorobiphenyl	2- 1@0@	0r1	%	**57.8**	@@@@	@@@@	@@@@	@@@@

Analytical Results

7gy@MaCPK: SOIL (MaCPK: SOIL)			Client sample ID	QC01/110413	@@@@	@@@@	@@@@	@@@@
			Client sampling date / time	11@: R@012 1G00	@@@@	@@@@	@@@@	@@@@
Compound	CAS Number	LOR	Unit	EM1303970-078	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates - Continued								
Anthracene-d10	1915@j @	0r1	%	98.8	@@@@	@@@@	@@@@	@@@@
4-Terphenyl-d14	191Q@G1@	0r1	%	84.5	@@@@	@@@@	@@@@	@@@@
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	190j 0@09@	0r1	%	78.8	@@@@	@@@@	@@@@	@@@@
Toluene-D8	- 029@j @	0r1	%	91.9	@@@@	@@@@	@@@@	@@@@
4-Bromofluorobenzene	Tj 0@0@	0r1	%	86.7	@@@@	@@@@	@@@@	@@@@

Surrogate Control Limits

7gy@MaCPx: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP074S: VOC Surrogates			
1.2-Dichloroethane-D4	190j 0@9@	j -	1- -
Toluene-D8	- 029@j @	j T	1- 0
4-Bromofluorobenzene	Tj 0@0@	j j	1- T
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	2j 9@- @	- - rQ	1- j
Phenol-d6	121- 9@Q@	- - r5	1- -
2-Chlorophenol-D4	525G1@2@	- 1rQ	1- 9
2.4.6-Tribromophenol	11Q@5@	15r1	122
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	T1j G@0@	- Tr9	1- Q
1.2-Dichlorobenzene-D4	- 155@5@	- - r-	10Q
2-Fluorobiphenyl	2- 1@0@	20r5	1- 9
Anthracene-d10	1915@j @	T-	1T-
4-Terphenyl-d14	191Q@1@	2Q	12Q
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	190j 0@9@	G1	1- G
Toluene-D8	- 029@j @	GG	1- G
4-Bromofluorobenzene	Tj 0@0@	G1	122

ALS Group

Environmental Division

QUALITY CONTROL REPORT

Work Order	: **ES 12327| 3**	9aLe	brfi yPCi
DlMuv	b**CARDNO LANE PIPER PTY LTD**	naEt cavt cm	bcuSMt uA euvalFRNSMMuP elEt f cue
Dt uvaOv	bl YFRhHHdP DR5HhnR	Dt uvaOv	bDadt IP4 alsG
hBBcess	brUgPW, WT3YdPY5hR T3Y4 55RP2VDpPh37 YhnVhPCr-U	hBBcess	bgP4 esvallPYBF7. dMLSaleP2VDPhf svcalMPCr@
c+A aM	bBauumA OBt ualB6 laue. MeaOt A:af	c+A aM	bOadt I:0alsG6 alsLIt Eal:Ot A
ele. Gt ue	b8i rPlOPj QQQ1r11	ele. Gt ue	b8i r+C+QUgj Pj i 1Q
FaOsMA Me	b8i rPlOPj Q1QQUrr	FaOsMA Me	b8i r+C+QUgj Pj i 1r
9dt NeOv	b-r-ri OPC	(DPneSel	bHc9I Pjjj PP7 OGeBf leFT)OqPauBPh n7P D7 OPekf MeA euv
7Me	bFMd/SMe		
D+5+DPuf A Eeo	b####	RaveP7aA. lesPYeOeNeB	brQ+h9Y+1rC
7aA. leo	bl RY	Vesf ePRave	b-g+h9Y+1rC
5dBedPuf A Eeo	b####		
		Ht:Pt yBaA. lesPeOeNeB	bjg
(f t vePuf A Eeo	bl cT(wrUw-	Ht:Pt yBaA. lesPaualmseB	b-r

GMP ce. t oP sf. ecseBesP aumP. ceSMf sP ce. t o)scP 0MGP vGMP ceyeceuOe:P Yesf lvsP a. . ImP vt P vGeP saA. le)scP asP sf EA MeB:P hIIP. aLesP t yP vGMP ce. t oP GaSeP EeeuP OGeO eBP auBP a. . dt SeBP yt c celease:P

GMP f alMhhPDt uvdt IPYe. t oPOt uvaMsPGePt llt 0MLPMyt oA aMub

- naEt cavt cmPf. IMaveP)R39qPYe. t o,PYelaNeP9ecOeuvaLePMyeceuOeP)Y9RqPauBPh OOe. vauOePhMA Ms
- I evGt BPTlau/ Pj I TqPauBPhaEt cavt cmPDt uvdt IP7. MePnD7qPYe. t o,PYeOt SeomPauBPh OOe. vauOePhMA Ms
- I avdMP7. MePj I 7qPYe. t o,PYeOt SeomPauBPh OOe. vauOePhMA Ms

NATA WORLD RECOGNISED ACCREDITATION

Hh hPh OOeBMeBPhaEt cavt cmPQ-U
P
hOOeBMeBPt cPOt A. IMauOeP0MGP
V7 5 wt DP @-U:

Signatories

GMP Bt Of A euvP GasP EeeuP eleOvt uMallmP sMueBP EmP vGeP af vGt cMeBP sMuavt cMsP MBMOaveBP Eelt 0:P cleOvt uMOP sMuMLP GasP Eeeu OacceBPt f vPMuPOt A. IMauOeP0MGP dt OeBf cesPs. eOMeBPMuP rPDFYP9aoPrr:

Signatories	*Position*	*Accreditation Category*
HauOnP4 auL	7euMdP7eA Mt lauMePusvf A euvPDGeA Msv	I elEt f cueP5 dLauMOs
HauOnP4 auL	7euMdP7eA Mt lauMePusvf A euvPDGeA Msv	I elEt f cueP5 dLauMOs
HMV MPve. uM0s/M	7euMdPut dLauMPusvf A euvPDGeA Msv	I elEt f cuePut dLauMOs
HMV MPve. uM0s/M	7euMdPut dLauMPusvf A euvPDGeA Msv	I elEt f cuePut dLauMOs

9aLe	b-RyPCi
4 t o' P5 dBeo	b cl r C1Cj @
DlMuv	b DhYRH5 PhhHcP9 V9cYP9 dPh R
9d NeOv	b-r-ri CPC

General Comments

GeP aualmMalP. d OeBf oesP f seBP EmP vGeP c uSM uA euvalP RMMuP GaSeP EeeuP BeSelt. eBP yd A P esvaEIMGeBP Mveoua Mualm P oeOt LuMeBP. d OeBf oesP sf OGP asP vGt seP. f EIMGeBP EmP vGeP 37c9hpP h9WhpP h7PauBP Hc9I :P VuP Gt f se BeSelt. eBP. d OeBf oesPaoePeA. It meBPMRGePaEseuOePt yPBt Of A euveBPsvauBadBsPt dPEmPOMuvPoekf esv.

4 GeoePA t MMf oePBeveoA MaMuPGasPEeeuP. eoyt oA eBpPoesf lvsPaoePe. t oveBPt uPaPBomPO eMGvPEasM:

4 GeoePaPe. t oveBPessPGauPj<qPoesf lvPsPGMGeoPGauPGePh5 YpPGMPA amPEePBf ePt P. dAaomPsaA. lePexvoaOwBMesvaveBMM MuPauBwt oPMsf yMMuvPsaA. lePt oPaualmsM:

4 GeoePGePh5 YPt yPaPe. t oveBPoesf lvPBMyeosPd A PsvauBadBPh5 YpPGMPA amPEePBf ePt PGMGPA t MMf oePOt uveuvpPMsf yMMuvPsaA. lePoeBf OeBPO eMGvPeA. It meBPt oPA avoMPMveoyeoeuOe:

KemPb

hut umA t f sP=PYeyeosPt PsaA. lesPO GMGPaoePt vPs. eOMMalmP aoPt yPGMPO t o' Pt dBeoPEf vPt oA eBP aoPt yPGePt DP. d OessPt v
Dh7PHf A EeoP=PDh7PoeLMvomPf A EeoPd A PBavaEasePA aMvaMeBPEmPDGeA MalPh EsvoaOvsP7eoSMes:P GePDGeA MalPh EsvoaOvsP7eoSMePsPaPBMMMuPt yPGePh A eoMauPDGeA MalP7t OMvmP
n5 YP=PhMA MPt yPe. t oMLP
Y9RP=PYelaM9eP9eoOeuvaLePRMyeoeuOe
#PP=PuBMMavesPyaMeBPt D

Laboratory Duplicate (DUP) Report

GeP kf alMnP Q uvd IP veoA P naEt cavt omP Rf . IMaveP ceyeosP vt P aP caBt A InP seleOeBP MvalaEt cavt omP s. IMP naEt cavt omP Bf . IMavesP . d SMeP Myt oA aMuP ceLacBMLP A evGt BP . ceOMuP auBP saA . leP Geved LeueMnP GeP . eoA MeBP cauLesP yt dPvGePYelaVeP9 eoOeuvPReSMvMuP)Y9 RcPt yPnaEt cavt omPRf . IMavesPacePs. eOMeBPMPhn7PI evGt BP(4 VtcHwCOPauBPacePBe. euBeuvPt uPvGePA aLuM BePt yPcesf lvsPMPOl A . adMt uPvt PvGePleSelPt yPce. t oMLbPYesf lvP<P r 1PMA esPn5 Ybl Ht PnMA MPYesf lvPEev0 eeuP 1PauBP 1PMA esPn5 YbPP1%PRU1%;PYesf lvP>P 1PMA esPn5 YbPP1%PRP 1%:

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EA355: Soisture Content (QC Lot:) 42) 34) G									
cl r C1Q @+1 1r	9+hr+ Qvl:r	ch1UU+r 1OP t MvfceP Dt uveuvPBdMBP6 P 1C°Dq	++++	r:1	%	j :-	j :U	- :j	Ht PnMA M
cl r C1Q @+1 C1	9+h Ca+1r w:g	ch1UU+r 1OP t MvfceP Dt uveuvPBdMBP6 P 1C°Dq	++++	r:1	%	- @@	- @U	1:@	1%PRP 1%
EA355: Soisture Content (QC Lot:) 42) 342G									
cl r C1Q @+1@Q	(D1r wr 1gr C	ch1UU+r 1OP t MvfceP Dt uveuvPBdMBP6 P 1C°Dq	++++	r:1	%	@-	@1	C:U	Ht PnMA M
cl r C1Q @+1r 1	hut umA t f s	ch1UU+r 1OP t MvfceP Dt uveuvPBdMBP6 P 1C°Dq	++++	r:1	%	r - :i	r r :i	Q-	1%PRU1%
Eb 335T: Total Setals yBICP8AEM (QC Lot:) 4212) 3G									
cl r C1Q i - +1 1U	hut umA t f s	c, 11U bPTeomMA	@gg1+gr+@	r	ALwL	r	<r	1:1	Ht PnMA M
		c, 11U bPDaBA MA	@gg1+gC+j	r	ALwL	<r	<r	1:1	Ht PnMA M
		c, 11U bPTadMA	@gg1+Q+C	r 1	ALwL	r - 1	r 11	r r :i	1%PRU1%
		c, 11U bPDGt A MA	@gg1+g@C	-	ALwL	- 1	r Q	r 1:U	1%PRU1%
		c, 11U bPDt Ealv	@gg1+gQ+g	-	ALwL	Q	@	1:1	Ht PnMA M
		c, 11U bPHMOel	@gg1+1- +1	-	ALwL	r 1	j	1:1	Ht PnMA M
		c, 11U bPnoseuMO	@gg1+CQ+	U	ALwL	<U	<U	1:1	Ht PnMA M
		c, 11U bPDt . . eo	@gg1+U1+Q	U	ALwL	r r	r 1	1:1	Ht PnMA M
		c, 11U bPneaB	@Q +j - +r	U	ALwL	r i	r i	1:1	Ht PnMA M
		c, 11U bP auLauese	@Q +j i +U	U	ALwL	gg@	ggU	1:U	1%PRP 1%
		c, 11U bP2 auaBMA	@gg1+i - +	U	ALwL	C1	- Q	Q-	Ht PnMA M
		c, 11U bPZMO	@gg1+i i +i	U	ALwL	- Q	- @	1:1	Ht PnMA M
cl r C1Q @+1 C1	9+h Ca+1r w:g	c, 11U bPTeomMA	@gg1+gr+@	r	ALwL	-	-	1:1	Ht PnMA M
		c, 11U bPDaBA MA	@gg1+gC+j	r	ALwL	<r	<r	1:1	Ht PnMA M
		c, 11U bPTadMA	@gg1+Q+C	r 1	ALwL	r Q1	r - 1	CC:i	1%PRU1%
		c, 11U bPDGt A MA	@gg1+g@C	-	ALwL	i 1	UQ	g:g	1%PRP 1%
		c, 11U bPDt Ealv	@gg1+gQ+g	-	ALwL	r g	r g	1:1	Ht PnMA M
		c, 11U bPHMOel	@gg1+1- +1	-	ALwL	- @	- @	1:1	1%PRU1%
		c, 11U bPnoseuMO	@gg1+CQ+	U	ALwL	<U	<U	1:1	Ht PnMA M
		c, 11U bPDt . . eo	@gg1+U1+Q	U	ALwL	r 1	r r	1:1	Ht PnMA M
		c, 11U bPneaB	@Q +j - +r	U	ALwL	r g	r i	Q@	Ht PnMA M
		c, 11U bP auLauese	@Q +j i +U	U	ALwL	Ci	- Q	- i :C	Ht PnMA M
		c, 11U bP2 auaBMA	@gg1+i - +	U	ALwL	j 1	j U	U:C	1%PRU1%
		c, 11U bPZMO	@gg1+i i +i	U	ALwL	Q	Q	1:1	Ht PnMA M
Eb 325T: Total Re0overayle Ser0urByBclS M (QC Lot:) 4212) 1G									
cl r C1Q i - +1 1U	hut umA t f s	c, 1CU bP eoOl om	@Q +j @i	1:r	ALwL	<1:r	<1:r	1:1	Ht PnMA M
cl r C1Q @+1 C1	9+h Ca+1r w:g	c, 1CU bP eoOl om	@Q +j @i	1:r	ALwL	<1:r	<1:r	1:1	Ht PnMA M
EP3| FA: Sono0B0li0 Aromati0 + Bdro0aryons (QC Lot:) 4212F) G									
cl r C1Q @+1 1r	9+hr+ Qvl:r	c91@bPTeuzeue	@+gC+	1:-	ALwL	<1:-	<1:-	1:1	Ht PnMA M

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QC Lot:) 4212F) G80ontinued									
cI r C1Q @+11r	9+h r + Qd:r	c91@bP t lf eue	r 1Q+QQ+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bR vGmEeuzeue	r 11+gr +g	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bA eva+R&P aca+Xmeue	r 1Q+QQ+QP r 1i +g- +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bF vmeue	r 11+g- +U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP oGt +Xmeue	j U+g@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRst . d . mEeuzeue	j Q+Q +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRu+9d . mEeuzeue	r 1C+i U+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP :C.U+ dA evGmEeuzeue	r 1Q+i @Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bReO+Tf vmEeuzeue	r CU+j Q+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP :- :g+ dA evGmEeuzeue	j U+i C+i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bReo+Tf vmEeuzeue	j Q+1i +i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP +st . d . mt lf eue	j j +Q@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRu+Tf vmEeuzeue	r 1g+Ur +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
cI r C1Q @+1C1	9+h Ca+1r w:g	c91@bTeuzeue	@ +gC+	1:-	ALwL	<1:-	<1:-	1:1	Ht PnMA M
		c91@bP t lf eue	r 1Q+QQ+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bR vGmEeuzeue	r 11+gr +g	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bA eva+R&P aca+Xmeue	r 1Q+QQ+QP r 1i +g- +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bF vmeue	r 11+g- +U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP oGt +Xmeue	j U+g@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRst . d . mEeuzeue	j Q+Q +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRu+9d . mEeuzeue	r 1C+i U+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP :C.U+ dA evGmEeuzeue	r 1Q+i @Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bReO+Tf vmEeuzeue	r CU+j Q+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP :- :g+ dA evGmEeuzeue	j U+i C+i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bReo+Tf vmEeuzeue	j Q+1i +i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP +st . d . mt lf eue	j j +Q@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRu+Tf vmEeuzeue	r 1g+Ur +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QC Lot:) 421525G									
cI r C1Q @+1@Q	(D1r wr 1gr C	c91@bTeuzeue	@ +gC+	1:-	ALwL	<1:-	<1:-	1:1	Ht PnMA M
		c91@bP t lf eue	r 1Q+QQ+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bR vGmEeuzeue	r 11+gr +g	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bA eva+R&P aca+Xmeue	r 1Q+QQ+QP r 1i +g- +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bF vmeue	r 11+g- +U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP oGt +Xmeue	j U+g@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRst . d . mEeuzeue	j Q+Q +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bRu+9d . mEeuzeue	r 1C+i U+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@bP :C.U+ dA evGmEeuzeue	r 1Q+i @Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M

9aLe b ULt yPCl
4 t d F5 dBeo b cl r C1Q @
DIMuv b DhYRH5 PhhHcP9 V9cYP9 dPh R
9d MOv b -r-ri ClPC

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QC Lot:) 421525G 80ontinued									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bReO+Tf vmEeuzeue	r CU+j Q+Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- :g+ dMevGmEeuzeue	j U+i C+i	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bReo+Tf vmEeuzeue	j Q+1i +i	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP +Vst . d . mM If eue	j j +Q@i	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bRu+Tf vmEeuzeue	r 1g+Ur +Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
EP3| Fx : OgBpenated Comf ounds (QC Lot:) 4212F) G									
cl r C1Q @+1 1r	9 +hr + Q/d :r	c91@b2 MmPh Oevave	r 1Q+1U+g	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Tf vaut ueP)l cKq	@Q+j C+C	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bRg+l evGm+ +: euvaut ueP)l V/TKq	r 1Q+r 1+r	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Wexaut ueP)l TKq	Uj r +@Q+i	U	A LwL	<U	<U	1:1	Ht PMA M
cl r C1Q @+1C1	9 +h Ca+1r w:g	c91@b2 MmPh Oevave	r 1Q+1U+g	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Tf vaut ueP)l cKq	@Q+j C+C	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bRg+l evGm+ +: euvaut ueP)l V/TKq	r 1Q+r 1+r	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Wexaut ueP)l TKq	Uj r +@Q+i	U	A LwL	<U	<U	1:1	Ht PMA M
EP3| Fx : OgBpenated Comf ounds (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@b2 MmPh Oevave	r 1Q+1U+g	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Tf vaut ueP)l cKq	@Q+j C+C	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bRg+l evGm+ +: euvaut ueP)l V/TKq	r 1Q+r 1+r	U	A LwL	<U	<U	1:1	Ht PMA M
		c91@bP +Wexaut ueP)l TKq	Uj r +@Q+i	U	A LwL	<U	<U	1:1	Ht PMA M
EP3| FC: Mulfonated Comf ounds (QC Lot:) 4212F) G									
cl r C1Q @+1 1r	9 +hr + Q/d :r	c91@bPDadEt uPBMf lyMe	@U+r U+1	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
cl r C1Q @+1C1	9 +h Ca+1r w:g	c91@bPDadEt uPBMf lyMe	@U+r U+1	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
EP3| FC: Mulfonated Comf ounds (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bPDadEt uPBMf lyMe	@U+r U+1	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
EP3| FD: cumipants (QC Lot:) 4212F) G									
cl r C1Q @+1 1r	9 +hr + Q/d :r	c91@bP :- +RMGt d . d . aue	Uj g+ 1+@	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- +RMGt d . d . aue	@Q+Q@U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bPOs+r :C+RMGt d . d . mieue	r 11i r +1r +U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bRaus+r :C+RMGt d . d . mieue	r 11i r +1- +i	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- +RMd A t evGaueP)c RTq	r 1i +j C+g	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
cl r C1Q @+1C1	9 +h Ca+1r w:g	c91@bP :- +RMGt d . d . aue	Uj g+ 1+@	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- +RMGt d . d . aue	@Q+Q@U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bPOs+r :C+RMGt d . d . mieue	r 11i r +1r +U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bRaus+r :C+RMGt d . d . mieue	r 11i r +1- +i	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- +RMd A t evGaueP)c RTq	r 1i +j C+g	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
EP3| FD: cumipants (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bP :- +RMGt d . d . aue	Uj g+ 1+@	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bP :- +RMGt d . d . aue	@Q+Q@U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M
		c91@bPOs+r :C+RMGt d . d . mieue	r 11i r +1r +U	1:U	A LwL	<1:U	<1:U	1:1	Ht PMA M

9aLe b i Rt yPQ
4 t d F5 dBeo b cl r C1Q @
DlMuv b DhYRH5 RnhHcR9 9cYR9 dRn R
9d NeOv b -r-ri ORC

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| FD: cumipants (QC Lot:) 421525G80ontinued									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bRoaus+r :C+RMGt d . d . meue	r 11i r +1- +i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :- +RMd A t evGauePjc RTq	r 1i +j C+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QC Lot:) 4212F) G									
cl r C1Q @+11r	9+hr + Qd :r	c91@bP :r +RMGt d evGeue	@U+CU+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRY Bt A evGaue	@g+CQ+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRoaus+r :- +RMGt d evGeue	r Ui +i 1+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r +RMGt d evGaue	@U+Cg+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bROs+r :- +RMGt d evGeue	r Ui +Uj +	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r :r + dMGt d evGaue	@ +UU+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r +RMGt d . d . meue	Ui C+UQ+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRDadEt uP evaOGt dBe	Ui + C+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :- +RMGt d evGaue	r 1@+1i +	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP dMGt d evGeue	@ +1r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRMd A t A evGaue	@g+j U+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r :- + dMGt d evGaue	@ +11+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :C+RMGt d . d . aue	r g- + Q+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP evaOGt d evGeue	r - @r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r :r :- + evaOGt d evGaue	i C1+ 1+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRoaus+r :g+RMGt d + +Ef veue	r r 1+U@i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bROs+r :g+RMGt d + +Ef veue	r g@ +r r +U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r :- :- + evaOGt d evGaue	@ +Cg+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :- :C+ dMGt d . d . aue	j i +r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bR9 euvaOGt d evGaue	@ +1r +@	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :- +RMd A t +C+OGt d . d . aue	j i +r - +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRMGt d BMf t d A evGaue	@U+@ +Q	U	ALwL	<U	<U	1:1	Ht RMA M
		c91@bRDGt d A evGaue	@g+Q@C	U	ALwL	<U	<U	1:1	Ht RMA M
		c91@bR2 MnRGt dBe	@U+1r +g	U	ALwL	<U	<U	1:1	Ht RMA M
		c91@bRT d A t A evGaue	@g+CC+j	U	ALwL	<U	<U	1:1	Ht RMA M
		c91@bRDGt d evGaue	@U+11+C	U	ALwL	<U	<U	1:1	Ht RMA M
		c91@bP dMGt d yf t d A evGaue	@U+i j +g	U	ALwL	<U	<U	1:1	Ht RMA M
cl r C1Q @+1C1	9+h Ca+1r w :g	c91@bP :r +RMGt d evGeue	@U+CU+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRY Bt A evGaue	@g+CQ+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRoaus+r :- +RMGt d evGeue	r Ui +i 1+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r +RMGt d evGaue	@U+Cg+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bROs+r :- +RMGt d evGeue	r Ui +Uj +	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r :r + dMGt d evGaue	@ +UU+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :r +RMGt d . d . meue	Ui C+UQ+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bRDadEt uP evaOGt dBe	Ui + C+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP :- +RMGt d evGaue	r 1@+1i +	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M
		c91@bP dMGt d evGeue	@ +1r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht RMA M

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QC Lot:) 4212F) G80ontinued									
cl r C1Q @+1C1	9+h Ca+1r w:g	c91@bRMd A t A evGaue	@+j U+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :- + dMGt d evGaue	@+11+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :C+RMGt d . d . aue	rg- + Q+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP evaOGt d evGeue	r- @r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :r :- + evaOGt d evGaue	i C1+ 1+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRaus+r :g+RMGt d + +Ef veue	rr1+U@i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bPOs+r :g+RMGt d + +Ef veue	rg@+r r+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :- :- + evaOGt d evGaue	@+Cg+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :- :C+ dMGt d . d . aue	j i +r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP euvaOGt d evGaue	@+1r +@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :- +RMd A t +C+OGt d . d . aue	j i +r - +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRMGt d BMf t d A evGaue	@H@ +Q	U	ALwL	<U	<U	1:1	Ht RhMA M
		c91@bPDGt d A evGaue	@+Q@C	U	ALwL	<U	<U	1:1	Ht RhMA M
		c91@bP2 MmRPOGt dMe	@H1r +g	U	ALwL	<U	<U	1:1	Ht RhMA M
		c91@bPTd A t A evGaue	@+QC+j	U	ALwL	<U	<U	1:1	Ht RhMA M
		c91@bPDGt d evGaue	@H11+C	U	ALwL	<U	<U	1:1	Ht RhMA M
		c91@bP dMGt d yf t d A evGaue	@Hi j +g	U	ALwL	<U	<U	1:1	Ht RhMA M
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bP :r +RMGt d evGeue	@H+CU+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bPY Bt A evGaue	@+QQ+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRaus+r :- +RMGt d evGeue	rUi +i 1+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r +RMGt d evGaue	@H+Cg+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bPOs+r :- +RMGt d evGeue	rUi +Uj +	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :r + dMGt d evGaue	@+UU+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r +RMGt d . d . mleue	Ui C+UQ+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bPDacEt uP evaOGt dMe	Ui + C+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :- +RMGt d evGaue	r1@+1i +	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP dMGt d evGeue	@+1r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRMd A t A evGaue	@+j U+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :- + dMGt d evGaue	@+11+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :C+RMGt d . d . aue	rg- + Q+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP evaOGt d evGeue	r- @r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :r :- + evaOGt d evGaue	i C1+ 1+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRaus+r :g+RMGt d + +Ef veue	rr1+U@i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bPOs+r :g+RMGt d + +Ef veue	rg@+r r+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :r :- :- + evaOGt d evGaue	@+Cg+U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :- :C+ dMGt d . d . aue	j i +r Q+g	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP euvaOGt d evGaue	@+1r +@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bP :- +RMd A t +C+OGt d . d . aue	j i +r - +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@bRMGt d BMf t d A evGaue	@H@ +Q	U	ALwL	<U	<U	1:1	Ht RhMA M

9aLe b Qt yPCi
4 t d P5 dBeo b cl r C1Q @
DIMduv b DhYRH5 PhhHcP9 9cYP9 dPh R
9d NeOv b -r-ri CPC

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QC Lot:) 421525G 80ontinued									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bPDGt d A evGaue	@g+Q@C	U	ALwL	<U	<U	1:1	Ht PhMA M
		c91@b2 MmPOGt dBe	@H1r +g	U	ALwL	<U	<U	1:1	Ht PhMA M
		c91@bPTd At A evGaue	@g+QC+j	U	ALwL	<U	<U	1:1	Ht PhMA M
		c91@bPDGt d evGaue	@H11+C	U	ALwL	<U	<U	1:1	Ht PhMA M
		c91@bP dMGt d yIf t d A evGaue	@Hi j +g	U	ALwL	<U	<U	1:1	Ht PhMA M
EP3| Fc: +alopenated Aromati0 Comf ounds (QC Lot:) 4212F) G									
cl r C1Q @+11r	9+hr+ Qd:r	c91@bPDGt d Eeuzeue	r 1Qij 1+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At Eeuzeue	r 1Q+Q +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP +DGt d vl If eue	j U+gj +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPg+DGt d vl If eue	r 1i +gC+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
cl r C1Q @+1C1	9+hCa+1r w:g	c91@bPDGt d Eeuzeue	r 1Qij 1+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At Eeuzeue	r 1Q+Q +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP +DGt d vl If eue	j U+gj +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPg+DGt d vl If eue	r 1i +gC+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| Fc: +alopenated Aromati0 Comf ounds (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bPDGt d Eeuzeue	r 1Qij 1+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At Eeuzeue	r 1Q+Q +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP +DGt d vl If eue	j U+gj +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPg+DGt d vl If eue	r 1i +gC+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| Fb: Tri9alomet9anes (QC Lot:) 4212F) G									
cl r C1Q @+11r	9+hr+ Qd:r	c91@bPDGt d yt oA	i @i +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At BMGt d A evGaue	@H+ @g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPRMd At OGt d A evGaue	r - g+gQ+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At yt oA	@H+ U+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
cl r C1Q @+1C1	9+hCa+1r w:g	c91@bPDGt d yt oA	i @i +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At BMGt d A evGaue	@H+ @g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPRMd At OGt d A evGaue	r - g+gQ+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At yt oA	@H+ U+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| Fb: Tri9alomet9anes (QC Lot:) 421525G									
cl r C1Q @+1@Q	(D1r wr 1gr C	c91@bPDGt d yt oA	i @i +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At BMGt d A evGaue	@H+ @g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPRMd At OGt d A evGaue	r - g+gQ+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@bPTd At yt oA	@H+ U+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| 5A: P9enoli0 Comf ounds (QC Lot:) 4215) 2G									
cl r C1Q @+11r	9+hr+ Qd:r	c91@bP9 Geut l	r 1Qij U+	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@bP +DGt d . Geut l	j U+U@Q	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| 5A: P9enoli0 Comf ounds (QC Lot:) 4215) 2G 80ontinued									
cl r C1Cj @l+11r	9+hr+ Qd:r	c91@JbP+I evGml. Geut I	j U+gQ+@	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbPC+R&Pg+I evGml. Geut I	r Cr j +@@C	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP+HMd . Geut I	QQ+@J+U	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP:g+RMA evGml. Geut I	r 1U+i @j	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP:g+RMGt d . Geut I	r - 1+QC+	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP:i +RMGt d . Geut I	Q@i U+1	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@Jbg+DGt d +C+I evGml. Geut I	Uj +U1+@	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP:g:i + dMGt d . Geut I	QQ+1i +	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP:g:U+ dMGt d . Geut I	j U+j U+g	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP9euvaCGt d . Geut I	Q@Q +U	r	ALwL	<i	<i	1:1	Ht PnMA M
cl r C1Cj @l+1UC	9+h Ca+1Qd:r	c91@JbP9 Geut I	r 1Q+j U+	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+DGt d . Geut I	j U+U@Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+I evGml. Geut I	j U+gQ+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbPC+R&Pg+I evGml. Geut I	r Cr j +@@C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+HMd . Geut I	QQ+@J+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g+RMA evGml. Geut I	r 1U+i @j	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g+RMGt d . Geut I	r - 1+QC+	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:i +RMGt d . Geut I	Q@i U+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Jbg+DGt d +C+I evGml. Geut I	Uj +U1+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g:i + dMGt d . Geut I	QQ+1i +	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g:U+ dMGt d . Geut I	j U+j U+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP9euvaCGt d . Geut I	Q@Q +U	r	ALwL	<r	<r	1:1	Ht PnMA M
EP3| 5A: P9enoli0 Comf ounds (QC Lot:) 42F3- 7G									
cl r C1Cj @l+1- U	9+hr +C@d:j	c91@JbP9 Geut I	r 1Q+j U+	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+DGt d . Geut I	j U+U@Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+I evGml. Geut I	j U+gQ+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbPC+R&Pg+I evGml. Geut I	r Cr j +@@C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP+HMd . Geut I	QQ+@J+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g+RMA evGml. Geut I	r 1U+i @j	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g+RMGt d . Geut I	r - 1+QC+	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:i +RMGt d . Geut I	Q@i U+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Jbg+DGt d +C+I evGml. Geut I	Uj +U1+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g:i + dMGt d . Geut I	QQ+1i +	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP:g:U+ dMGt d . Geut I	j U+j U+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@JbP9euvaCGt d . Geut I	Q@Q +U	r	ALwL	<r	<r	1:1	Ht PnMA M
EP3| 5x : PolBnu0lear Aromati0 + Bdro0aryons (QC Lot:) 4215) 2G									
cl r C1Cj @l+11r	9+hr+ Qd:r	c91@JbPHa. GGaleue	j r+ 1+C	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP+I evGmlua. GGaleue	j r+U@i	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbP+DGt d ua. GGaleue	j r+UQ+@	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M
		c91@JbPn Ceua. GGmleue	- 1Q+j i +Q	1:U	ALwL	<C1	<C1	1:1	Ht PnMA M

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| 5x : PolBnu0lear Aromati0 + Bdro0aryons (QC Lot:) 4215) 2G 80ontinued									
cI r C1Cj @1+11r	9+hr+-Qv1:r	c91@Ubn Oeua. GvGeue	QC+C-+j	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbFIf t oeue	Qi +@C+@	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@Ub9 GeuauvGoeue	QU+1r+Q	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@Ubn uvGoaOeue	r-1+r-+@	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbFIf t oauvGeue	-1i +gg+1	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@Ub9 mceue	r-j +11+1	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbH+ +FIf t oeumPn OevaA Me	UC+j i +C	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbTeuz)acpauvGoaOeue	Ui +UU+C	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbDGomseue	-r Q+1r+j	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@Ub@r- +RMA evGmIEeuz)acpauvGoaOeue	U@j @i	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbTeuzt)aq mceue	U1+C-+Q	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbC+I evGmIOGt lauvGoeue	Ui +gj +U	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbVuBeut)r:-:C:OBq mceue	rj C+Cj +U	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbRMeuz)a:GcpauvGoaOeue	UC+@ +C	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbTeuzt)L:GMj eomeue	rj r+g+	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@Ub7f A Rt yP9 hWs	+++	1:U	ALwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UbTeuzt)EqR&Teuzt)/ qlf t oauvGeue	-1U+j j +P -1@1Q+j	r	ALwL	<i	<i	1:1	Ht PnMA M
cI r C1Cj @1+1UC	9+hCa+1Qv1:r	c91@UbHa. GvGaleue	j r+1+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbP+I evGmIua. GvGaleue	j r+U@i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbP+DGt ct ua. GvGaleue	j r+UQ+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ubn Oeua. GvGmeue	-1Q+j i +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ubn Oeua. GvGeue	QC+C-+j	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbFIf t oeue	Qi +@C+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ub9 GeuauvGoeue	QU+1r+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ubn uvGoaOeue	r-1+r-+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbFIf t oauvGeue	-1i +gg+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ub9 mceue	r-j +11+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbH+ +FIf t oeumPn OevaA Me	UC+j i +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbTeuz)acpauvGoaOeue	Ui +UU+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbDGomseue	-r Q+1r+j	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ub@r- +RMA evGmIEeuz)acpauvGoaOeue	U@j @i	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbTeuzt)aq mceue	U1+C-+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbC+I evGmIOGt lauvGoeue	Ui +gj +U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbVuBeut)r:-:C:OBq mceue	rj C+Cj +U	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbRMeuz)a:GcpauvGoaOeue	UC+@ +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbTeuzt)L:GMj eomeue	rj r+g+	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@Ub7f A Rt yP9 hWs	+++	1:U	ALwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UbTeuzt)EqR&Teuzt)/ qlf t oauvGeue	-1U+j j +P -1@1Q+j	r	ALwL	<r	<r	1:1	Ht PnMA M

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| 5x : PolBnu0lear Aromati0 + Bdro0aryons (QC Lot:) 42F3- 7G									
cl r C1Q @+1- U	9+h r +C@d:j	c91@JbPHa. GGaleue	j r+ 1+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbP +l evGmua. GGaleue	j r +U@i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbP +DGt d ua. GGaleue	j r +UQ+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPh Oeua. GGmeue	- 1Q+j i +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPh Oeua. GGeue	QC+C- +j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbFlf t oeue	Q +@C+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbP9 GeuauvGoeue	QU+1r +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPh uvGoaOeue	r - 1+r - +@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbFlf t oauvGeue	- 1i +gg+1	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbP9 meue	r - j +11+1	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPH+ +Flf t oeumRh OevaA Me	UC+j i +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTeuz)aqauvGoaOeue	Ui +UU+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPDGmseue	- r Q+1r +j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbP@r - +RMA evGmlEeuz)aqauvGoaOeue	U@j @i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTeuzt)aq meue	U1+C- +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPC+l evGmlOGt lauvGoeue	Ui +gj +U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbPvBeut)r :- :C.OBq meue	rj C+Q +U	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMeuz)a:GqauvGoaOeue	UC+@ +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTeuzt)L:GMq eoneue	rj r + g+	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Jb7f A Rt yP9 h Ws	+++	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTeuzt)EqR&Teuzt)/ qlf t oauvGeue	- 1U+j j + P - 1@1Q+j	r	ALwL	<r	<r	1:1	Ht RhMA M
EP3| 5C: P9t9alate Esters (QC Lot:) 4215) 2G									
cl r C1Q @+11r	9+h r + Qd:r	c91@JbRMA evGmlP. GGalave	r Or +r r +C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@JbRMevGmlP. GGalave	Qg+i i +	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@JbRMu+Ef vmlP. GGalave	Qg+@g+	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@JbTf vmlEeuzmlP. GGalave	QU+i Q+@	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@JbRMu+t Oml. GGalave	r r @Qg+1	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@JbEM)- +evGmlGexmlqP. GGalave	r r @Q +@	U:1	ALwL	<C1:1	<C1:1	1:1	Ht RhMA M
cl r C1Q @+1UC	9+h Ca+1Qd:r	c91@JbRMA evGmlP. GGalave	r Or +r r +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMevGmlP. GGalave	Qg+i i +	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMu+Ef vmlP. GGalave	Qg+@g+	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTf vmlEeuzmlP. GGalave	QU+i Q+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMu+t Oml. GGalave	r r @Qg+1	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbEM)- +evGmlGexmlqP. GGalave	r r @Q +@	U:1	ALwL	<U:1	<U:1	1:1	Ht RhMA M
EP3| 5C: P9t9alate Esters (QC Lot:) 42F3- 7G									
cl r C1Q @+1- U	9+h r +C@d:j	c91@JbRMA evGmlP. GGalave	r Or +r r +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMevGmlP. GGalave	Qg+i i +	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbRMu+Ef vmlP. GGalave	Qg+@g+	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@JbTf vmlEeuzmlP. GGalave	QU+i Q+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| 5C: P9t9alate Esters (QC Lot:) 42F3-7G80ontinued									
cl r C1Q @+1-U	9+hr+C@d:j	c91@UbFRMu+t Om. GGalave	rr@Qg+1	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFEM)-+evGmGexmkP GGalave	rr@Qr+@	U:1	ALwL	<U:1	<U:1	1:1	Ht FnMA M
EP3| 5D: Nitrosamines (QC Lot:) 4215) 2G									
cl r C1Q @+11r	9+hr+Qd:r	c91@UbFH+HMd st A evGmevGmaA Me	r1Uj Uj Ui	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMvGmaA Me	UUr QU	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st A t o Gt IMe	Uj+Q+	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMu+ d . maA Me	i-r+ig+@	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st . MedBMe	r11+@Ug	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMf vmaA Me	j-g+ri+C	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbF evGa. mdMeue	jr+Q1+U	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFH+HMd st . mod IMBMe	jC1+UU+	r:1	ALwL	<i:1	<i:1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMGeumR&RMGeumaA Me	Q+C1+i FP r--+Q+g	r:1	ALwL	<i:1	<i:1	1:1	Ht FnMA M
cl r C1Q @+1UC	9+hCa+1Qd:r	c91@UbFH+HMd st A evGmevGmaA Me	r1Uj Uj Ui	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMvGmaA Me	UUr QU	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st A t o Gt IMe	Uj+Q+	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMu+ d . maA Me	i-r+ig+@	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st . MedBMe	r11+@Ug	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMf vmaA Me	j-g+ri+C	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbF evGa. mdMeue	jr+Q1+U	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st . mod IMBMe	jC1+UU+	r:1	ALwL	<r:1	<r:1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMGeumR&RMGeumaA Me	Q+C1+i FP r--+Q+g	r:1	ALwL	<r:1	<r:1	1:1	Ht FnMA M
EP3| 5D: Nitrosamines (QC Lot:) 42F3-7G									
cl r C1Q @+1-U	9+hr+C@d:j	c91@UbFH+HMd st A evGmevGmaA Me	r1Uj Uj Ui	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMvGmaA Me	UUr QU	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st A t o Gt IMe	Uj+Q+	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMu+ d . maA Me	i-r+ig+@	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st . MedBMe	r11+@Ug	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st BMf vmaA Me	j-g+ri+C	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbF evGa. mdMeue	jr+Q1+U	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbFH+HMd st . mod IMBMe	jC1+UU+	r:1	ALwL	<r:1	<r:1	1:1	Ht FnMA M
		c91@UbFH+HMd st BMGeumR&RMGeumaA Me	Q+C1+i FP r--+Q+g	r:1	ALwL	<r:1	<r:1	1:1	Ht FnMA M
EP3| 5E: Nitroaromati0s and Ketones (QC Lot:) 4215) 2G									
cl r C1Q @+11r	9+hr+Qd:r	c91@UbF+9MIMe	r1j+1i+Q	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFhOevt . Geut ue	jQ+Q+	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFHMd Eeuzeue	jQ+j U+C	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbFRst . Gt d ue	@Q+Uj+r	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M
		c91@UbF+Ha. GGmaA Me	rCg+C-+@	1:U	ALwL	<C1	<C1	1:1	Ht FnMA M

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| 5E: Nitroaromati0s and Ketones (QC Lot:) 4215) 2G80ontinued									
cl r C1Q @+11r	9+hr + Qvl:r	c91@Ubg+HMt kf Mt IMe+H+t xMe	Ui +U@U	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@UbRU+HMt +t +vt If MMe	j j +UU+Q	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@UbP :C.U+ dMMt Eeuzeue	j j +CU+g	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@UbP9 GeuaCeM	i - +gg+	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@Ubg+hA Mt EMGeum	j - +i @r	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@Ub9 euvaCGt d uMt Eeuzeue	Q +i Q+Q	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@Ub9 d uaA Me	- Q U1+UQ+U	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@UbRMA evGmaA Mt azt Eeuzeue	i 1+r r +@	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@UbDGt d EeuzMave	Ur 1+r U+i	1:U	ALwL	<C:1	<C:1	1:1	Ht FnMA M
		c91@Ubn zt Eeuzeue	r 1C+CC+C	r	ALwL	<i	<i	1:1	Ht FnMA M
		c91@UbP :i +RMMt vt If eue	i 1i + 1+	r:1	ALwL	<i :1	<i :1	1:1	Ht FnMA M
		c91@UbP :g+RMMt vt If eue	r - r +r g+	r:1	ALwL	<i :1	<i :1	1:1	Ht FnMA M
cl r C1Q @+1UC	9+h Ca+1Qvl:r	c91@UbP +9 Mt IMe	r 1j +1i +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubn Cevt . Geut ue	j Q+Q +	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbHMt Eeuzeue	j Q+j U+C	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbRvt . Gt d ue	@Q+Uj +r	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP +Ha. GuGmaA Me	r Cg+C +@	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubg+HMt kf Mt IMe+H+t xMe	Ui +U@U	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbRU+HMt +t +vt If MMe	j j +UU+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP :C.U+ dMMt Eeuzeue	j j +CU+g	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP9 GeuaCeM	i - +gg+	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubg+hA Mt EMGeum	j - +i @r	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ub9 euvaCGt d uMt Eeuzeue	Q +i Q+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ub9 d uaA Me	- Q U1+UQ+U	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbRMA evGmaA Mt azt Eeuzeue	i 1+r r +@	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbDGt d EeuzMave	Ur 1+r U+i	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubn zt Eeuzeue	r 1C+CC+C	r	ALwL	<r	<r	1:1	Ht FnMA M
		c91@UbP :i +RMMt vt If eue	i 1i + 1+	r:1	ALwL	<r :1	<r :1	1:1	Ht FnMA M
		c91@UbP :g+RMMt vt If eue	r - r +r g+	r:1	ALwL	<r :1	<r :1	1:1	Ht FnMA M
EP3| 5E: Nitroaromati0s and Ketones (QC Lot:) 42F3- 7G									
cl r C1Q @+1- U	9+hr +C@vl:j	c91@UbP +9 Mt IMe	r 1j +1i +Q	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubn Cevt . Geut ue	j Q+Q +	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbHMt Eeuzeue	j Q+j U+C	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbRvt . Gt d ue	@Q+Uj +r	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP +Ha. GuGmaA Me	r Cg+C +@	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubg+HMt kf Mt IMe+H+t xMe	Ui +U@U	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbRU+HMt +t +vt If MMe	j j +UU+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP :C.U+ dMMt Eeuzeue	j j +CU+g	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@UbP9 GeuaCeM	i - +gg+	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M
		c91@Ubg+hA Mt EMGeum	j - +i @r	1:U	ALwL	<1:U	<1:U	1:1	Ht FnMA M

Laboratory Duplicate (DUP) Report

9aLe b r gPt yPCi
4 t d P5 dBeo b cl r C1Cj @
DIMuv b DhYRH5 Phh Hc P9 V9c YP9 dPh R
9d NeOv b - r - r i CPC

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Laboratory Duplicate (DUP) Report Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| 5E: Nitroaromati0s and Ketones (QC Lot:) 42F3- 7G 80ontinued									
cl r C1Cj @+1- U	9+hr +C@1:j	c91@UP9 euvaOGt d uMt Eeuzeue	Q- +i Q+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9 d uaA Ne	- Cj U1+UQ+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPRMA evGmaA Mt azt Eeuzeue	i 1+r r +@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt d EeuzMave	Ur 1+r U+i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPhzt Eeuzeue	r 1C+CC+C	r	ALwL	<r	<r	1:1	Ht PhMA M
		c91@UP :i +RMMt vt If eue	i 1i +- 1+-	r :1	ALwL	<r :1	<r :1	1:1	Ht PhMA M
		c91@UP :g+RMMt vt If eue	r - r +r g+-	r :1	ALwL	<r :1	<r :1	1:1	Ht PhMA M
EP3| 5c: +aloet9ers (QC Lot:) 4215) 2G									
cl r C1Cj @+11r	9+hr +- Qw:r	c91@UPTMs)- +OGt d evGmlqPevGeo	r r r +gg+g	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPTMs)- +OGt d evGt xmqPA evGaue	r r r +j r +r	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPg+DGt d . GeumlP: GeumlPevGeo	@1U+@ +C	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPg+Td A t . GeumlP: GeumlPevGeo	r 1r +UU+C	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
cl r C1Cj @+1UC	9+h Ca+1Qw:r	c91@UPTMs)- +OGt d evGmlqPevGeo	r r r +gg+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPTMs)- +OGt d evGt xmqPA evGaue	r r r +j r +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg+DGt d . GeumlP: GeumlPevGeo	@1U+@ +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg+Td A t . GeumlP: GeumlPevGeo	r 1r +UU+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| 5c: +aloet9ers (QC Lot:) 42F3- 7G									
cl r C1Cj @+1- U	9+hr +C@1:j	c91@UPTMs)- +OGt d evGmlqPevGeo	r r r +gg+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPTMs)- +OGt d evGt xmqPA evGaue	r r r +j r +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg+DGt d . GeumlP: GeumlPevGeo	@1U+@ +C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg+Td A t . GeumlP: GeumlPevGeo	r 1r +UU+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| 5b : C9lorinated +Bdro0aryons (QC Lot:) 4215) 2G									
cl r C1Cj @+11r	9+hr +- Qw:r	c91@UP :C+RMGt d Eeuzeue	Ugr +@C+r	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UP :g+RMGt d Eeuzeue	r 1i +gi +@	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UP :- +RMGt d Eeuzeue	j U+U1+r	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPWexaOGt d evGaue	i @@ +r	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UP :- :g+ dMGt d Eeuzeue	r - 1+Q- +r	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPWexaOGt d . d . mleue	r QQQ+@ +@	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPWexaOGt d Ef vaBMue	Q@i Q+C	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UP9 euvaOGt d Eeuzeue	i 1Q+j C+U	1:U	ALwL	<C:1	<C:1	1:1	Ht PhMA M
		c91@UPWexaOGt d EeuzeuePWDTq	r r Q+@g+r	r :1	ALwL	<i :1	<i :1	1:1	Ht PhMA M
		c91@UPWexaOGt d OmOt . euvaBMue	@@g@g	- :U	ALwL	<r U:1	<r U:1	1:1	Ht PhMA M
cl r C1Cj @+1UC	9+h Ca+1Qw:r	c91@UP :C+RMGt d Eeuzeue	Ugr +@C+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP :g+RMGt d Eeuzeue	r 1i +gi +@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP :- +RMGt d Eeuzeue	j U+U1+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPWexaOGt d evGaue	i @@ +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP :- :g+ dMGt d Eeuzeue	r - 1+Q- +r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPWexaOGt d . d . mleue	r QQQ+@ +@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPWexaOGt d Ef vaBMue	Q@i Q+C	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9 euvaOGt d Eeuzeue	i 1Q+j C+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
						Laboratory Duplicate (DUP) Report			
EP3| 5b : C9lorinated + Bdro0aryons (QC Lot:) 4215) 2G 8 0ontinued									
cl r C1Q @+1UC	9+h Ca+1Qd:r	c91@UP WexaOGt d EeuzeueP WDTq	r r Q+@+r	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
		c91@UP WexaOGt d OnOt . euvaBMue	@@g@g	- :U	A LwL	<- :U	<- :U	1:1	Ht PnMA M
EP3| 5b : C9lorinated + Bdro0aryons (QC Lot:) 42F3- 7G									
cl r C1Q @+1- U	9+h r +C@d:j	c91@UP :C+RMGt d Eeuzeue	Ugr +@C+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP :g+RMGt d Eeuzeue	r 1i +gi +@	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP :- +RMGt d Eeuzeue	j U+U1+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP WexaOGt d evGaue	i @@+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP :- :g+ dMGt d Eeuzeue	r - 1+Q+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP WexaOGt d . d . mteue	r QQQ+@+@	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP WexaOGt d Ef vaBMue	Q@i Q+C	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP9 euvaOGt d Eeuzeue	i 1Q+j C+U	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP WexaOGt d EeuzeueP WDTq	r r Q+@+r	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
		c91@UP WexaOGt d OnOt . euvaBMue	@@g@g	- :U	A LwL	<- :U	<- :U	1:1	Ht PnMA M
EP3| 5+ : Anilines and x enzidines (QC Lot:) 4215) 2G									
cl r C1Q @+1r	9+h r + Qd:r	c91@UP nuMMe	i - +UC+C	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UPg+DGt d auMMe	r 1i +g@Q	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UP RMeuzt yf oau	r C- +i g+j	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UPg+HMt auMMe	r 11+1r +i	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UP DacEazt le	Q +@+Q	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UPC:C +RMGt d EeuzMMe	j r +j g+r	1:U	A LwL	<C:1	<C:1	1:1	Ht PnMA M
		c91@UP +HMt auMMe	QQ+@+g	r :1	A LwL	<i :1	<i :1	1:1	Ht PnMA M
		c91@UPC+HMt auMMe	j j +1j +	r :1	A LwL	<i :1	<i :1	1:1	Ht PnMA M
cl r C1Q @+1UC	9+h Ca+1Qd:r	c91@UP nuMMe	i - +UC+C	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPg+DGt d auMMe	r 1i +g@Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP RMeuzt yf oau	r C- +i g+j	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPg+HMt auMMe	r 11+1r +i	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP DacEazt le	Q +@+Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPC:C +RMGt d EeuzMMe	j r +j g+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP +HMt auMMe	QQ+@+g	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
		c91@UPC+HMt auMMe	j j +1j +	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
EP3| 5+ : Anilines and x enzidines (QC Lot:) 42F3- 7G									
cl r C1Q @+1- U	9+h r +C@d:j	c91@UP nuMMe	i - +UC+C	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPg+DGt d auMMe	r 1i +g@Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP RMeuzt yf oau	r C- +i g+j	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPg+HMt auMMe	r 11+1r +i	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP DacEazt le	Q +@+Q	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UPC:C +RMGt d EeuzMMe	j r +j g+r	1:U	A LwL	<1:U	<1:U	1:1	Ht PnMA M
		c91@UP +HMt auMMe	QQ+@+g	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
		c91@UPC+HMt auMMe	j j +1j +	r :1	A LwL	<r :1	<r :1	1:1	Ht PnMA M
EP3| 5l: Orpano09lorine Pesti0ides (QC Lot:) 4215) 2G									

9aLe	b r i Rt yRCi
4 t d R5 dBeo	b cl r C1Cj @
DIMuv	b DhYRH5 RhHcR9 9cYR9 dRh R
9d MeOv	b -r-ri CRC

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP3| 5I: Orpano09lorine Pesti0ides (QC Lot:) 4215) 2G80ontinued									
cl r C1Cj @+11r	9+hr+ Q+:r	c91@Ubal. Ga+TWD	Cr j +Cg+i	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbEeva+TWD	Cr j +CU+@	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbLaA A a+TWD	UC+Cj +j	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbBelva+TWD	Cr j +C +C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbWe. vaCGt o	@+gg+C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubn IBoM	C1j +11+	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbWe. vaCGt de. t xMe	r 1-g+U@C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubal. Ga+cuBt sf lyau	j Uj +j C+C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubg:g`+RRc	@+UU+j	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbRMIBoM	i 1+U@r	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubc uBoM	@+ 1+C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@UbEeva+cuBt sf lyau	CC-r C+i U+j	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubg:g`+RRR	@+Ug+C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubc uBt sf lyauBf lyave	r 1Cr +1@C	1:U	ALwL	<C:1	<C:1	1:1	Ht RhMA M
		c91@Ubg:g`+RR	U1+ j +C	r :1	ALwL	<i :1	<i :1	1:1	Ht RhMA M
cl r C1Cj @+1UC	9+h Ca+1Q+:r	c91@Ubal. Ga+TWD	Cr j +Cg+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbEeva+TWD	Cr j +CU+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbLaA A a+TWD	UC+Cj +j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbBelva+TWD	Cr j +C +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbWe. vaCGt o	@+gg+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubn IBoM	C1j +11+	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbWe. vaCGt de. t xMe	r 1-g+U@C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubal. Ga+cuBt sf lyau	j Uj +j C+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubg:g`+RRc	@+UU+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbRMIBoM	i 1+U@r	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubc uBoM	@+ 1+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbEeva+cuBt sf lyau	CC-r C+i U+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubg:g`+RRR	@+Ug+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubc uBt sf lyauBf lyave	r 1Cr +1@C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubg:g`+RR	U1+ j +C	r :1	ALwL	<r :1	<r :1	1:1	Ht RhMA M
EP3| 5I: Orpano09lorine Pesti0ides (QC Lot:) 42F3-7G									
cl r C1Cj @+1- U	9+hr +C@+:j	c91@Ubal. Ga+TWD	Cr j +Cg+i	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbEeva+TWD	Cr j +CU+@	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbLaA A a+TWD	UC+Cj +j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbBelva+TWD	Cr j +C +C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbWe. vaCGt o	@+gg+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubn IBoM	C1j +11+	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@UbWe. vaCGt de. t xMe	r 1-g+U@C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubal. Ga+cuBt sf lyau	j Uj +j C+C	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M
		c91@Ubg:g`+RRc	@+UU+j	1:U	ALwL	<1:U	<1:U	1:1	Ht RhMA M

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP3| 5I: Orpano09lorine Pesti0ides (QC Lot:) 42F3-7G80ontinued									
cl r C1Q @+1-U	9+hr+C@d:j	c91@UPRMlBoM	i 1+U@r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPcuBoM	@+1+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPEeva+cuBt sf lyau	OC-r C+i U+j	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg:g`+RRR	@+Ug+Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPcuBt sf lyauPsf lyave	r 1Or+1@Q	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPg:g`+RR	U1+j+C	r:1	ALwL	<r:1	<r:1	1:1	Ht PhMA M
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QC Lot:) 4215) 2G									
cl r C1Q @+11r	9+hr+Qd:r	c91@UPRMGt oSt s	i -+@C+@	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPRMA evGt ave	i 1+Ur+U	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPRMzMt u	OCC+gr+U	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPDGt o mdyM s+A evGml	UUj Qr C+1	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPP alavGMu	r-r+@U+U	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPFeuvGMu	UU+OQ+j	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPDGt o mdyM s	-j-r+OQ+	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UP9MdA. Gt s+evGml	-OU1U+gr+r	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPDGt oyeuSM. Gt s	g@+j 1+i	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UP9d vGMyt s	Ogi gC+gi+g	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
		c91@UPcvGMu	Ui Cr-+	1:U	ALwL	<C1	<C1	1:1	Ht PhMA M
cl r C1Q @+1UC	9+hCa+1Qd:r	c91@UPRMGt oSt s	i -+@C+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPRMA evGt ave	i 1+Ur+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPRMzMt u	OCC+gr+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt o mdyM s+A evGml	UUj Qr C+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPP alavGMu	r-r+@U+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPFeuvGMu	UU+OQ+j	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt o mdyM s	-j-r+OQ+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9MdA. Gt s+evGml	-OU1U+gr+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt oyeuSM. Gt s	g@+j 1+i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9d vGMyt s	Ogi gC+gi+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPcvGMu	Ui Cr-+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QC Lot:) 42F3-7G									
cl r C1Q @+1-U	9+hr+C@d:j	c91@UPRMGt oSt s	i -+@C+@	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPRMA evGt ave	i 1+Ur+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPRMzMt u	OCC+gr+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt o mdyM s+A evGml	UUj Qr C+1	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPP alavGMu	r-r+@U+U	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPFeuvGMu	UU+OQ+j	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt o mdyM s	-j-r+OQ+	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9MdA. Gt s+evGml	-OU1U+gr+r	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UPDGt oyeuSM. Gt s	g@+j 1+i	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M
		c91@UP9d vGMyt s	Ogi gC+gi+g	1:U	ALwL	<1:U	<1:U	1:1	Ht PhMA M

7f E‡ av‡M: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
						Laboratory Duplicate (DUP) Report			
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QC Lot:) 42F3-7G80ontinued									
c l r C1Q @ ‡1-U	9 ‡r +C@‡:j	c91@‡‡ v‡‡u	U C‡r - ‡	1:U	A L w L	<1:U	<1:U	1:1	Ht ‡M M
EP343/3| 1: Total Petroleum + Bdro0aryons (QC Lot:) 4212F1G									
c l r C1Q @ ‡1 1r	9 ‡r + Q‡:r	c91Q1‡Di ‡Dj ‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
c l r C1Q @ ‡1C1	9 ‡ Ca‡1r w:g	c91Q1‡Di ‡Dj ‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
EP343/3| 1: Total Petroleum + Bdro0aryons (QC Lot:) 4215) - G									
c l r C1Q @ ‡1 1r	9 ‡r + Q‡:r	c91@‡Dr U‡D- Q‡a O‡u	####	r 11	A L w L	- UQ1	- - g1	r g:1	1%‡P 1%
		c91@‡D- j ‡DQ ‡a O‡u	####	r 11	A L w L	r r U1	j Q1	r U:g	1%‡U1%
		c91@‡Dr 1‡Dr g‡a O‡u	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
		c91@‡Dr 1‡DQ ‡a O‡u‡sf A q	####	U1	A L w L	C@C1	C - - 1	r g:@	1%‡P 1%
c l r C1Q @ ‡1C1	9 ‡ Ca‡1r w:g	c91@‡Dr U‡D- Q‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡D- j ‡DQ ‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡Dr 1‡Dr g‡a O‡u	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
		c91@‡Dr 1‡DQ ‡a O‡u‡sf A q	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
EP343/3| 1: Total Petroleum + Bdro0aryons (QC Lot:) 42152FG									
c l r C1Q @ ‡1@Q	(D1r wr 1gr C	c91Q1‡Di ‡Dj ‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
EP343/3| 1: Total Petroleum + Bdro0aryons (QC Lot:) 421524G									
c l r C1g11Q‡1i	hut um A t f s	c91@‡Dr U‡D- Q‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡D- j ‡DQ ‡a O‡u	####	r 11	A L w L	r g1	<r 11	QU:r	Ht ‡M M
		c91@‡Dr 1‡Dr g‡a O‡u	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
		c91@‡Dr 1‡DQ ‡a O‡u‡sf A q	####	U1	A L w L	r g1	<U1	j g:@	Ht ‡M M
c l r C1g11Q‡1r i	hut um A t f s	c91@‡Dr U‡D- Q‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡D- j ‡DQ ‡a O‡u	####	r 11	A L w L	- 11	- - 1	QU	Ht ‡M M
		c91@‡Dr 1‡Dr g‡a O‡u	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
		c91@‡Dr 1‡DQ ‡a O‡u‡sf A q	####	U1	A L w L	- 11	- - 1	j :U	Ht ‡M M
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Draft (QC Lot:) 4212F1G									
c l r C1Q @ ‡1 1r	9 ‡r + Q‡:r	c91Q1‡Di ‡Dr 1‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
c l r C1Q @ ‡1C1	9 ‡ Ca‡1r w:g	c91Q1‡Di ‡Dr 1‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Draft (QC Lot:) 4215) - G									
c l r C1Q @ ‡1 1r	9 ‡r + Q‡:r	c91@‡Dr i ‡DCg‡a O‡u	####	r 11	A L w L	CgQ1	C1r 1	r g:g	1%‡P 1%
		c91@‡DCg‡Dg1‡a O‡u	####	r 11	A L w L	C@	C11	- 1:@	Ht ‡M M
		c91@‡Dr 1‡Dr i ‡a O‡u	####	U1	A L w L	- 11	r @	r g:1	Ht ‡M M
		c91@‡Dr 1‡Dg1‡a O‡u‡sf A q	####	U1	A L w L	g1U1	CgQ1	r U:r	1%‡P 1%
c l r C1Q @ ‡1C1	9 ‡ Ca‡1r w:g	c91@‡Dr i ‡DCg‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡DCg‡Dg1‡a O‡u	####	r 11	A L w L	<r 11	<r 11	1:1	Ht ‡M M
		c91@‡Dr 1‡Dr i ‡a O‡u	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
		c91@‡Dr 1‡Dg1‡a O‡u‡sf A q	####	U1	A L w L	<U1	<U1	1:1	Ht ‡M M
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Draft (QC Lot:) 42152FG									
c l r C1Q @ ‡1@Q	(D1r wr 1gr C	c91Q1‡Di ‡Dr 1‡a O‡u	####	r 1	A L w L	<r 1	<r 1	1:1	Ht ‡M M
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Draft (QC Lot:) 421524G									

9aLe	b rj Rt yPCi
4 t o/ P5 dBeo	b cl r C1Cj @l
DIMuv	b DhYRH5 PnhHcP9V9cYP9 dPn R
9d NeOv	b -r-ri CPC

7f E+l avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Draft (QC Lot:) 421524G 80ontinued									
cl r C1g11Q+11i	hut umAtfs	c91@bP>Dri PPDCgPFaOMu	++++	r 11	ALwL	r g1	<r 11	Ci :U	Ht PnMA M
		c91@bP>DCgPPDg1PFaOMu	++++	r 11	ALwL	r U1	<r 11	CQr	Ht PnMA M
		c91@bP>Dr 1PPDri PFaOMu	++++	U1	ALwL	<U1	<U1	1:1	Ht PnMA M
		c91@bP>Dr 1PPDg1PFaOMuPsf Aq	++++	U1	ALwL	-j 1	<U1	r gr	Ht PnMA M
cl r C1g11Q+1ri	hut umAtfs	c91@bP>Dri PPDCgPFaOMu	++++	r 11	ALwL	-g1	-g1	1:1	Ht PnMA M
		c91@bP>DCgPPDg1PFaOMu	++++	r 11	ALwL	r C1	r U1	r @r	Ht PnMA M
		c91@bP>Dr 1PPDri PFaOMu	++++	U1	ALwL	<U1	<U1	1:1	Ht PnMA M
		c91@bP>Dr 1PPDg1PFaOMuPsf Aq	++++	U1	ALwL	C@	Cj 1	U:C	Ht PnMA M

Method Blank (MB) and Laboratory Control Spike (LCS) Report

GePkf alMhPQ uvd lPveA P l evG BPwPnaEt oavt omP Tlau/ PoeyeosPvt PauPaualmePyeePA avdMPvt P0 GMGPallPoeaLeuvsPaePaBBeBPMPvGePsaA ePSt lf A esPt dP. d . t oMusPasPf seBPMPsvauBadBPsaA . leP. oe. aoaWu:P GeP. f o t seP t yPvGMP(DP . aoaA evedP MP vt P A t uM dP. t veuMlP laEt oavt omP Q uvaA MaWu:P GeP kf alMhP Q uvd lP veoA P naEt oavt omP Dt uvd lP 7aA. leP)nD7 dP oeyeosP vt P aP OeoMeBP oeyeoeuOeP A avedMlP t dP aP / ut 0 uP Mveoyeoeu OeP yoeeP A avdMP s. MeBP 0 MGP vadLevP aualmes:P GeP. f o t seP yPGMP(DP aoaA evedP MP t P A t uM dP A evG BP oeOsMMuPauBP aOO oaOmPMBe. euBeuvP yBaA. leP A avdM PmuaA MPY eO SeomPMA MsPaoePEaseBP uP svalvMOalPSalf avMuP yP d OesseBP D7:

7f E+l avdM: MOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
Eb 335T: Total S etals yBICP8AEM (QCLot:) 4212) 3G								
c, 11U bPh oseuMO	@g1+CQ+	U	ALwL	<U	r Ci PA LwL	r r 1	QQ	r - -
c, 11U bPT aoMA	@g1+Q +C	r 1	ALwL	<r 1	r Q PA LwL	r r 1	j 1	r - 1
c, 11U bPT eoMMA	@g1+gr +@	r	ALwL	<r	i :- PA LwL	j g:i	QC	r r U
c, 11U bPD aBA MA	@g1+gC+j	r	ALwL	<r	- :QPA LwL	r 1g	@U	r r @
c, 11U bPD Gd A MA	@g1+g@C	-	ALwL	<-	i 1:j PA LwL	r 1Q	Qg	r r Q
c, 11U bPD t Ealv	@g1+gQ+g	-	ALwL	<-	- U:gPA LwL	r 1C	@Q	r r Q
c, 11U bPD t . . eo	@g1+U1+Q	U	ALwL	<U	UU:r PA LwL	j @i	Q@	r r @
c, 11U bPh eaB	@Q +j - +r	U	ALwL	<U	Ug:j PA LwL	r 1i	Q	r r i
c, 11U bP auLauese	@Q +j i +U	U	ALwL	<U	r C@PA LwL	r 1C	Qr	r r j
c, 11U bPH MO el	@g1+1- +1	-	ALwL	<-	UU:r PA LwL	r 1j	Q	r r Q
c, 11U bP2 auaBMA	@g1+i - +	U	ALwL	<U	Cg:j PA LwL	r 1Q	Qg	r r i
c, 11U bPZ MO	@g1+i i +i	U	ALwL	<U	r 1UPA LwL	r 1j	Qr	r r U
Eb 325T: Total Re0overayle S er0urByBclS M (QCLot:) 4212) 1G								
c, 1CU bP eO om	@Q +j @i	1:r	ALwL	<1:r	r :g@PA LwL	j 1:C	Qr	r - C
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 4212F) G								
c 9 1@gbPT euzeue	@ +gC+	1:-	ALwL	<1:-	r PA LwL	QC:1	i j	r - r
c 9 1@gbP t lf eue	r 1Q+QQ+C	1:U	ALwL	<1:U	r PA LwL	j r :r	@g	r - 1
c 9 1@gbPc vGmEeuzeue	r 11+gr +g	1:U	ALwL	<1:U	r PA LwL	Q@U	@	r r @
c 9 1@gbPA eva+P&P aoa+Xmeue	r 1Q+QQ+QP r 1i +g- +C	1:U	ALwL	<1:U	- PA LwL	Qg:@	i j	r - C
c 9 1@gbP7 vmeue	r 11+g- +U	1:U	ALwL	<1:U	r PA LwL	QC:C	i Q	r r i
c 9 1@gbP oGt +Xmeue	j Ug@i	1:U	ALwL	<1:U	r PA LwL	Q :@	@U	r r j
c 9 1@gbPvt . d . mEeuzeue	j Q+Q +Q	1:U	ALwL	<1:U	r PA LwL	Q@1	i @	r r j
c 9 1@gbPu+9 d . mEeuzeue	r 1C+i U+r	1:U	ALwL	<1:U	r PA LwL	@@Q	i C	r r C
c 9 1@gbP :C:U+ dMA evGmEeuzeue	r 1Q+i @Q	1:U	ALwL	<1:U	r PA LwL	@:-	i U	r r r
c 9 1@gbPseO+Tf vmEeuzeue	r CU+j Q+Q	1:U	ALwL	<1:U	r PA LwL	Q1:U	i C	r r U
c 9 1@gbP :- :g+ dMA evGmEeuzeue	j U+i C+i	1:U	ALwL	<1:U	r PA LwL	@@r	i C	r r C
c 9 1@gbPeo+Tf vmEeuzeue	j Q+1i +i	1:U	ALwL	<1:U	r PA LwL	@:@	i U	r r C
c 9 1@gbP +vt . d . mM lf eue	j j +Q@i	1:U	ALwL	<1:U	r PA LwL	@:Q	i -	r r g
c 9 1@gbPu+Tf vmEeuzeue	r 1g+Ur +Q	1:U	ALwL	<1:U	r PA LwL	@Ur	Ug	r r i
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 421525G								
c 9 1@gbPT euzeue	@ +gC+	1:-	ALwL	<1:-	r PA LwL	@QC	i j	r - r
c 9 1@gbP t lf eue	r 1Q+QQ+C	1:U	ALwL	<1:U	r PA LwL	@Q-	@g	r - 1
c 9 1@gbPc vGmEeuzeue	r 11+gr +g	1:U	ALwL	<1:U	r PA LwL	@Qg	@	r r @

7f E+l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 421525G 80ontinued								
c91@gbA eva+R&P aca+Xmeue	r1Q+CQ+CP r1i+g-+C	1:U	ALwL	<1:U	-FALwL	@@@	ij	r-C
c91@gb7 vmeue	r11+g-+U	1:U	ALwL	<1:U	rFALwL	@Qr	iQ	rri
c91@gbP oG +Xmeue	jU+g@i	1:U	ALwL	<1:U	rFALwL	@:Q	@J	rrj
c91@gbPst . d . mEeuzeue	jQ+Q+Q	1:U	ALwL	<1:U	rFALwL	@Qg	i@	rrj
c91@gbRu+9d . mEeuzeue	r1C+i U+r	1:U	ALwL	<1:U	rFALwL	@C@	iC	rrC
c91@gbP:C:U+ dA evGmEeuzeue	r1Q+i @Q	1:U	ALwL	<1:U	rFALwL	@:i	iU	rrr
c91@gbseO+Tf vmEeuzeue	rCU+j Q+Q	1:U	ALwL	<1:U	rFALwL	@:g	iC	rrU
c91@gbP:-:g+ dA evGmEeuzeue	jU+i C+i	1:U	ALwL	<1:U	rFALwL	@:-	iC	rrC
c91@gbReo+Tf vmEeuzeue	jQ+1i+i	1:U	ALwL	<1:U	rFALwL	@:U	iU	rrC
c91@gbP+Nst . d . mN If eue	jj+Q@i	1:U	ALwL	<1:U	rFALwL	@Cj	i-	rrg
c91@gbRu+Tf vmEeuzeue	r1g+Ur+Q	1:U	ALwL	<1:U	rFALwL	@Cg	Ug	rri
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 42F3-4G								
c91@gbTeuzeue	@+gC+	1:-	ALwL	<1:-	rFALwL	jg:r	ij	r-r
c91@gbP t If eue	r1Q+CQ+C	1:U	ALwL	<1:U	rFALwL	jj:1	@g	r-1
c91@gbR vGmEeuzeue	r11+gr+g	1:U	ALwL	<1:U	rFALwL	ji:Q	@	rr@
c91@gbA eva+R&P aca+Xmeue	r1Q+CQ+CP r1i+g-+C	1:U	ALwL	<1:U	-FALwL	jQC	ij	r-C
c91@gb7 vmeue	r11+g-+U	1:U	ALwL	<1:U	rFALwL	jQg	iQ	rri
c91@gbP oG +Xmeue	jU+g@i	1:U	ALwL	<1:U	rFALwL	jj:Q	@J	rrj
c91@gbPst . d . mEeuzeue	jQ+Q+Q	1:U	ALwL	<1:U	rFALwL	j@j	i@	rrj
c91@gbRu+9d . mEeuzeue	r1C+i U+r	1:U	ALwL	<1:U	rFALwL	jU:-	iC	rrC
c91@gbP:C:U+ dA evGmEeuzeue	r1Q+i @Q	1:U	ALwL	<1:U	rFALwL	j-:j	iU	rrr
c91@gbseO+Tf vmEeuzeue	rCU+j Q+Q	1:U	ALwL	<1:U	rFALwL	ji:j	iC	rrU
c91@gbP:-:g+ dA evGmEeuzeue	jU+i C+i	1:U	ALwL	<1:U	rFALwL	jCU	iC	rrC
c91@gbReo+Tf vmEeuzeue	jQ+1i+i	1:U	ALwL	<1:U	rFALwL	ji:@	iU	rrC
c91@gbP+Nst . d . mN If eue	jj+Q@i	1:U	ALwL	<1:U	rFALwL	jg:-	i-	rrg
c91@gbRu+Tf vmEeuzeue	r1g+Ur+Q	1:U	ALwL	<1:U	rFALwL	Q@C	Ug	rri
EP3| Fx: OgBpenated Comf ounds (QCLot:) 4212F) G								
c91@gb2 MmRn Oevave	r1Q+1U+g	U	ALwL	<U	r1FALwL	@:i	gg	r-i
c91@gbP+Tf vaut ueRl cKq	@Q+j C+C	U	ALwL	<U	r1FALwL	Q:1	gQ	rQ
c91@gbg+l evGmI+ + euvaut ueRl VTKq	r1Q+r 1+r	U	ALwL	<U	r1FALwL	Q1:g	UC	r-j
c91@gbP+Wexaut ueRl TKq	Uj r+@Q+i	U	ALwL	<U	r1FALwL	QU:U	Ur	rQr
EP3| Fx: OgBpenated Comf ounds (QCLot:) 421525G								
c91@gb2 MmRn Oevave	r1Q+1U+g	U	ALwL	<U	r1FALwL	@:U	gg	r-i
c91@gbP+Tf vaut ueRl cKq	@Q+j C+C	U	ALwL	<U	r1FALwL	@:j	gQ	rQ
c91@gbg+l evGmI+ + euvaut ueRl VTKq	r1Q+r 1+r	U	ALwL	<U	r1FALwL	@:1	UC	r-j
c91@gbP+Wexaut ueRl TKq	Uj r+@Q+i	U	ALwL	<U	r1FALwL	Q:C	Ur	rQr
EP3| Fx: OgBpenated Comf ounds (QCLot:) 42F3-4G								

7f E+l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP3| Fx: OgBpenated Comf ounds (QCLot:) 42F3-4G80ontinued								
c91@gbP2 MmPh Oevave	r1Q+1U+g	U	ALwL	<U	r1PALwL	jU:i	gg	r-i
c91@gbP+Tf vaut uePl cKq	@Q+j C+C	U	ALwL	<U	r1PALwL	j@1	gQ	rQ
c91@gbPg+l evGml++ euvaut uePl VTKq	r1Q+r1+r	U	ALwL	<U	r1PALwL	ji:1	UC	r-j
c91@gbP+Wexaut uePl TKq	Uj r+@Q+i	U	ALwL	<U	r1PALwL	j@1	Ur	rQr
EP3| FC: Mulfonated Comf ounds (QCLot:) 4212F) G								
c91@gbPDadEt uPBMf lyBe	@U+r U+1	1:U	ALwL	<1:U	rPALwL	@:@	gi	r-i
EP3| FC: Mulfonated Comf ounds (QCLot:) 421525G								
c91@gbPDadEt uPBMf lyBe	@U+r U+1	1:U	ALwL	<1:U	rPALwL	Q@g	gi	r-i
EP3| FC: Mulfonated Comf ounds (QCLot:) 42F3-4G								
c91@gbPDadEt uPBMf lyBe	@U+r U+1	1:U	ALwL	<1:U	rPALwL	r1g	gi	r-i
EP3| FD: cumipants (QCLot:) 4212F) G								
c91@gbP:-+RMGt d.d.aue	Uj g++1+@	1:U	ALwL	<1:U	rPALwL	@QU	Ur	rQr
c91@gbP:-+RMGt d.d.aue	@Q+Q@U	1:U	ALwL	<1:U	rPALwL	Qr:1	i@	rr@
c91@gbPOs+r:C+RMGt d.d.mleue	r11ir+1r+U	1:U	ALwL	<1:U	rPALwL	@:r	Uj	r-g
c91@gbRoaus+r:C+RMGt d.d.mleue	r11ir+1-+i	1:U	ALwL	<1:U	rPALwL	@Cg	U-	r-@
c91@gbP:-+RMd AtevGauePcRTq	r1i+j C+g	1:U	ALwL	<1:U	rPALwL	QU:1	gj	r-@
EP3| FD: cumipants (QCLot:) 421525G								
c91@gbP:-+RMGt d.d.aue	Uj g++1+@	1:U	ALwL	<1:U	rPALwL	@:r	Ur	rQr
c91@gbP:-+RMGt d.d.aue	@Q+Q@U	1:U	ALwL	<1:U	rPALwL	@:j	i@	rr@
c91@gbPOs+r:C+RMGt d.d.mleue	r11ir+1r+U	1:U	ALwL	<1:U	rPALwL	@Cj	Uj	r-g
c91@gbRoaus+r:C+RMGt d.d.mleue	r11ir+1-+i	1:U	ALwL	<1:U	rPALwL	@g:r	U-	r-@
c91@gbP:-+RMd AtevGauePcRTq	r1i+j C+g	1:U	ALwL	<1:U	rPALwL	Q1:1	gj	r-@
EP3| FD: cumipants (QCLot:) 42F3-4G								
c91@gbP:-+RMGt d.d.aue	Uj g++1+@	1:U	ALwL	<1:U	rPALwL	Q:r	Ur	rQr
c91@gbP:-+RMGt d.d.aue	@Q+Q@U	1:U	ALwL	<1:U	rPALwL	jr:@	i@	rr@
c91@gbPOs+r:C+RMGt d.d.mleue	r11ir+1r+U	1:U	ALwL	<1:U	rPALwL	j1:-	Uj	r-g
c91@gbRoaus+r:C+RMGt d.d.mleue	r11ir+1-+i	1:U	ALwL	<1:U	rPALwL	j1:i	U-	r-@
c91@gbP:-+RMd AtevGauePcRTq	r1i+j C+g	1:U	ALwL	<1:U	rPALwL	r11	gj	r-@
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QCLot:) 4212F) G								
c91@gbRMGt d BMf t d AevGaue	@U+@+Q	U	ALwL	<U	r1PALwL	iCQ	C@	r-C
c91@gbPDGt d AevGaue	@g+Q@C	U	ALwL	<U	r1PALwL	@:Q	UU	rCC
c91@gbP2 MmPGt dBe	@U+1r+g	U	ALwL	<U	r1PALwL	QU:g	Ur	rCC
c91@gbPTd AtAevGaue	@g+CC+j	U	ALwL	<U	r1PALwL	ij:Q	CQ	r--
c91@gbPDGt d evGaue	@U+11+C	U	ALwL	<U	r1PALwL	@@g	iU	rCU
c91@gbP dMGt d yft d AevGaue	@U+ij+g	U	ALwL	<U	r1PALwL	@:@	ir	rCC
c91@gbP:r+RMGt d evGeue	@U+CU+g	1:U	ALwL	<1:U	rPALwL	@1	UQ	r-Q
c91@gbPV Bt AevGaue	@g+CQ+g	1:U	ALwL	<1:U	rPALwL	ig:U	g@	rri
c91@gbRoaus+r:-+RMGt d evGeue	rUi+1+U	1:U	ALwL	<1:U	rPALwL	QC:1	ig	r-1

7f E+l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QCLot:) 4212F) G80ontinued								
c91@gbP:r+RM0Gt d evGaue	@H+Cg+C	1:U	ALwL	<1:U	rFALwL	Q1:g	iC	r-r
c91@gbPOsH+r:-+RM0Gt d evGeue	rUi+Uj+	1:U	ALwL	<1:U	rFALwL	Q:U	ij	rrj
c91@gbP:r:r+dM0Gt d evGaue	@+UUH	1:U	ALwL	<1:U	rFALwL	Qr:g	ig	rrU
c91@gbP:r+RM0Gt d.d.mleue	Ui C+UQH	1:U	ALwL	<1:U	rFALwL	Q:g	@	r-1
c91@gbPDadEt uP evaOGt dMe	Ui+C+U	1:U	ALwL	<1:U	rFALwL	@Q-	Ur	rr@
c91@gbP:-+RM0Gt d evGaue	r1@H1i+	1:U	ALwL	<1:U	rFALwL	@Qr	i@	r-r
c91@gbP dM0Gt d evGeue	@+1r+i	1:U	ALwL	<1:U	rFALwL	Q:j	iQ	rri
c91@gbPRMEd AtA evGaue	@g+j U+C	1:U	ALwL	<1:U	rFALwL	Q1:1	@	rrj
c91@gbP:r:-+dM0Gt d evGaue	@+11+U	1:U	ALwL	<1:U	rFALwL	Qj:U	ij	rrj
c91@gbP:C+RM0Gt d.d.aue	rg-+Q+j	1:U	ALwL	<1:U	rFALwL	Q@@	@	r-1
c91@gbP evaOGt d evGeue	r-@r Q+g	1:U	ALwL	<1:U	rFALwL	Qj:i	i@	r-r
c91@gbP:r:r:-+evaOGt d evGaue	iC1+1+i	1:U	ALwL	<1:U	rFALwL	Q:U	Ug	r-g
c91@gbRoaus+r:g+RM0Gt d++Ef veue	rr1+U@i	1:U	ALwL	<1:U	rFALwL	@Ui	g-	rri
c91@gbPOsH+r:g+RM0Gt d++Ef veue	rg@+r r+U	1:U	ALwL	<1:U	rFALwL	@:C	--	rQ
c91@gbP:r:-:-+evaOGt d evGaue	@+Cg+U	1:U	ALwL	<1:U	rFALwL	QU:C	ir	r-U
c91@gbP:-:C+dM0Gt d.d.aue	ji+r Q+g	1:U	ALwL	<1:U	rFALwL	j1:j	i-	rC1
c91@gbP9euvaOGt d evGaue	@+1r+@	1:U	ALwL	<1:U	rFALwL	iU:i	g1	jg
c91@gbP:-+RMEd At+C+OGt d.d.aue	ji+r-+Q	1:U	ALwL	<1:U	rFALwL	@g:g	r1	rCg
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QCLot:) 421525G								
c91@gbRM0Gt d BMf t d A evGaue	@H@+Q	U	ALwL	<U	r1FALwL	@:U	C@	r-C
c91@gbPDGt d A evGaue	@g+Q@C	U	ALwL	<U	r1FALwL	Q1:i	UU	rCC
c91@gb2MmlPOGt dMe	@H1r+g	U	ALwL	<U	r1FALwL	Qj:g	Ur	rCC
c91@gbPTd AtA evGaue	@g+CC+j	U	ALwL	<U	r1FALwL	QC:r	CQ	r--
c91@gbPDGt d evGaue	@H11+C	U	ALwL	<U	r1FALwL	QU:@	iU	rCU
c91@gbP dM0Gt d ylf t d A evGaue	@Hi j+g	U	ALwL	<U	r1FALwL	@Qj	ir	rCC
c91@gbP:r+RM0Gt d evGeue	@HCU+g	1:U	ALwL	<1:U	rFALwL	@:r	UQ	r-Q
c91@gbPY Bt A evGaue	@g+CQ+g	1:U	ALwL	<1:U	rFALwL	@Uj	g@	rri
c91@gbRoaus+r:-+RM0Gt d evGeue	rUi+i 1+U	1:U	ALwL	<1:U	rFALwL	@C:U	ig	r-1
c91@gbP:r+RM0Gt d evGaue	@H+Cg+C	1:U	ALwL	<1:U	rFALwL	@@C	iC	r-r
c91@gbPOsH+r:-+RM0Gt d evGeue	rUi+Uj+	1:U	ALwL	<1:U	rFALwL	@Ur	ij	rrj
c91@gbP:r:r+dM0Gt d evGaue	@+UUH	1:U	ALwL	<1:U	rFALwL	@C:Q	ig	rrU
c91@gbP:r+RM0Gt d.d.mleue	Ui C+UQH	1:U	ALwL	<1:U	rFALwL	@QC	@	r-1
c91@gbPDadEt uP evaOGt dMe	Ui+C+U	1:U	ALwL	<1:U	rFALwL	ij:@	Ur	rr@
c91@gbP:-+RM0Gt d evGaue	r1@H1i+	1:U	ALwL	<1:U	rFALwL	@@-	i@	r-r
c91@gbP dM0Gt d evGeue	@+1r+i	1:U	ALwL	<1:U	rFALwL	@:@	iQ	rri
c91@gbPRMEd AtA evGaue	@g+j U+C	1:U	ALwL	<1:U	rFALwL	@Uj	@	rrj
c91@gbP:r:-+dM0Gt d evGaue	@+11+U	1:U	ALwL	<1:U	rFALwL	Q1:-	ij	rrj
c91@gbP:C+RM0Gt d.d.aue	rg-+Q+j	1:U	ALwL	<1:U	rFALwL	Q:-	@	r-1
c91@gbP evaOGt d evGeue	r-@r Q+g	1:U	ALwL	<1:U	rFALwL	@:@	i@	r-r

7f E+I avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QCLot:) 421525G 80ontinued								
c91@gbP :r :r :- + evaOGt d evGaue	i C1+ 1+i	1:U	ALwL	<1:U	rFALwL	@g:r	Ug	r-g
c91@gbRaus+r :g+RMGt d + +Ef veue	rr1+U@i	1:U	ALwL	<1:U	rFALwL	@:1	g-	rri
c91@gbPOsl+r :g+RMGt d + +Ef veue	rg@+r r+U	1:U	ALwL	<1:U	rFALwL	@:r	--	rQ
c91@gbP :r :- :- + evaOGt d evGaue	@+Cg+U	1:U	ALwL	<1:U	rFALwL	@:-	ir	r-U
c91@gbP :- :C+ dMGt d . d . aue	j i+r Q+g	1:U	ALwL	<1:U	rFALwL	QU:r	i-	rC1
c91@gbP9 euvaOGt d evGaue	@+1r+@	1:U	ALwL	<1:U	rFALwL	iU:j	g1	jg
c91@gbP :- +RMd At +C+OGt d . d . aue	j i+r- +Q	1:U	ALwL	<1:U	rFALwL	Q:@	r1	rCg
EP3| FE: +alopenated Alif 9ati0 Comf ounds (QCLot:) 42F3- 4G								
c91@gbRMGt d BMf t d A evGaue	@U+@+Q	U	ALwL	<U	r1FALwL	Qg:j	C@	r-C
c91@gbPDGt d A evGaue	@g+Q@C	U	ALwL	<U	r1FALwL	jQg	UU	rCC
c91@gbP2 MmRPOGt dMe	@U+1r+g	U	ALwL	<U	r1FALwL	jr:j	Ur	rCC
c91@gbPTd At A evGaue	@g+CC+j	U	ALwL	<U	r1FALwL	r1i	CQ	r--
c91@gbPDGt d evGaue	@U+11+C	U	ALwL	<U	r1FALwL	rrg	iU	rCU
c91@gbP dMGt d yf t d A evGaue	@U+i j+g	U	ALwL	<U	r1FALwL	j-:C	ir	rCC
c91@gbP :r +RMGt d evGeue	@U+CU+g	1:U	ALwL	<1:U	rFALwL	j-:Q	UQ	r-Q
c91@gbPV Bt A evGaue	@g+QQ+g	1:U	ALwL	<1:U	rFALwL	Q:C	g@	rri
c91@gbRaus+r :- +RMGt d evGeue	rU+i 1+U	1:U	ALwL	<1:U	rFALwL	QQi	ig	r-1
c91@gbP :r +RMGt d evGaue	@U+Cg+C	1:U	ALwL	<1:U	rFALwL	Q:U	iC	r-r
c91@gbPOsl+r :- +RMGt d evGeue	rU+U j+	1:U	ALwL	<1:U	rFALwL	j-:g	ij	rrj
c91@gbP :r :r + dMGt d evGaue	@+UU+i	1:U	ALwL	<1:U	rFALwL	QQr	ig	rrU
c91@gbP :r +RMGt d . d . mieue	Ui C+UQ+i	1:U	ALwL	<1:U	rFALwL	jr:1	@	r-1
c91@gbPDacEt uP evaOGt dMe	Ui+ C+U	1:U	ALwL	<1:U	rFALwL	Qg:i	Ur	rr@
c91@gbP :- +RMGt d evGaue	r1@+i+	1:U	ALwL	<1:U	rFALwL	jC-	i@	r-r
c91@gbP dMGt d evGeue	@+1r+i	1:U	ALwL	<1:U	rFALwL	jr:@	iQ	rri
c91@gbRMd At A evGaue	@g+j U+C	1:U	ALwL	<1:U	rFALwL	j@	@	rrj
c91@gbP :r :- + dMGt d evGaue	@+11+U	1:U	ALwL	<1:U	rFALwL	j@g	ij	rrj
c91@gbP :C+RMGt d . d . aue	rg- + Q+j	1:U	ALwL	<1:U	rFALwL	r1r	@	r-1
c91@gbP evaOGt d evGeue	r-@+r Q+g	1:U	ALwL	<1:U	rFALwL	jC1	i@	r-r
c91@gbP :r :r :- + evaOGt d evGaue	i C1+ 1+i	1:U	ALwL	<1:U	rFALwL	j1:Q	Ug	r-g
c91@gbRaus+r :g+RMGt d + +Ef veue	rr1+U@i	1:U	ALwL	<1:U	rFALwL	Q:j	g-	rri
c91@gbPOsl+r :g+RMGt d + +Ef veue	rg@+r r+U	1:U	ALwL	<1:U	rFALwL	Qg:r	--	rQ
c91@gbP :r :- :- + evaOGt d evGaue	@+Cg+U	1:U	ALwL	<1:U	rFALwL	r1-	ir	r-U
c91@gbP :- :C+ dMGt d . d . aue	j i+r Q+g	1:U	ALwL	<1:U	rFALwL	r1r	i-	rC1
c91@gbP9 euvaOGt d evGaue	@+1r+@	1:U	ALwL	<1:U	rFALwL	QQi	g1	jg
c91@gbP :- +RMd At +C+OGt d . d . aue	j i+r- +Q	1:U	ALwL	<1:U	rFALwL	j1:-	r1	rCg
EP3| Fc: +alopenated Aromati0 Comf ounds (QCLot:) 4212F) G								
c91@gbPDGt d Eeuzeue	r1Q+j 1+@	1:U	ALwL	<1:U	rFALwL	Q:-	@	rri
c91@gbPTd At Eeuzeue	r1Q+Q +r	1:U	ALwL	<1:U	rFALwL	Q1:1	ir	rr@
c91@gbP +DGt d vt lf eue	j U+gj +Q	1:U	ALwL	<1:U	rFALwL	Q1:i	iQ	rr-

9aLe b - U/t yPCi
4 t d P5 dBeo b cl r C1Cj @
DIMuv b DhYRH5 Pnh HcP9 V9cYP9 dPn R
9d NeOv b - r - ri CPC

7f E+l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| Fc: +alopenated Aromati0 Comf ounds (QCLot:) 4212F) G80ontinued								
c91@gbRg+DGt d vt lf eue	r 1i +gC+g	1:U	ALwL	<1:U	rPA LwL	@@g	ii	rr-
c91@gbP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	rPA LwL	j C:Q	ir	rr@
EP3| Fc: +alopenated Aromati0 Comf ounds (QCLot:) 421525G								
c91@gbPDGt d Eeuzeue	r 1Q+j 1+@	1:U	ALwL	<1:U	rPA LwL	@@j	@	rri
c91@gbPTd At Eeuzeue	r 1Q+Q +r	1:U	ALwL	<1:U	rPA LwL	@:g	ir	rr@
c91@gbP +DGt d vt lf eue	j U+gj +Q	1:U	ALwL	<1:U	rPA LwL	@:-	iQ	rr-
c91@gbRg+DGt d vt lf eue	r 1i +gC+g	1:U	ALwL	<1:U	rPA LwL	@C:U	ii	rr-
c91@gbP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	rPA LwL	QC:C	ir	rr@
EP3| Fc: +alopenated Aromati0 Comf ounds (QCLot:) 42F3- 4G								
c91@gbPDGt d Eeuzeue	r 1Q+j 1+@	1:U	ALwL	<1:U	rPA LwL	j i :Q	@	rri
c91@gbPTd At Eeuzeue	r 1Q+Q +r	1:U	ALwL	<1:U	rPA LwL	j g:j	ir	rr@
c91@gbP +DGt d vt lf eue	j U+gj +Q	1:U	ALwL	<1:U	rPA LwL	j C:i	iQ	rr-
c91@gbRg+DGt d vt lf eue	r 1i +gC+g	1:U	ALwL	<1:U	rPA LwL	j - :g	ii	rr-
c91@gbP :- :C+ dMGt d Eeuzeue	Q@i r +i	1:U	ALwL	<1:U	rPA LwL	r 1j	ir	rr@
EP3| Fb : Tri9alomet9anes (QCLot:) 4212F) G								
c91@gbPDGt d yt oA	i @i i +C	1:U	ALwL	<1:U	rPA LwL	@:-	iQ	rrQ
c91@gbPTd At BMGt d AevGaue	@U+ @g	1:U	ALwL	<1:U	rPA LwL	@:U	g1	rri
c91@gbRMEd At OGt d AevGaue	r - g+gQ+r	1:U	ALwL	<1:U	rPA LwL	@C:Q	-@	rrj
c91@gbPTd At yt oA	@U+ U+	1:U	ALwL	<1:U	rPA LwL	ij :g	g1	r-1
EP3| Fb : Tri9alomet9anes (QCLot:) 421525G								
c91@gbPDGt d yt oA	i @i i +C	1:U	ALwL	<1:U	rPA LwL	@:-	iQ	rrQ
c91@gbPTd At BMGt d AevGaue	@U+ @g	1:U	ALwL	<1:U	rPA LwL	ij :1	g1	rri
c91@gbRMEd At OGt d AevGaue	r - g+gQ+r	1:U	ALwL	<1:U	rPA LwL	@:-	-@	rrj
c91@gbPTd At yt oA	@U+ U+	1:U	ALwL	<1:U	rPA LwL	i - :Q	g1	r-1
EP3| Fb : Tri9alomet9anes (QCLot:) 42F3- 4G								
c91@gbPDGt d yt oA	i @i i +C	1:U	ALwL	<1:U	rPA LwL	j r:i	iQ	rrQ
c91@gbPTd At BMGt d AevGaue	@U+ @g	1:U	ALwL	<1:U	rPA LwL	QU:1	g1	rri
c91@gbRMEd At OGt d AevGaue	r - g+gQ+r	1:U	ALwL	<1:U	rPA LwL	Q@1	-@	rrj
c91@gbPTd At yt oA	@U+ U+	1:U	ALwL	<1:U	rPA LwL	Q1:-	g1	r-1
EP3| 5A: P9enoli0 Comf ounds (QCLot:) 4215) 2G								
c91@UbP9 Geut l	r 1Q+j U+	1:U	ALwL	<1:U	- :UPA LwL	j QC	Q	r-U
c91@UbP +DGt d . Geut l	j U+U@Q	1:U	ALwL	<1:U	- :UPA LwL	QU:i	CQ	r-g
c91@UbP +l evGml. Geut l	j U+gQ+@	1:U	ALwL	<1:U	- :UPA LwL	i g:j	CC	r-j
c91@UbPC+R&Rg+l evGml. Geut l	r Cr j +@@C	1:U	ALwL	<1:U	- :UPA LwL	j @r	CQ	rCr
c91@UbP +HMdt . Geut l	QQ+@U+U	1:U	ALwL	<1:U	- :UPA LwL	i r:U	Q	r-1
c91@UbP :g+RMA evGml. Geut l	r 1U+i @j	1:U	ALwL	<1:U	- :UPA LwL	r 11	r1	r-j
c91@UbP :g+RMGt d . Geut l	r - 1+QC+	1:U	ALwL	<1:U	- :UPA LwL	j g:g	CQ	r-g
c91@UbP :i +RMGt d . Geut l	Q@i U+1	1:U	ALwL	<1:U	- :UPA LwL	j @	g1	rC1

9aLe	b-i R yPQ
4 t d'P5 dBeo	b cl rC1Q @
DlMuv	b DhYRH5 PnhHcP9 9cYP9 dPn R
9d NdOv	b-r-ri CPC

7f E+l avd/M: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	High
EP3| 5A: P9enoli0 Comf ounds (QCLot:) 4215) 2G80ontinued								
c91@0Pg+DGt d +C+l evGnl. Geut l	Uj +U1+@	1:U	ALwL	<1:U	-:UPA LwL	r--	U-	rC1
c91@0P:g:i + dM0Gt d. Geut l	QQ+1i +	1:U	ALwL	<1:U	-:UPA LwL	r-@	gg	r-Q
c91@0P:g:U+ dM0Gt d. Geut l	j Uj Ug	1:U	ALwL	<1:U	-:UPA LwL	r-i	gg	r-Q
c91@0P9euvaOGt d. Geut l	Q@Q +U	r:1	ALwL	<r	-:UPA LwL	@:@	rg	r-i
EP3| 5A: P9enoli0 Comf ounds (QCLot:) 42F3-7G								
c91@0P9 Geut l	r1Qj U+	1:U	ALwL	<1:U	-:UPA LwL	@:C	Q	r-U
c91@0P+DGt d. Geut l	j U+U@Q	1:U	ALwL	<1:U	-:UPA LwL	@:1	QQ	r-g
c91@0P+l evGnl. Geut l	j UgQ+@	1:U	ALwL	<1:U	-:UPA LwL	j-:r	QC	r-j
c91@0PC+R&Pg+l evGnl. Geut l	rQrj +@@C	1:U	ALwL	<1:U	-:UPA LwL	j 1:U	QQ	rQr
c91@0P+HMdt. Geut l	QQ+@U+U	1:U	ALwL	<1:U	-:UPA LwL	i g:g	Q	r-1
c91@0P:g+RMA evGnl. Geut l	r1U+i @j	1:U	ALwL	<1:U	-:UPA LwL	i r:@	r1	r-j
c91@0P:g+RM0Gt d. Geut l	r-1+QC+	1:U	ALwL	<1:U	-:UPA LwL	i U:r	QQ	r-g
c91@0P:i +RM0Gt d. Geut l	Q@i U+1	1:U	ALwL	<1:U	-:UPA LwL	i j:U	g1	rC1
c91@0Pg+DGt d +C+l evGnl. Geut l	Uj +U1+@	1:U	ALwL	<1:U	-:UPA LwL	@:g	U-	rC1
c91@0P:g:i + dM0Gt d. Geut l	QQ+1i +	1:U	ALwL	<1:U	-:UPA LwL	i @@	gg	r-Q
c91@0P:g:U+ dM0Gt d. Geut l	j Uj Ug	1:U	ALwL	<1:U	-:UPA LwL	@:@	gg	r-Q
c91@0P9euvaOGt d. Geut l	Q@Q +U	r:1	ALwL	<r	-:UPA LwL	UQg	rg	r-i
EP3| 5x: PolBnu0lear Aromati0 + Bdro0aryons (QCLot:) 4215) 2G								
c91@0PHa. GGaleue	j r+1+C	1:U	ALwL	<1:U	-:UPA LwL	i @g	g-	r--
c91@0P+l evGnlua. GGaleue	j r+U@i	1:U	ALwL	<1:U	-:UPA LwL	Q:i	gC	r-@
c91@0P+DGt d ua. GGaleue	j r+UQ+@	1:U	ALwL	<1:U	-:UPA LwL	rri	-j:U	rri
c91@0Pn Geua. GGnleue	-1Q+j i +Q	1:U	ALwL	<1:U	-:UPA LwL	rrQ	gi	r-1
c91@0Pn Geua. GGeue	QC+C-+j	1:U	ALwL	<1:U	-:UPA LwL	j r:@	U1	r--
c91@0PFlf t oeue	Q +@C+@	1:U	ALwL	<1:U	-:UPA LwL	j U:Q	UC	r-j
c91@0P9 GeuauvGoeue	QU+1r +Q	1:U	ALwL	<1:U	-:UPA LwL	r1g	UC	r-@
c91@0Pn uvGoaOeue	r-1+r-+@	1:U	ALwL	<1:U	-:UPA LwL	r1C	U1	r-Q
c91@0PFlf t oauvGeue	-1i +gg+1	1:U	ALwL	<1:U	-:UPA LwL	r1i	UC	r-j
c91@0P9 mneue	r-j +11+1	1:U	ALwL	<1:U	-:UPA LwL	rrr	U-	rQg
c91@0PH+ +Flf t oeumPn OevaA Nlle	UC+j i +C	1:U	ALwL	<1:U	-:UPA LwL	r1g	gi	rQ
c91@0PTeuz)aopauvGoaOeue	Ui +UU+C	1:U	ALwL	<1:U	-:UPA LwL	r1-	gj	r-@
c91@0PDGmseue	-rQ+1r +j	1:U	ALwL	<1:U	-:UPA LwL	r1Q	U1	rC1
c91@0PTeuzt)EqR&PTeuzt)/ qlf t oauvGeue	-1U+j j + P -1@1Q+j	r	ALwL	<r	UPA LwL	r1i	gQ	rQ
c91@0PQr - +RMA evGnlEeuz)aopauvGoaOeue	U@i @i	1:U	ALwL	<1:U	-:UPA LwL	r1j	i r	rUg
c91@0PTeuzt)aq mneue	U1+C-+Q	1:U	ALwL	<1:U	-:UPA LwL	r1C	gQ	r-i
c91@0PC+l evGnlOGt lauvGoeue	Ui +gj +U	1:U	ALwL	<1:U	-:UPA LwL	j U:Q	Ur	rC@
c91@0PVuBeut)r:-:C:OBq mneue	rj C+Q +U	1:U	ALwL	<1:U	-:UPA LwL	j g:i	gU	rQU
c91@0PRMeuz)a:GopauvGoaOeue	UC+@ +C	1:U	ALwL	<1:U	-:UPA LwL	j C:i	gU	rQC
c91@0PTeuzt)L:GMq eomeue	rj r+g+	1:U	ALwL	<1:U	-:UPA LwL	j-:@	g-	rQQ

7f E+I avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP3| 5x: PolBnu0lear Aromati0 +Bdro0aryons (QCLot:) 4215) 2G 80ontinued								
c91@bP7f A R yP9 h Ws	####	1:U	ALwL	<1:U	####	####	####	####
EP3| 5x: PolBnu0lear Aromati0 +Bdro0aryons (QCLot:) 42F3-7G								
c91@bPHa. GGaleue	j r+1+C	1:U	ALwL	<1:U	-:UPA LwL	@:r	g-	r--
c91@bP+I evGnlua. GGaleue	j r+U@i	1:U	ALwL	<1:U	-:UPA LwL	@:1	gC	r-@
c91@bP+DGt d ua. GGaleue	j r+UQ+@	1:U	ALwL	<1:U	-:UPA LwL	i-:g	-j:U	rri
c91@bPh Oeua. GGnleue	-1Qij i+Q	1:U	ALwL	<1:U	-:UPA LwL	@:1	gi	r-1
c91@bPh Oeua. GGeue	QC+C-+j	1:U	ALwL	<1:U	-:UPA LwL	@:g	U1	r--
c91@bPFlf t oeue	Q +@C+@	1:U	ALwL	<1:U	-:UPA LwL	@QU	UC	r-j
c91@bP9 GeuauvGoeue	QU+1r+Q	1:U	ALwL	<1:U	-:UPA LwL	j g:C	UC	r-@
c91@bPh uvGoaOeue	r-1+r-+@	1:U	ALwL	<1:U	-:UPA LwL	j g:U	U1	r-Q
c91@bPFlf t oauvGeue	-1i+gg+1	1:U	ALwL	<1:U	-:UPA LwL	j @Q	UC	r-j
c91@bP9 moeue	r-j+11+1	1:U	ALwL	<1:U	-:UPA LwL	r1C	U-	rCg
c91@bPH++Flf t oeumPh OevaA Ne	UC+j i+C	1:U	ALwL	<1:U	-:UPA LwL	j U:-	gi	rQ
c91@bPTeuz)aqauvGoaOeue	Ui+UU+C	1:U	ALwL	<1:U	-:UPA LwL	j g:j	gj	r-@
c91@bPDGmseue	-rQ+1r+j	1:U	ALwL	<1:U	-:UPA LwL	j j:r	U1	rC1
c91@bPTeuzt)EqR&Teuzt)/ qlf t oauvGeue	-1U+j j+P -1@1Q+j	r	ALwL	<r	UPA LwL	j Qi	gQ	rQ
c91@bP@r-+RMA evGnlEeuz)aqauvGoaOeue	U@j @i	1:U	ALwL	<1:U	-:UPA LwL	Q:C	ir	rUg
c91@bPTeuzt)aq moeue	U1+C-+Q	1:U	ALwL	<1:U	-:UPA LwL	j Q-	gQ	r-i
c91@bPC+I evGnlOGt lauvGoeue	Ui+gj+U	1:U	ALwL	<1:U	-:UPA LwL	j-:1	Ur	rC@
c91@bPVBeut)r:-:COBq moeue	rj C+Q+U	1:U	ALwL	<1:U	-:UPA LwL	Qg:g	gU	rCU
c91@bPRMEeuz)a:GqauvGoaOeue	UC+@+C	1:U	ALwL	<1:U	-:UPA LwL	Q:-	gU	rCC
c91@bPTeuzt)L:GM eoneue	rj r+g+	1:U	ALwL	<1:U	-:UPA LwL	QQ@	g-	rCQ
c91@bP7f A R yP9 h Ws	####	1:U	ALwL	<1:U	####	####	####	####
EP3| 5C: P9t9alate Esters (QCLot:) 4215) 2G								
c91@bPRMA evGnlP GGalave	rCr+r r+C	1:U	ALwL	<1:U	-:UPA LwL	rCC	U1	rCg
c91@bPRMvGnlP GGalave	Qg+i i+	1:U	ALwL	<1:U	-:UPA LwL	j i:g	UQ	rQ
c91@bPRMu+Ef vnlP GGalave	Qg+@g+	1:U	ALwL	<1:U	-:UPA LwL	rrC	UC	r@
c91@bPTf vnlFEeuznlP GGalave	QU+i Q+@	1:U	ALwL	<1:U	-:UPA LwL	r1i	gQ	rCg
c91@bPEM)-+evGnlGexnlqP GGalave	rr@Qr+@	1:U	ALwL	<U:1	-:UPA LwL	rri	Ui	rUU
c91@bPRMu+t Onl. GGalave	rr@Qg+1	1:U	ALwL	<1:U	-:UPA LwL	r1C	Ui	rCQ
EP3| 5C: P9t9alate Esters (QCLot:) 42F3-7G								
c91@bPRMA evGnlP GGalave	rCr+r r+C	1:U	ALwL	<1:U	-:UPA LwL	Q:C	U1	rCg
c91@bPRMvGnlP GGalave	Qg+i i+	1:U	ALwL	<1:U	-:UPA LwL	QU:g	UQ	rQ
c91@bPRMu+Ef vnlP GGalave	Qg+@g+	1:U	ALwL	<1:U	-:UPA LwL	rrC	UC	r@
c91@bPTf vnlFEeuznlP GGalave	QU+i Q+@	1:U	ALwL	<1:U	-:UPA LwL	r11	gQ	rCg
c91@bPEM)-+evGnlGexnlqP GGalave	rr@Qr+@	1:U	ALwL	<U:1	-:UPA LwL	rrr	Ui	rUU
c91@bPRMu+t Onl. GGalave	rr@Qg+1	1:U	ALwL	<1:U	-:UPA LwL	j j:U	Ui	rCQ

7f E-l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| 5D: Nitrosamines (QCLot:) 4215) 2G								
c91@UbPH+HMdt st AevGmlevGmlaAMe	r1Uj U+j U+i	1:U	ALwL	<1:U	-:UPALwL	i@r	Qr:g	rQU
c91@UbPH+HMdt st BMvGmlaAMe	UU+r Q+U	1:U	ALwL	<1:U	-:UPALwL	r1U	g1	r-g
c91@UbPH+HMdt st . mod IMBMe	j C1+UU+-	1:U	ALwL	<r:1	-:UPALwL	Q:r	QU	r-C
c91@UbPH+HMdt st At o Gt IMe	Uj +Qj +-	1:U	ALwL	<1:U	-:UPALwL	@:j	C@	r-U
c91@UbPH+HMdt st BMu+. dt . mlaAMe	i-r+i g+@	1:U	ALwL	<1:U	-:UPALwL	ig:U	gr	r-r
c91@UbPH+HMdt st . MedMBMe	r11+@U+g	1:U	ALwL	<1:U	-:UPALwL	@:Q	C@	r-r
c91@UbPH+HMdt st BMf vmlaAMe	j-g+r i +C	1:U	ALwL	<1:U	-:UPALwL	ji:r	g1	r-i
c91@UbPH+HMdt st BMGeumlR&PRMGeumlaAMe	Qi +C1+i PP r--+Qj +g	1:U	ALwL	<r:1	-:UPALwL	j-:r	gg	rQg
c91@UbP evGa. mdMeue	jr+Q1+U	1:U	ALwL	<1:U	@PALwL	r--	gi	rgC
EP3| 5D: Nitrosamines (QCLot:) 42F3- 7G								
c91@UbPH+HMdt st AevGmlevGmlaAMe	r1Uj U+j U+i	1:U	ALwL	<1:U	-:UPALwL	iUj	Qr:g	rQU
c91@UbPH+HMdt st BMvGmlaAMe	UU+r Q+U	1:U	ALwL	<1:U	-:UPALwL	ig:-	g1	r-g
c91@UbPH+HMdt st . mod IMBMe	j C1+UU+-	1:U	ALwL	<r:1	-:UPALwL	i-:1	QU	r-C
c91@UbPH+HMdt st At o Gt IMe	Uj +Qj +-	1:U	ALwL	<1:U	-:UPALwL	UUj	C@	r-U
c91@UbPH+HMdt st BMu+. dt . mlaAMe	i-r+i g+@	1:U	ALwL	<1:U	-:UPALwL	iCj	gr	r-r
c91@UbPH+HMdt st . MedMBMe	r11+@U+g	1:U	ALwL	<1:U	-:UPALwL	ig:C	C@	r-r
c91@UbPH+HMdt st BMf vmlaAMe	j-g+r i +C	1:U	ALwL	<1:U	-:UPALwL	ij:-	g1	r-i
c91@UbPH+HMdt st BMGeumlR&PRMGeumlaAMe	Qi +C1+i PP r--+Qj +g	1:U	ALwL	<r:1	-:UPALwL	Qr:U	gg	rQg
c91@UbP evGa. mdMeue	jr+Q1+U	1:U	ALwL	<1:U	-:UPALwL	r1g	gi	rgC
EP3| 5E: Nitroaromati0s and Ketones (QCLot:) 4215) 2G								
c91@UbP+9MtIMe	r1j+1i +Q	1:U	ALwL	<1:U	-:UPALwL	r-j	r1	rQr
c91@UbPh Qevt . Geut ue	j Q+Q +-	1:U	ALwL	<1:U	-:UPALwL	ig:Q	QQ	r-g
c91@UbPHMdt Eeuzeue	j Q+j U+C	1:U	ALwL	<1:U	-:UPALwL	iCj	g-	r--
c91@UbPst . Gt dt ue	@Q+Uj +r	1:U	ALwL	<1:U	-:UPALwL	@j:Q	Qj	r-U
c91@UbP:i +RMlMdt vt If eue	i1i+-1+-	1:U	ALwL	<r:1	-:UPALwL	rQC	UC	rQC
c91@UbP:g+RMlMdt vt If eue	r-r+r g+-	1:U	ALwL	<r:1	-:UPALwL	jg:C	Uj	rQU
c91@UbP+Ha. GGmlaAMe	rQg+C-+@	1:U	ALwL	<1:U	-:UPALwL	ij:-	r@r	r-C
c91@Ubg+HMdt kf Mt IMe+H+t xMBe	Ui +U@U	1:U	ALwL	<1:U	-:UPALwL	rr1	r@@	rUC
c91@UbU+HMdt +t +vt If NBMe	jj+UU+Q	1:U	ALwL	<1:U	-:UPALwL	Qj:i	gC	rrj
c91@UbPh zt Eeuzeue	r1C+QC+C	r	ALwL	<r	-:UPALwL	jg:-	UU	rQC
c91@UbP:C:U+ dMlMdt Eeuzeue	jj+QU+g	1:U	ALwL	<1:U	-:UPALwL	Q1:i	QC	rr@
c91@UbP9 GeuaQevM	i-+gg+-	1:U	ALwL	<1:U	-:UPALwL	ji:g	U@	rQj
c91@Ubg+hAMt EMGeuml	j-+i @r	1:U	ALwL	<1:U	-:UPALwL	ij:U	r1	jg
c91@UbP9euvaQGt dt uMdt Eeuzeue	Q-+i Q+Q	1:U	ALwL	<1:U	-:UPALwL	jg:j	Ui	rQi
c91@UbP9dt uaAMBe	-Qj U1+UQ+U	1:U	ALwL	<1:U	-:UPALwL	r1@	U-	r-g
c91@UbPRMevGmlaAMt azt Eeuzeue	i1+r r+@	1:U	ALwL	<1:U	-:UPALwL	r1g	g@	rQU
c91@UbPDGt dt EeuzMave	Ur1+r U+i	1:U	ALwL	<1:U	-:UPALwL	r1C	gU	rQC

7f E+l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP3| 5E: Nitroaromati0s and Ketones (QCLot:) 42F3-7G								
c91@UP +9MQt IMe	r1j+1i+Q	1:U	ALWL	<1:U	-:UPA LWL	i Qr	r1	rQr
c91@UPn Oevt . Geut ue	j Q+Q+	1:U	ALWL	<1:U	-:UPA LWL	i i :1	QQ	r-g
c91@UP-HMdt Eeuzeue	j Q+j U+C	1:U	ALWL	<1:U	-:UPA LWL	i U:g	g-	r--
c91@UPVst . Gt d ue	@Q+Uj+r	1:U	ALWL	<1:U	-:UPA LWL	i U:i	Qj	r-U
c91@UP :i +RMMdt vt If eue	i 1i+1+	1:U	ALWL	<r:1	-:UPA LWL	Q:-	UC	rQC
c91@UP :g+RMMdt vt If eue	r-r+r g+	1:U	ALWL	<r:1	-:UPA LWL	Q@r	Uj	rQU
c91@UP +Ha. GGmtaA Me	rQg+C-+@	1:U	ALWL	<1:U	-:UPA LWL	i @g	r@r	r-C
c91@UPg+HMdt kf Mt IMe+H+t xMe	Ui+U@U	1:U	ALWL	<1:U	-:UPA LWL	j @g	r@@	rUC
c91@UPU+HMdt +t +vt If MMe	j j +UU+Q	1:U	ALWL	<1:U	-:UPA LWL	j Q-	gC	rrj
c91@UPn zt Eeuzeue	r1C+CC+C	r	ALWL	<r	-:UPA LWL	Qr:@	UU	rQC
c91@UP :C:U+ dMMdt Eeuzeue	j j +CU+g	1:U	ALWL	<1:U	-:UPA LWL	@:i	QC	rr@
c91@UP9 GeuaOevM	i -+gg+	1:U	ALWL	<1:U	-:UPA LWL	QC-	U@	rQj
c91@UPg+h A Mt EMGeuml	j -+i @r	1:U	ALWL	<1:U	-:UPA LWL	i 1:@	r1	j g
c91@UP9 euvaOGt d uMdt Eeuzeue	Q-+i Q+Q	1:U	ALWL	<1:U	-:UPA LWL	QU:U	Ui	rQi
c91@UP9 d uaA MBe	-Qj U1+UQ+U	1:U	ALWL	<1:U	-:UPA LWL	j j :g	U-	r-g
c91@UPRMA evGmtaA Mt azt Eeuzeue	i 1+r r+@	1:U	ALWL	<1:U	-:UPA LWL	j U:j	g@	rQU
c91@UPDGt d EeuzMave	Ur1+r U+i	1:U	ALWL	<1:U	-:UPA LWL	j @Q	gU	rQC
EP3| 5c: +aloet9ers (QCLot:) 4215) 2G								
c91@UPTMd)- +OGt d evGmtqPevGeo	rrr+gg+g	1:U	ALWL	<1:U	-:UPA LWL	Qg:1	QQ	r-i
c91@UPTMd)- +OGt d evGt xmqPA evGaue	rrr+j r+r	1:U	ALWL	<1:U	-:UPA LWL	i U:C	C@	r-r
c91@UPg+DGt d . GeumP GeumPevGeo	@1U+@+C	1:U	ALWL	<1:U	-:UPA LWL	j g:r	U-	rC-
c91@UPg+Td A t . GeumP GeumPevGeo	r1r+UU+C	1:U	ALWL	<1:U	-:UPA LWL	j i :1	Ui	rQg
EP3| 5c: +aloet9ers (QCLot:) 42F3-7G								
c91@UPTMd)- +OGt d evGmtqPevGeo	rrr+gg+g	1:U	ALWL	<1:U	-:UPA LWL	i g:r	QQ	r-i
c91@UPTMd)- +OGt d evGt xmqPA evGaue	rrr+j r+r	1:U	ALWL	<1:U	-:UPA LWL	i U:r	C@	r-r
c91@UPg+DGt d . GeumP GeumPevGeo	@1U+@+C	1:U	ALWL	<1:U	-:UPA LWL	@Q@	U-	rC-
c91@UPg+Td A t . GeumP GeumPevGeo	r1r+UU+C	1:U	ALWL	<1:U	-:UPA LWL	Q:r	Ui	rQg
EP3| 5b: C9lorinated +Bdro0aryons (QCLot:) 4215) 2G								
c91@UP :C+RMGt d Eeuzeue	Ugr+@C+r	1:U	ALWL	<1:U	-:UPA LWL	rr-	C@	rr@
c91@UP :g+RMGt d Eeuzeue	r1i+gi+@	1:U	ALWL	<1:U	-:UPA LWL	r1g	Qj	r-r
c91@UP :- +RMGt d Eeuzeue	j U+U1+r	1:U	ALWL	<1:U	-:UPA LWL	j Qj	C@	r-r
c91@UPVexaOGt d evGaue	i @@+r	1:U	ALWL	<1:U	-:UPA LWL	j i :i	Qi	rrQ
c91@UP :- :g+ dMGt d Eeuzeue	r-1+Q+r	1:U	ALWL	<1:U	-:UPA LWL	UU:Q	Qg	rrg
c91@UPVexaOGt d . d . mteue	rQQQ+@+@	1:U	ALWL	<1:U	-:UPA LWL	i @-	-Ci	rQ@
c91@UPVexaOGt d Ef vaBMue	Q@i Q+C	1:U	ALWL	<1:U	-:UPA LWL	i -:C	QQ	rC1
c91@UPVexaOGt d OnOt . euvaBMue	@@g@g	1:U	ALWL	<-:U	-:UPA LWL	C1:i	r@C	rgr
c91@UP9 euvaOGt d Eeuzeue	i 1Q+j C+U	1:U	ALWL	<1:U	-:UPA LWL	j Cr	Ur	rQC
c91@UPVexaOGt d EeuzeuePWDTq	rrQ+@+r	1:U	ALWL	<r:1	UPA LWL	j U:r	Ug	rQg

9aLe b C1Rt yPQ
4 t d F5 dBeo b cl rC1Q @
DIMuv b DhYRH5 PhhHcP9 VcYP9 dPh R
9d NeOv b -r-ri CPC

7f E+I avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| 5b: C9lorinated +Bdro0aryons (QCLot:) 42F3-7G								
c91@UbP :C+RMGt d Eeuzeue	Ugr +@C+r	1:U	ALwL	<1:U	-:UPA LwL	@:-	C@	rr@
c91@UbP :g+RMGt d Eeuzeue	r1i +gi +@	1:U	ALwL	<1:U	-:UPA LwL	iQU	Cj	r-r
c91@UbP :- +RMGt d Eeuzeue	j U+U1+r	1:U	ALwL	<1:U	-:UPA LwL	ij:@	C@	r-r
c91@UbPWexaCGt d evGaue	i @@+r	1:U	ALwL	<1:U	-:UPA LwL	ii:@	Ci	rrQ
c91@UbP :-:g+ dMGt d Eeuzeue	r-1+Q-+r	1:U	ALwL	<1:U	-:UPA LwL	ig:Q	Cg	rrg
c91@UbPWexaCGt d . d . mleue	rQQQ+@+@	1:U	ALwL	<1:U	-:UPA LwL	@g:1	-C:i	rC@
c91@UbPWexaCGt d Ef vaBMue	Q@i Q+C	1:U	ALwL	<1:U	-:UPA LwL	ij:@	CQ	rC1
c91@UbPWexaCGt d OnOt . euvaBMue	@@g@g	1:U	ALwL	<-:U	-:UPA LwL	gQ@	r@C	rgr
c91@UbP9euvaCGt d Eeuzeue	i1Q+j C+U	1:U	ALwL	<1:U	-:UPA LwL	@g:@	Ur	rCC
c91@UbPWexaCGt d EeuzeuePjWDTq	rrQ+@g+r	1:U	ALwL	<r:1	UPA LwL	Q-:g	Ug	rCg
EP3| 5+: Anilines and xenzidines (QCLot:) 4215) 2G								
c91@UbPhuMMe	i-+UC+C	1:U	ALwL	<1:U	-:UPA LwL	ii:r	r-:Q	r1U
c91@UbPg+DGt d auMMe	r1i +g@Q	1:U	ALwL	<1:U	-:UPA LwL	@:U	r1	r1g
c91@UbP +HMt auMMe	QQ+@g+g	1:U	ALwL	<r:1	-:UPA LwL	r-Q	gQ	rCg
c91@UbPC+HMt auMMe	jj+1j+-	1:U	ALwL	<r:1	-:UPA LwL	QC:Q	-U:-	rr@
c91@UbPRMEeuzt yf cau	rC-+i g+j	1:U	ALwL	<1:U	-:UPA LwL	j-:C	Ur	r-@
c91@UbPg+HMt auMMe	r11+1r+i	1:U	ALwL	<1:U	-:UPA LwL	r1C	gQ	rC1
c91@UbPDacEazt le	Ci +@+Q	1:U	ALwL	<1:U	-:UPA LwL	r1U	U-	r-Q
c91@UbPC.C+RMGt d EeuzMMe	jr+j g+r	1:U	ALwL	<1:U	-:UPA LwL	jQi	rU:@	rrg
EP3| 5+: Anilines and xenzidines (QCLot:) 42F3-7G								
c91@UbPhuMMe	i-+UC+C	1:U	ALwL	<1:U	-:UPA LwL	UC:r	r-:Q	r1U
c91@UbPg+DGt d auMMe	r1i +g@Q	1:U	ALwL	<1:U	-:UPA LwL	gi:j	r1	r1g
c91@UbP +HMt auMMe	QQ+@g+g	1:U	ALwL	<r:1	-:UPA LwL	@QU	gQ	rCg
c91@UbPC+HMt auMMe	jj+1j+-	1:U	ALwL	<r:1	-:UPA LwL	@:r	-U:-	rr@
c91@UbPRMEeuzt yf cau	rC-+i g+j	1:U	ALwL	<1:U	-:UPA LwL	@:i	Ur	r-@
c91@UbPg+HMt auMMe	r11+1r+i	1:U	ALwL	<1:U	-:UPA LwL	jQC	gQ	rC1
c91@UbPDacEazt le	Ci +@+Q	1:U	ALwL	<1:U	-:UPA LwL	jj:j	U-	r-Q
c91@UbPC.C+RMGt d EeuzMMe	jr+j g+r	1:U	ALwL	<1:U	-:UPA LwL	jU:U	rU:@	rrg
EP3| 5I: Orpano09lorine Pesti0ides (QCLot:) 4215) 2G								
c91@UbPal. Ga+TWD	Crj +Cg+i	1:U	ALwL	<1:U	-:UPA LwL	jU:1	UQ	rCg
c91@UbPEeva+TWD	Crj +CU+@	1:U	ALwL	<1:U	-:UPA LwL	ji:g	Ur	rC@
c91@UbPLaAAa+TWD	UQ+Q +j	1:U	ALwL	<1:U	-:UPA LwL	jg:-	Ui	rC@
c91@UbPBelva+TWD	Crj +Q +Q	1:U	ALwL	<1:U	-:UPA LwL	r1g	UC	rCC
c91@UbPWe. vaCGt o	@+gg+Q	1:U	ALwL	<1:U	-:UPA LwL	jj:i	gj	rCC
c91@UbPhIBdM	C1j +11+-	1:U	ALwL	<1:U	-:UPA LwL	r1C	gj	rCC
c91@UbPWe. vaCGt dPe. t xMe	r1-g+U@C	1:U	ALwL	<1:U	-:UPA LwL	r1i	gj	rCU
c91@UbPal. Ga+cuBt sf lyau	jUj +j Q+Q	1:U	ALwL	<1:U	-:UPA LwL	jg:1	Ur	rgr
c91@UbPg:g`+RRc	@+UU+j	1:U	ALwL	<1:U	-:UPA LwL	r1U	@	rCC
c91@UbPRMIBdM	i1+U@r	1:U	ALwL	<1:U	-:UPA LwL	r1j	UU	rCU

7f E+l avdM: **MOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP3| 5I: Orpano09lorine Pesti0ides (QCLot:) 4215) 2G 80ontinued								
c 91@Ub2cuBdM	@+ 1+Q	1:U	A LwL	<1:U	- :UPA LwL	r 1@	gi	r g1
c 91@Ub2Eeva+cuBt sf lyau	CC- r C+i Uhj	1:U	A LwL	<1:U	- :UPA LwL	r 1-	Ug	r Ci
c 91@Ub2g:g`+RRR	@+Ug+Q	1:U	A LwL	<1:U	- :UPA LwL	r 1g	gg	r g-
c 91@Ub2cuBt sf lyauP2sf lyave	r 1Cr+1@2Q	1:U	A LwL	<1:U	- :UPA LwL	r 1U	gi	r Ci
c 91@Ub2g:g`+RR	U1+ j +C	1:U	A LwL	<r :1	- :UPA LwL	r 1@	- @	r Ur
EP3| 5I: Orpano09lorine Pesti0ides (QCLot:) 42F3- 7G								
c 91@Ub2al. Ga+TWD	Cr j +Qg+i	1:U	A LwL	<1:U	- :UPA LwL	Qg:Q	UQ	r Cg
c 91@Ub2Eeva+TWD	Cr j +QU+@	1:U	A LwL	<1:U	- :UPA LwL	Qg:Q	Ur	r C@
c 91@Ub2LaA A a+TWD	UQ+Cj +j	1:U	A LwL	<1:U	- :UPA LwL	Qi :@	Ui	r C@
c 91@Ub2Belva+TWD	Cr j +Qi +Q	1:U	A LwL	<1:U	- :UPA LwL	j U:g	UC	r CC
c 91@Ub2We. vaCGt o	@ +gg+Q	1:U	A LwL	<1:U	- :UPA LwL	j g:g	gj	r CC
c 91@Ub2PhlBdM	C1j +11+	1:U	A LwL	<1:U	- :UPA LwL	j g:Q	gj	r CC
c 91@Ub2We. vaCGt dRe. t xMBe	r 1- g+U@C	1:U	A LwL	<1:U	- :UPA LwL	j i :j	gj	r CU
c 91@Ub2al. Ga+cuBt sf lyau	j Uj +j Q+Q	1:U	A LwL	<1:U	- :UPA LwL	QQj	Ur	r gr
c 91@Ub2g:g`+RRc	@ +UU+j	1:U	A LwL	<1:U	- :UPA LwL	j Q-	@	r CC
c 91@Ub2RNdlBdM	i 1+U@r	1:U	A LwL	<1:U	- :UPA LwL	r 1r	UU	r CU
c 91@Ub2cuBdM	@+ 1+Q	1:U	A LwL	<1:U	- :UPA LwL	r 11	gi	r g1
c 91@Ub2Eeva+cuBt sf lyau	CC- r C+i Uhj	1:U	A LwL	<1:U	- :UPA LwL	j j :@	Ug	r Ci
c 91@Ub2g:g`+RRR	@ +Ug+Q	1:U	A LwL	<1:U	- :UPA LwL	j @Q	gg	r g-
c 91@Ub2cuBt sf lyauP2sf lyave	r 1Cr+1@2Q	1:U	A LwL	<1:U	- :UPA LwL	j j :-	gi	r Ci
c 91@Ub2g:g`+RR	U1+ j +C	1:U	A LwL	<r :1	- :UPA LwL	r 11	- @	r Ur
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QCLot:) 4215) 2G								
c 91@Ub2RM0Gt cSt s	i - +@C+@	1:U	A LwL	<1:U	- :UPA LwL	r r C	C@	r - r
c 91@Ub2RMAevGt ave	i 1+Ur +U	1:U	A LwL	<1:U	- :UPA LwL	j 1:-	g@	r - j
c 91@Ub2RNdzMt u	CCC+gr +U	1:U	A LwL	<1:U	- :UPA LwL	j g:-	Ur	r CC
c 91@Ub2PDGt o mdMs+AevGmi	UUj Q+r C+1	1:U	A LwL	<1:U	- :UPA LwL	r 1r	UU	r CU
c 91@Ub2P alavGtMu	r - r +@2+U	1:U	A LwL	<1:U	- :UPA LwL	r 1g	Ug	r CQ
c 91@Ub2FeuvGtMu	UU+CQ+j	1:U	A LwL	<1:U	- :UPA LwL	r 1U	UC	r CC
c 91@Ub2PDGt o mdMs	- j - r +QQ+	1:U	A LwL	<1:U	- :UPA LwL	r 1-	Ui	r Cg
c 91@Ub29NdMA. Gt s+evGmi	- CU1U+gr +r	1:U	A LwL	<1:U	- :UPA LwL	r 1U	Ug	r Ci
c 91@Ub2PDGt oyeuSMd. Gt s	g@+j 1+i	1:U	A LwL	<1:U	- :UPA LwL	r 1g	Ur	r gr
c 91@Ub29dtvGMyt s	Cgi gC+gi +g	1:U	A LwL	<1:U	- :UPA LwL	r 1g	U-	r Ci
c 91@Ub2cvGMu	Ui C+r - +	1:U	A LwL	<1:U	- :UPA LwL	r 1C	UC	r C@
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QCLot:) 42F3- 7G								
c 91@Ub2RM0Gt cSt s	i - +@C+@	1:U	A LwL	<1:U	- :UPA LwL	i @C	C@	r - r
c 91@Ub2RMAevGt ave	i 1+Ur +U	1:U	A LwL	<1:U	- :UPA LwL	QU:r	g@	r - j
c 91@Ub2RNdzMt u	CCC+gr +U	1:U	A LwL	<1:U	- :UPA LwL	Qj :j	Ur	r CC
c 91@Ub2PDGt o mdMs+AevGmi	UUj Q+r C+1	1:U	A LwL	<1:U	- :UPA LwL	j g:C	UU	r CU
c 91@Ub2P alavGtMu	r - r +@2+U	1:U	A LwL	<1:U	- :UPA LwL	j @r	Ug	r CQ

9aLe	b C-Ft yPQ
4 t d F5 dBeo	b cl r C1Q @
DIMuv	b DhYRH5 FnhHcF9 V9cYF9 dFn R
9d NeOv	b -r-ri OPC

7f E-l avdM: MOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP3| 5J: Orpanof 9osf 9orus Pesti0ides (QCLot:) 42F3-7G 80ontinued								
c91@UFFeuvGMu	UU+CQ+j	1:U	ALwL	<1:U	-:UFALwL	ji:r	UC	rCC
c91@UFDGt o mdyl s	-j-r+CQ+	1:U	ALwL	<1:U	-:UFALwL	j@g	Ui	rCg
c91@UF9MA. Gt s+evGml	-CU1U+gr+r	1:U	ALwL	<1:U	-:UFALwL	jQC	Ug	rCi
c91@UFDGt oyeuSM. Gt s	g@+j1+i	1:U	ALwL	<1:U	-:UFALwL	ji:j	Ur	rgr
c91@UF9d vGMyt s	Cgi gC+gi+g	1:U	ALwL	<1:U	-:UFALwL	r1-	U-	rCi
c91@UFc vGMu	Ui C+r-+	1:U	ALwL	<1:U	-:UFALwL	jQQ	UC	rC@
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 4212F1G								
c91Q1bFDi FFDj FFcaOMu	####	r1	ALwL	<r1	Ci FALwL	@Ui	iC	r-j
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 4215) - G								
c91@bFDr1FFDrgFFcaOMu	####	U1	ALwL	<U1	i1-FALwL	j-:j	UU	r-r
c91@bFDrUFFD-QFFcaOMu	####	r11	ALwL	<r11	rQ@UFALwL	Ci:C	@	r-g
c91@bFD-jFFDCi FFcaOMu	####	r11	ALwL	<r11	@CQFALwL	@:g	ii	rri
c91@bFDr1FFDCi FFcaOMuFsf Aq	####	U1	ALwL	<U1	####	####	####	####
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 42152FG								
c91Q1bFDi FFDj FFcaOMu	####	r1	ALwL	<r1	Ci FALwL	r1U	iC	r-j
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 421524G								
c91@bFDr1FFDrgFFcaOMu	####	U1	ALwL	<U1	i1-FALwL	r1g	UU	r-r
c91@bFDrUFFD-QFFcaOMu	####	r11	ALwL	<r11	rQ@UFALwL	jU-	@	r-g
c91@bFD-jFFDCi FFcaOMu	####	r11	ALwL	<r11	@CQFALwL	j@	ii	rri
c91@bFDr1FFDCi FFcaOMuFsf Aq	####	U1	ALwL	<U1	####	####	####	####
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4212F1G								
c91Q1bFDi FFDr1FFcaOMu	####	r1	ALwL	<r1	gUFALwL	@Ci	i1	rCg
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4215) - G								
c91@bF>Dr1FFDri FFcaOMu	####	U1	ALwL	<U1	j-jFALwL	Q@C	ii	r--
c91@bF>Dri FFDCgFFcaOMu	####	r11	ALwL	<r11	--C@FALwL	Cg:@	ij	rrj
c91@bF>DCgFFDg1FFcaOMu	####	r11	ALwL	<r11	-C-FALwL	ir:g	gg	r-g
c91@bF>Dr1FFDg1FFcaOMuFsf Aq	####	r11	ALwL	<r11	####	####	####	####
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 42152FG								
c91Q1bFDi FFDr1FFcaOMu	####	r1	ALwL	<r1	gUFALwL	r1U	i1	rCg
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 421524G								
c91@bF>Dr1FFDri FFcaOMu	####	U1	ALwL	<U1	j-jFALwL	ji:r	ii	r--
c91@bF>Dri FFDCgFFcaOMu	####	r11	ALwL	<r11	--C@FALwL	r1U	ij	rrj
c91@bF>DCgFFDg1FFcaOMu	####	r11	ALwL	<r11	-C-FALwL	j-:g	gg	r-g
c91@bF>Dr1FFDg1FFcaOMuFsf Aq	####	r11	ALwL	<r11	####	####	####	####

Matrix Spike (MS) Report

9aLe b CCł yPQ
4 t d P5 dBeo b cl r C1Q @
DIMuv b DhYRH5 PnhHcP9 9cYP9 dPn R
9d NeOv b -r-ri CPC

GePkfalMnPQ uvct IPveoA PI avdMP7. MeP)I 7cPoeyeosPvt PauPMvoalaEt oavt onPs. IMPsaA. lePs. MeBP0MGPaPoe. oeseuvaMePsevPt yPvadLevPaualmes:P GeP. f o t sePt yPvGMP(DP. aoaAevecPMePvt PAt uM oP. t veuMIPA avdMPeyeOsPt uF aualmeReO SeoMs:P7vaMPYeO SeomPnMAMsPasP edPaEt oavt onPRavaP(falMnP5 EMeOMesPR(5 sqPBealReO SeomPauLesPsvaveBPA amEeP alMeBMPGeReSeuvPt yPsaA. leA avdMPMveoyeceuOe:

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	Recovery Limits (%) High
Eb 335T: Total S etals yBICP8AEM (QCLot:) 4212) 3G							
cl r C1Q i - +11i	hut umAt f s	c, 11U bPnoseuM0	@g1+CQ+	U1PA LwL	r 1r	@Q	r - g
		c, 11U bPTadMA	@g1+Q +C	U1PA LwL	#PHt vP ReveoA MeB	@	r C1
		c, 11U bPTeonMMA	@g1+gr +@	U1PA LwL	r 1g	QU	r - U
		c, 11U bPDaBA MA	@g1+gC+j	U1PA LwL	r 1j	Qg	r r i
		c, 11U bPDGd A MA	@g1+g@C	U1PA LwL	j C.Q	@	r - r
		c, 11U bPDt . . eo	@g1+U1+Q	U1PA LwL	Q :Q	Q	r - g
		c, 11U bPneaB	@Q +j - +r	U1PA LwL	j C.U	@	r - g
		c, 11U bP auLauese	@Q +j i +U	U1PA LwL	#PHt vP ReveoA MeB	@	r C1
		c, 11U bPHM0 el	@g1+1- +1	U1PA LwL	j r :g	@Q	r - 1
		c, 11U bP2auaBMA	@g1+i - +	U1PA LwL	Q@j	@	r - g
		c, 11U bPZMO	@g1+i i +i	U1PA LwL	j g:Q	@	r - Q
Eb 325T: Total Re0overayle S er0urByBcIS M (QCLot:) 4212) 1G							
cl r C1Q i - +11i	hut umAt f s	c, 1CU bP eo0f om	@Q +j @i	U:1PA LwL	j Q1	Q1	r - 1
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 4212F) G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@gbPTeuzeue	@ +gC+	- PA LwL	Q1:C	Ur	r CC
		c91@gbP t lf eue	r 1Q+QQ+C	- PA LwL	j 1:r	Ui	r Q
EP3| FE: + alopenated Alif 9ati0 Comf ounds (QCLot:) 4212F) G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@gbP :r +RMGt d evGeue	@+CU+g	- PA LwL	@:U	CC	r - @
		c91@gbP dMGt d evGeue	@ +1r +i	- PA LwL	Q :U	gj	r - @
EP3| Fc: + alopenated Aromati0 Comf ounds (QCLot:) 4212F) G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@gbPDGt d Eeuzeue	r 1Q+j 1+@	- PA LwL	Q :i	U@	r C@
EP3| 5A: P9enoli0 Comf ounds (QCLot:) 4215) 2G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@ubP9 Geut l	r 1Q+j U+	UPA LwL	Q1:j	- C.@	r r j
		c91@ubP +DGt d . Geut l	j U+U@Q	UPA LwL	i @@	Q :r	r r i
		c91@ubP +HMd . Geut l	QQ+@+U	UPA LwL	i C-	r i :g	r r U
		c91@ubPg+DGt d +C+I evGml. Geut l	Uj +U1+@	UPA LwL	Q :i	- - :C	r - -
		c91@ubP9 euvaOGt d . Geut l	Q@Q +U	UPA LwL	Qg:C	r @	r g-
EP3| 5x : PolBnu0lear Aromati0 + Bdro0aryons (QCLot:) 4215) 2G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@ubPnOeua. GGeue	QC+C- +j	UPA LwL	@:-	- U:g	r - -
		c91@ubP9 meue	r - j +11+1	UPA LwL	Q :1	r g:i	r - @
EP3| 5D: Nitrosamines (QCLot:) 4215) 2G							
cl r C1Q @+11@	9 +hr +C1vd:U	c91@ubPH+HMd st BMu+ d . mlaA Me	i - r +i g+@	UPA LwL	Uj :1	r @Q	r r 1
EP3| 5E: Nitroaromati0s and Ketones (QCLot:) 4215) 2G							

7f E+I avdM: **MOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	Recovery Limits (%) High
EP3| 5E: Nitroaromati0s and Ketones (QCLot:) 4215) 2G 80ontinued							
c l r C1Q @+I 1@	9+hr+C1vd:U	c 9 1@JbP :g+RMMt vt lf eue	r - r +r g+	UPA LwL	i @g	- QC	r r -
EP3| 5b : C9lorinated + Bdro0aryons (QCLot:) 4215) 2G							
c l r C1Q @+I 1@	9+hr+C1vd:U	c 9 1@JbP :g+RMGt d Eeuzeue	r 1i +gi +@	UPA LwL	i C1	- C	r r -
		c 9 1@JbP :- :g+ dMGt d Eeuzeue	r - 1+Q +r	UPA LwL	Uj :g	r - :j	r r r
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 4212F1G							
c l r C1Q @+I 1@	9+hr+C1vd:U	c 9 1Q1bPDi PPDj PFoaOMu	++++	- QPA LwL	@:@	gg	r - g
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 4215) - G							
c l r C1Q @+I 1U	9+hr+-j vd:U	c 9 1@ bPDr 1PPDr gPFoaOMu	++++	i 1- PA LwL	r 11	UC	r - C
		c 9 1@ bPDr UPPD- QPFoaOMu	++++	r Q@UPA LwL	j 1:i	@	r - g
		c 9 1@ bPD-j PPDQi PFoaOMu	++++	@QQPA LwL	Q :-	i g	r r Q
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 421524G							
c l r C1g11r +I 1r	hut umA t f s	c 9 1@ bPDr 1PPDr gPFoaOMu	++++	i 1- PA LwL	r r 1	UC	r - C
		c 9 1@ bPDr UPPD- QPFoaOMu	++++	r Q@UPA LwL	j @Q	@	r - g
		c 9 1@ bPD-j PPDQi PFoaOMu	++++	@QQPA LwL	j @-	i g	r r Q
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4212F1G							
c l r C1Q @+I 1@	9+hr+C1vd:U	c 9 1Q1bPDi PPDr 1PFoaOMu	++++	QQPA LwL	@:i	gU	r - @
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4215) - G							
c l r C1Q @+I 1U	9+hr+-j vd:U	c 9 1@ bP>Dr 1PPDr i PFoaOMu	++++	j - j PA LwL	j - :U	i U	r - C
		c 9 1@ bP>Dr i PPDQgPFoaOMu	++++	- - C@PA LwL	QQi	i @	r - r
		c 9 1@ bP>DQgPPDg1PFoaOMu	++++	- C- PA LwL	i @-	gg	r - i
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 421524G							
c l r C1g11r +I 1r	hut umA t f s	c 9 1@ bP>Dr 1PPDr i PFoaOMu	++++	j - j PA LwL	r 11	i U	r - C
		c 9 1@ bP>Dr i PPDQgPFoaOMu	++++	- - C@PA LwL	r 1@	i @	r - r
		c 9 1@ bP>DQgPPDg1PFoaOMu	++++	- C- PA LwL	Qr :j	gg	r - i

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

GeP k f alMnP Q uvd IP veA P I avdMP 7 . MeP)I 7qP auBP I avdMP 7 . MeP Rf . IMaveP)I 7 RqP oeyeoP vt P Mvoala Et oavt onP s. IMP saA . lesP s. MeBP 0 MGP aP oe. oeseuvaMeP sevP t yP vadLevP aualmes:P GeP . f o t seP t yP vGeseP (DP . aoaA eveosP aoeP vt F A t uM dP t veuMaIPA avdMPeyeOsP uPaualmeReO Sedes:P7 vaMPYeO SeomPMA MsPasP edPaEt oavt omPRavaP(f alMnP5 EvOMesPjR(5 sqPBealReO SeomPauLesPsaveBPA amEeP0 alMeBPMRGeReSeuvP yPsaA . leP A avdMPMveqeoeuOe:

7f E+I avdM: **MOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%) MS	Spike Recovery (%) MSD	Recovery Limits (%) Low	Recovery Limits (%) High	RPDs (%) Value	RPDs (%) Control Limit
Eb 335T: Total S etals yBICP8AEM (QCLot:) 4212) 3G										
c l r C1Q i - +I 1i	hut umA t f s	c , 11U bPnoseuMD	@gg1+QQ+	U1PA LwL	r 1r	++++	@Q	r - g	++++	++++
		c , 11U bPTadMA	@gg1+Q +C	U1PA LwL	#PHt vP ReveoA MeB	++++	@	r C1	++++	++++

7f E+I avdM: MOIL

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%) MS	Spike Recovery (%) MSD	Recovery Limits (%) Low	Recovery Limits (%) High	RPDs (%) Value	RPDs (%) Control Limit
Eb 335T: Total S etals y BICP8AEM (QCLot:) 4212) 3G 80ontinued										
cl r C1Q i - +11i	hut umA t f s	c, 11U bPTeomIMA	@g1+gr+@	U1PA LwL	r 1g	####	QU	r - U	####	####
		c, 11U bPDaBA MA	@g1+gC+j	U1PA LwL	r 1j	####	Qg	r r i	####	####
		c, 11U bPDGd A MA	@g1+g@C	U1PA LwL	j CQ	####	@	r - r	####	####
		c, 11U bPDt . . eo	@g1+U1+Q	U1PA LwL	Q :Q	####	Q	r - g	####	####
		c, 11U bPneaB	@Q +j - +r	U1PA LwL	j CU	####	@	r - g	####	####
		c, 11U bP auLauese	@Q +j i +U	U1PA LwL	#PHt vP ReveoA MeB	####	@	r C1	####	####
		c, 11U bPHM el	@g1+1 - +1	U1PA LwL	j r :g	####	@Q	r - 1	####	####
		c, 11U bP2 auaBMA	@g1+i - +	U1PA LwL	Q@j	####	@	r - g	####	####
		c, 11U bPZMO	@g1+i i +i	U1PA LwL	j g:Q	####	@j	r - Q	####	####
Eb 325T: Total Re0overayle S er0urBy BclS M (QCLot:) 4212) 1G										
cl r C1Q i - +11i	hut umA t f s	c, 1CU bP eoCf om	@Q +j @	U:1PA LwL	j Q1	####	Q1	r - 1	####	####
EP343/3| 1: Total Petroleum + Bdro0aryons (QCLot:) 4212F1G										
cl r C1Q @+11@	9+hr+C1wl:U	c91Q1bPDi PPDj PFoaOMu	####	- QPA LwL	@ :@	####	gg	r - g	####	####
EP343/3| 1: Total Re0overayle + Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4212F1G										
cl r C1Q @+11@	9+hr+C1wl:U	c91Q1bPDi PPDr 1PFoaOMu	####	CCPA LwL	@ :i	####	gU	r - @	####	####
EP3| FA: S ono0B0li0 Aromati0 + Bdro0aryons (QCLot:) 4212F) G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@gbPTeuzeue	@+gC+	- PA LwL	Q1:C	####	Ur	r CC	####	####
		c91@gbP t lf eue	r 1Q+QQ+C	- PA LwL	j 1:r	####	U	r Q	####	####
EP3| FE: + alopenated Alif 9ati0 Comf ounds (QCLot:) 4212F) G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@gbP :r +RMGt d evGeue	@H+CU+g	- PA LwL	@ :U	####	CC	r - @	####	####
		c91@gbP dMGt d evGeue	@+1r+i	- PA LwL	Q :U	####	gj	r - @	####	####
EP3| Fc: + alopenated Aromati0 Comf ounds (QCLot:) 4212F) G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@gbPDGt d Eeuzeue	r 1Q+j 1+@	- PA LwL	Q :i	####	U@	r C@	####	####
EP3| 5A: P9enoli0 Comf ounds (QCLot:) 4215) 2G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@UP9 Geut l	r 1Q+j U+	UPA LwL	Q1:j	####	- C@	r r j	####	####
		c91@UP +DGt d . Geut l	j U+U@Q	UPA LwL	i @@	####	Q :r	r r i	####	####
		c91@UP +HMd . Geut l	QQ+@+U	UPA LwL	i C-	####	r i :g	r r U	####	####
		c91@Ug+DGt d +C+l evGnl. Geut l	Uj +U1+@	UPA LwL	Q :i	####	- - :C	r - -	####	####
		c91@UP9 euvaCGt d . Geut l	Q@Q +U	UPA LwL	Qg:C	####	r @	r g-	####	####
EP3| 5x : PolBnu0lear Aromati0 + Bdro0aryons (QCLot:) 4215) 2G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@UPn Oeua. GGeue	QC+C- +j	UPA LwL	@ :-	####	- Ug	r - -	####	####
		c91@UP9 meue	r - j +11+1	UPA LwL	Q :1	####	r g:i	r - @	####	####
EP3| 5D: Nitrosamines (QCLot:) 4215) 2G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@UPH +HMd st BMu+ d . mtaA Me	i - r+i g+@	UPA LwL	Uj :1	####	r @Q	r r 1	####	####
EP3| 5E: Nitroaromati0s and Ketones (QCLot:) 4215) 2G										
cl r C1Q @+11@	9+hr+C1wl:U	c91@UP :g+RMMd vt lf eue	r - r+r g+	UPA LwL	i @g	####	- QC	r r -	####	####

7fE+l avdM: **MOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
					MS	MSD	Low	High	Value	Control Limit
EP3| 5b : C9lorinated +Bdro0aryons (QCLot:) 4215) 2G										
cl r C1Cj @+11@	9+hr+C1vt:U	c91@bP:g+RMGt d Eeuzeue	r1i+gi+@	UPA LwL	i C.1	+++	-C	rr-	+++	+++
		c91@bP:-:g+ dMGt d Eeuzeue	r-1+Q-+r	UPA LwL	Uj:g	+++	r-:j	rrr	+++	+++
EP343/3| 1: Total Petroleum +Bdro0aryons (QCLot:) 4215) -G										
cl r C1Cj @+11U	9+hr+jvt:U	c91@bPDr1PPDrgPFcaOMu	+++	i 1-PA LwL	r11	+++	UC	r-C	+++	+++
		c91@bPDrUPPD-QPFcaOMu	+++	rQ@PA LwL	j1:i	+++	@	r-g	+++	+++
		c91@bPD-jPPDCiPFcaOMu	+++	@QQPA LwL	Q-:-	+++	ig	rrQ	+++	+++
EP343/3| 1: Total Re0overayle +Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 4215) -G										
cl r C1Cj @+11U	9+hr+jvt:U	c91@bP>Dr1PPDriPFcaOMu	+++	j-jPA LwL	j-:U	+++	iU	r-C	+++	+++
		c91@bP>DriPPDCgPFcaOMu	+++	--C@PA LwL	QQi	+++	i@	r-r	+++	+++
		c91@bP>DCgPPDg1PFcaOMu	+++	-C-PA LwL	i@-	+++	gg	r-i	+++	+++
EP343/3| 1: Total Petroleum +Bdro0aryons (QCLot:) 421524G										
cl r C1g11r+11r	hutumAtfs	c91@bPDr1PPDrgPFcaOMu	+++	i 1-PA LwL	rr1	+++	UC	r-C	+++	+++
		c91@bPDrUPPD-QPFcaOMu	+++	rQ@PA LwL	j@Q	+++	@	r-g	+++	+++
		c91@bPD-jPPDCiPFcaOMu	+++	@QQPA LwL	j@-	+++	ig	rrQ	+++	+++
EP343/3| 1: Total Re0overayle +Bdro0aryons 8NEPS) 313 Dralt (QCLot:) 421524G										
cl r C1g11r+11r	hutumAtfs	c91@bP>Dr1PPDriPFcaOMu	+++	j-jPA LwL	r11	+++	iU	r-C	+++	+++
		c91@bP>DriPPDCgPFcaOMu	+++	--C@PA LwL	r1@	+++	i@	r-r	+++	+++
		c91@bP>DCgPPDg1PFcaOMu	+++	-C-PA LwL	Qr:j	+++	gg	r-i	+++	+++

Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **EM1303970**	Page	: 1 of 12
Client	: CARDNO LANE PIPER PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: MR DANNY MCDONALD	Contact	: Carol Walsh
Address	: 154 HIGHBURY ROAD BURWOOD VIC, AUSTRALIA 3125	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: danny.mcdonald@lanepiper.com.au	E-mail	: carol.walsh@alsglobal.com
Telephone	: +61 03 98880100	Telephone	: +61-3-8549 9608
Facsimile	: +61 03 98083511	Facsimile	: +61-3-8549 9601
Project	: 212163 3	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: Fiskville		
C-O-C number	: ----	Date Samples Received	: 18-APR-2013
Sampler	: MDR	Issue Date	: 24-APR-2013
Order number	: ----		
		No. of samples received	: 94
Quote number	: MEBQ/115/12	No. of samples analysed	: 21

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content								
Soil Glass Jar - Unpreserved (EA055-103)								
TP-A1-28/0.1,	TP-A1-29/0.5,	**11-APR-2013**	**----**	----	----	**22-APR-2013**	25-APR-2013	✓
TP-A1-30/0.5,	TP-A1-31/0.5,							
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	TP-A1-37/0.9,							
QC01/110413								
Soil Glass Jar - Unpreserved (EA055-103)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**----**	----	----	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-07/0.9,							
TP-A3a-08/0.1,	TP-A3a-09/0.1,							
TP-A3a-10/1.0,	TP-A3a-11/0.6,							
TP-A3a-13/0.1,	TP-A3a-14/0.5							
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP-A1-28/0.1,	TP-A1-31/0.5,	**11-APR-2013**	**22-APR-2013**	08-OCT-2013	✓	**22-APR-2013**	08-OCT-2013	✓
TP-A1-33/0.5,	TP-A1-34/0.7,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EG005T)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	09-OCT-2013	✓	**22-APR-2013**	09-OCT-2013	✓
TP-A3a-08/0.1,	TP-A3a-09/0.1,							
TP-A3a-13/0.1								
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
TP-A1-28/0.1,	TP-A1-31/0.5,	**11-APR-2013**	**22-APR-2013**	09-MAY-2013	✓	**23-APR-2013**	09-MAY-2013	✓
TP-A1-33/0.5,	TP-A1-34/0.7,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EG035T)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	10-MAY-2013	✓	**23-APR-2013**	10-MAY-2013	✓
TP-A3a-08/0.1,	TP-A3a-09/0.1,							
TP-A3a-13/0.1								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP071)								
TP-A1-28/0.1,	TP-A1-29/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	01-JUN-2013	✓
TP-A1-30/0.5,	TP-A1-31/0.5,							
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	TP-A1-37/0.9							
Soil Glass Jar - Unpreserved (EP071)								
QC01/110413		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP071)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	01-JUN-2013	✓
TP-A3a-05/1.3,	TP-A3a-07/0.9,							
TP-A3a-08/0.1,	TP-A3a-09/0.1,							
TP-A3a-10/1.0,	TP-A3a-11/0.6,							
TP-A3a-13/0.1,	TP-A3a-14/0.5							
EP074D: Fumigants								
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-28/0.1,	TP-A1-30/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-37/0.9		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-08/0.1,							
TP-A3a-09/0.1,	TP-A3a-11/0.6,							
TP-A3a-13/0.1								
EP074E: Halogenated Aliphatic Compounds								
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-28/0.1,	TP-A1-30/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-37/0.9		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-08/0.1,							
TP-A3a-09/0.1,	TP-A3a-11/0.6,							
TP-A3a-13/0.1								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074F: Halogenated Aromatic Compounds								
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-28/0.1,	TP-A1-30/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-37/0.9		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-08/0.1,							
TP-A3a-09/0.1,	TP-A3a-11/0.6,							
TP-A3a-13/0.1								
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-28/0.1,	TP-A1-30/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-37/0.9		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-08/0.1,							
TP-A3a-09/0.1,	TP-A3a-11/0.6,							
TP-A3a-13/0.1								
EP074B: Oxygenated Compounds								
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-28/0.1,	TP-A1-30/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	QC01/110413							
Soil Glass Jar - Unpreserved (EP074)								
TP-A1-37/0.9		**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-08/0.1,							
TP-A3a-09/0.1,	TP-A3a-11/0.6,							
TP-A3a-13/0.1								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)							
TP-A1-37/0.9	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved (EP074)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)							
TP-A1-37/0.9	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	25-APR-2013	✓
Soil Glass Jar - Unpreserved (EP074)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075)							
TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075) TP-A1-28/0.1, TP-A1-30/0.5, TP-A1-32/0.65, TP-A1-33/0.5, TP-A1-34/0.7, TP-A1-35/0.1, TP-A1-36/0.1, QC01/110413	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A1-37/0.9	**11-APR-2013**	**23-APR-2013**	25-APR-2013	✓	**24-APR-2013**	02-JUN-2013	✓
Soil Glass Jar - Unpreserved (EP075) TP-A3a-01/1.4, TP-A3a-04/0.1, TP-A3a-05/1.3, TP-A3a-08/0.1, TP-A3a-09/0.1, TP-A3a-11/0.6, TP-A3a-13/0.1	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**23-APR-2013**	01-JUN-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080)								
TP-A1-28/0.1,	TP-A1-29/0.5,	**11-APR-2013**	**22-APR-2013**	25-APR-2013	✓	**22-APR-2013**	25-APR-2013	✓
TP-A1-30/0.5,	TP-A1-31/0.5,							
TP-A1-32/0.65,	TP-A1-33/0.5,							
TP-A1-34/0.7,	TP-A1-35/0.1,							
TP-A1-36/0.1,	TP-A1-37/0.9,							
QC01/110413								
Soil Glass Jar - Unpreserved (EP080)								
TP-A3a-01/1.4,	TP-A3a-04/0.1,	**12-APR-2013**	**22-APR-2013**	26-APR-2013	✓	**22-APR-2013**	26-APR-2013	✓
TP-A3a-05/1.3,	TP-A3a-07/0.9,							
TP-A3a-08/0.1,	TP-A3a-09/0.1,							
TP-A3a-10/1.0,	TP-A3a-11/0.6,							
TP-A3a-13/0.1,	TP-A3a-14/0.5							

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	5	43	**11.6**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Semivolatile Organic Compounds	EP075	3	16	**18.8**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	19	**10.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	19	**10.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	4	35	**11.4**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	3	21	**14.3**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	3	15	**20.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Semivolatile Organic Compounds	EP075	2	16	**12.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	35	**5.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	21	**9.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	3	16	**18.8**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Semivolatile Organic Compounds	EP075	2	16	**12.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	35	**5.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	21	**9.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	3	16	**18.8**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Semivolatile Organic Compounds	EP075	1	15	**6.7**	**5.0**	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	19	**5.3**	**5.0**	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	35	**5.7**	**5.0**	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	**5.0**	**5.0**	✓	ALS QCS3 requirement
Volatile Organic Compounds	EP074	1	14	**7.1**	**5.0**	✓	ALS QCS3 requirement

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
Volatile Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
Semivolatile Organic Compounds	EP075	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 502)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)

Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW 846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG005T: Total Metals by ICP-AES	EM1303962-006	Anonymous	**Barium**	7440-39-3	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EG005T: Total Metals by ICP-AES	EM1303962-006	Anonymous	**Manganese**	7439-96-5	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Duplicate outliers occur.**
- **For all matrices, no Laboratory Control outliers occur.**

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP074S: VOC Surrogates	EM1303970-025	TP-A1-37/0.9	**1.2-Dichloroethane-D4**	17060-07-0	61.6 %	62-122 %	**Recovery less than lower data quality objective**
EP074S: VOC Surrogates	EM1303970-025	TP-A1-37/0.9	**4-Bromofluorobenzene**	460-00-4	64.7 %	66-124 %	**Recovery less than lower data quality objective**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- **No Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

ABN – 50 005 085 521 e.mail : enviro@mgtlabmark.com.au web : www.mgtlabmark.com.au

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3-5 Kingston Town Close
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F6, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Sample Receipt Advice

Company name: **Cardno Lane Piper Pty Ltd**

Contact name: Maria De Los Reyes
Client job number: FISKVILLE 212163.3
COC number: Not provided
Turn around time: 5 Day
Date/Time received: Apr 18, 2013 2:11 PM
Eurofins | mgt reference: **376257**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Organic samples had Teflon liners.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Natalie Krasselt on Phone : (+61) (3) 8564 5000 or by e.mail:
Natalie.Krasselt@mgtlabmark.com.au

Results will be delivered electronically via e.mail to Maria De Los Reyes - maria.delosreyes@lanepiper.com.au.

Eurofins | mgt Sample Receipt

eurofins | mgt

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Cardno Lane Piper Pty Ltd
Building 2, 154 Highbury Road
Burwood
VIC 3125

Attention: **Maria De Los Reyes**

Report **376257-S**
Client Reference FISKVILLE 212163.3
Received Date Apr 18, 2013

Client Sample ID			**QC02/110413**
Sample Matrix			**Soil**
Eurofins | mgt Sample No.			**M13-Ap15452**
Date Sampled			**Apr 11, 2013**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-36 (Total)	50	mg/kg	< 50
Volatile Organics			
1.1-Dichloroethane	0.05	mg/kg	< 0.05
1.1-Dichloroethene	0.05	mg/kg	< 0.05
1.1.1-Trichloroethane	0.05	mg/kg	< 0.05
1.1.1.2-Tetrachloroethane	0.05	mg/kg	< 0.05
1.1.2-Trichloroethane	0.05	mg/kg	< 0.05
1.1.2.2-Tetrachloroethane	0.05	mg/kg	< 0.05
1.2-Dibromoethane	0.05	mg/kg	< 0.05
1.2-Dichlorobenzene	0.05	mg/kg	[G01] < 0.1
1.2-Dichloroethane	0.05	mg/kg	< 0.05
1.2-Dichloropropane	0.05	mg/kg	< 0.05
1.2.3-Trichloropropane	0.05	mg/kg	< 0.05
1.2.4-Trimethylbenzene	0.05	mg/kg	< 0.05
1.3-Dichlorobenzene	0.05	mg/kg	< 0.05
1.3-Dichloropropane	0.05	mg/kg	< 0.05
1.3.5-Trimethylbenzene	0.05	mg/kg	< 0.05
1.4-Dichlorobenzene	0.05	mg/kg	< 0.05
2-Butanone (MEK)	0.05	mg/kg	< 0.05
2-Propanone (Acetone)	0.05	mg/kg	< 0.05
4-Chlorotoluene	0.05	mg/kg	< 0.05
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05
Allyl chloride	0.05	mg/kg	< 0.05
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.05	mg/kg	< 0.05
Bromochloromethane	0.05	mg/kg	< 0.05
Bromodichloromethane	0.05	mg/kg	< 0.05
Bromoform	0.05	mg/kg	< 0.05
Bromomethane	0.05	mg/kg	< 0.05
Carbon disulfide	0.05	mg/kg	< 0.05
Carbon Tetrachloride	0.05	mg/kg	< 0.05
Chlorobenzene	0.05	mg/kg	< 0.05

Client Sample ID			QC02/110413
Sample Matrix			Soil
Eurofins | mgt Sample No.			M13-Ap15452
Date Sampled			Apr 11, 2013
Test/Reference	LOR	Unit	
Volatile Organics			
Chloroethane	0.05	mg/kg	< 0.05
Chloroform	0.05	mg/kg	< 0.05
Chloromethane	0.05	mg/kg	< 0.05
cis-1.2-Dichloroethene	0.05	mg/kg	< 0.05
cis-1.3-Dichloropropene	0.05	mg/kg	< 0.05
Dibromochloromethane	0.05	mg/kg	< 0.05
Dibromomethane	0.05	mg/kg	< 0.05
Dichlorodifluoromethane	0.05	mg/kg	< 0.05
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.05	mg/kg	< 0.05
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.05	mg/kg	< 0.05
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.05	mg/kg	< 0.05
Tetrachloroethene	0.05	mg/kg	< 0.05
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.05	mg/kg	< 0.05
trans-1.3-Dichloropropene	0.05	mg/kg	< 0.05
Trichloroethene	0.05	mg/kg	< 0.05
Trichlorofluoromethane	0.05	mg/kg	< 0.05
Vinyl chloride	0.05	mg/kg	< 0.05
Xylenes - Total	0.3	mg/kg	< 0.3
Fluorobenzene (surr.)	1	%	57
4-Bromofluorobenzene (surr.)	1	%	57
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
Semivolatile Organics			
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
1-Chloronaphthalene	0.5	mg/kg	< 0.5
1-Naphthylamine	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2.3-Trichlorobenzene	0.5	mg/kg	< 0.5
1.2.3.4-Tetrachlorobenzene	0.5	mg/kg	< 0.5
1.2.3.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.2.4.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3.5-Trichlorobenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Chloronaphthalene	0.5	mg/kg	< 0.5
2-Chlorophenol	0.5	mg/kg	< 0.5
2-Methylnaphthalene	0.5	mg/kg	< 0.5

Client Sample ID			QC02/110413
Sample Matrix			Soil
Eurofins | mgt Sample No.			M13-Ap15452
Date Sampled			Apr 11, 2013
Test/Reference	LOR	Unit	
Semivolatile Organics			
2-Methylnaphthalene	0.5	mg/kg	< 0.5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Naphthylamine	0.5	mg/kg	< 0.5
2-Nitroaniline	0.5	mg/kg	< 0.5
2-Nitrophenol	1.0	mg/kg	< 1
2-Picoline	0.5	mg/kg	< 0.5
2.3.4.6-Tetrachlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2.4-Dinitrotoluene	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1.0	mg/kg	< 1
2.4.6-Trichlorophenol	1.0	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
2.6-Dinitrotoluene	0.5	mg/kg	< 0.5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
3-Methylcholanthrene	0.5	mg/kg	< 0.5
3.3'-Dichlorobenzidine	0.5	mg/kg	< 0.5
4-Aminobiphenyl	0.5	mg/kg	< 0.5
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1.0	mg/kg	< 1
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
4.4'-DDD	0.5	mg/kg	< 0.5
4.4'-DDE	0.5	mg/kg	< 0.5
4.4'-DDT	0.5	mg/kg	< 0.5
7.12-Dimethylbenz(a)anthracene	0.5	mg/kg	< 0.5
a-BHC	0.5	mg/kg	< 0.5
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Acetophenone	0.5	mg/kg	< 0.5
Aldrin	0.5	mg/kg	< 0.5
Aniline	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
b-BHC	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Benzyl chloride	0.5	mg/kg	< 0.5
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5
Bis(2-chloroisopropyl)ether	0.5	mg/kg	< 0.5
Bis(2-ethylhexyl)phthalate	0.5	mg/kg	0.6
Butyl benzyl phthalate	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
d-BHC	0.5	mg/kg	< 0.5
Di-n-butyl phthalate	0.5	mg/kg	< 0.5
Di-n-octyl phthalate	0.5	mg/kg	< 0.5

Client Sample ID			QC02/110413
Sample Matrix			Soil
Eurofins | mgt Sample No.			M13-Ap15452
Date Sampled			Apr 11, 2013
Test/Reference	LOR	Unit	
Semivolatile Organics			
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Dibenz(a.j)acridine	0.5	mg/kg	< 0.5
Dibenzofuran	0.5	mg/kg	< 0.5
Dieldrin	0.5	mg/kg	< 0.5
Diethyl phthalate	0.5	mg/kg	< 0.5
Dimethyl phthalate	0.5	mg/kg	< 0.5
Dimethylaminoazobenzene	0.5	mg/kg	< 0.5
Diphenylamine	0.5	mg/kg	< 0.5
Endosulfan I	0.5	mg/kg	< 0.5
Endosulfan II	0.5	mg/kg	< 0.5
Endosulfan sulphate	0.5	mg/kg	< 0.5
Endrin	0.5	mg/kg	< 0.5
Endrin aldehyde	0.5	mg/kg	< 0.5
Endrin ketone	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
g-BHC (Lindane)	0.5	mg/kg	< 0.5
Heptachlor	0.5	mg/kg	< 0.5
Heptachlor epoxide	0.5	mg/kg	< 0.5
Hexachlorobenzene	0.5	mg/kg	< 0.5
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Hexachlorocyclopentadiene	0.5	mg/kg	< 0.5
Hexachloroethane	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Methoxychlor	0.5	mg/kg	< 0.5
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5
N-Nitrosopiperidine	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Nitrobenzene	0.5	mg/kg	< 0.5
Pentachlorobenzene	0.5	mg/kg	< 0.5
Pentachloronitrobenzene	0.5	mg/kg	< 0.5
Pentachlorophenol	1.0	mg/kg	< 1
Phenanthrene	0.5	mg/kg	< 0.5
Phenol	0.5	mg/kg	< 0.5
Pronamide	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Trifluralin	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	72
Nitrobenzene-d5 (surr.)	1	%	73
2-Fluorobiphenyl (surr.)	1	%	75
2.4.6-Tribromophenol (surr.)	1	%	65
Heavy Metals			
Arsenic	2	mg/kg	< 2
Barium	10	mg/kg	24
Beryllium	2	mg/kg	< 2
Cadmium	0.4	mg/kg	0.9
Chromium	5	mg/kg	67
Cobalt	5	mg/kg	5.6

Client Sample ID			QC02/110413
Sample Matrix			**Soil**
Eurofins | mgt Sample No.			**M13-Ap15452**
Date Sampled			**Apr 11, 2013**
Test/Reference	LOR	Unit	
Heavy Metals			
Copper	5	mg/kg	6.2
Lead	5	mg/kg	18
Manganese	5	mg/kg	61
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	10
Vanadium	10	mg/kg	180
Zinc	5	mg/kg	7.3
% Moisture	0.1	%	7.2

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Apr 19, 2013	14 Day
- Method: TRH C6-C36 - MGT 100A			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions	Melbourne	Apr 19, 2013	14 Day
- Method: LM-LTM-ORG2010			
Volatile Organics	Melbourne	Apr 19, 2013	14 Day
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Semivolatile Organics	Melbourne	Apr 19, 2013	14 Day
- Method: USEPA 8270 Semivolatile Organics			
Metals M13	Melbourne	Apr 19, 2013	28 Day
- Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury			
% Moisture	Melbourne	Apr 19, 2013	14 Day
- Method: Method 102 - ANZECC - % Moisture			

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NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name:	Cardno Lane Piper Pty Ltd	**Order No.:**		**Received:**	Apr 18, 2013 2:11 PM
Address:	Building 2, 154 Highbury Road	**Report #:**	376257	**Due:**	Apr 26, 2013
	Burwood	**Phone:**	9888 0100	**Priority:**	5 Day
	VIC 3125	**Fax:**	9808 3511	**Contact Name:**	Maria De Los Reyes
Client Job No.:	FISKVILLE 212163.3				

Eurofins | mgt Client Manager: Natalie Krasselt

Sample Detail					% Moisture	Semivolatile Organics	Volatile Organics	Metals M13	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted									
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X
Sydney Laboratory - NATA Site # 18217									
Brisbane Laboratory - NATA Site # 20794									
External Laboratory									
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
QC02/110413	Apr 11, 2013		Soil	M13-Ap15452	X	X	X	X	X

Eurofins | mgt Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
Volatile Organics USEPA 8260 - MGT 350A Volatile Organics by GCMS							
1.1-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dibromoethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.05			0.05	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.3-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
2-Butanone (MEK)	mg/kg	< 0.05			0.05	Pass	
2-Propanone (Acetone)	mg/kg	< 0.05			0.05	Pass	
4-Chlorotoluene	mg/kg	< 0.05			0.05	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.05			0.05	Pass	
Allyl chloride	mg/kg	< 0.05			0.05	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.05			0.05	Pass	
Bromochloromethane	mg/kg	< 0.05			0.05	Pass	
Bromodichloromethane	mg/kg	< 0.05			0.05	Pass	
Bromoform	mg/kg	< 0.05			0.05	Pass	
Bromomethane	mg/kg	< 0.05			0.05	Pass	
Carbon disulfide	mg/kg	< 0.05			0.05	Pass	
Carbon Tetrachloride	mg/kg	< 0.05			0.05	Pass	
Chlorobenzene	mg/kg	< 0.05			0.05	Pass	
Chloroethane	mg/kg	< 0.05			0.05	Pass	
Chloroform	mg/kg	< 0.05			0.05	Pass	
Chloromethane	mg/kg	< 0.05			0.05	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Dibromochloromethane	mg/kg	< 0.05			0.05	Pass	
Dibromomethane	mg/kg	< 0.05			0.05	Pass	
Dichlorodifluoromethane	mg/kg	< 0.05			0.05	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.05			0.05	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.05			0.05	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.05			0.05	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Tetrachloroethene	mg/kg	< 0.05			0.05	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Trichloroethene	mg/kg	< 0.05			0.05	Pass	
Trichlorofluoromethane	mg/kg	< 0.05			0.05	Pass	
Vinyl chloride	mg/kg	< 0.05			0.05	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Semivolatile Organics USEPA 8270 Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
1-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
1-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.4-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2-Methylnaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
2-Nitroaniline	mg/kg	< 0.5			0.5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2-Picoline	mg/kg	< 0.5			0.5	Pass	
2.3.4.6-Tetrachlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2.4-Dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1.0	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1.0	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.6-Dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
3-Methylcholanthrene	mg/kg	< 0.5			0.5	Pass	
3.3'-Dichlorobenzidine	mg/kg	< 0.5			0.5	Pass	
4-Aminobiphenyl	mg/kg	< 0.5			0.5	Pass	
4-Bromophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1.0	Pass	
4-Chlorophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDD	mg/kg	< 0.5			0.5	Pass	
4.4'-DDE	mg/kg	< 0.5			0.5	Pass	
4.4'-DDT	mg/kg	< 0.5			0.5	Pass	
7.12-Dimethylbenz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
a-BHC	mg/kg	< 0.5			0.5	Pass	
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Acetophenone	mg/kg	< 0.5			0.5	Pass	
Aldrin	mg/kg	< 0.5			0.5	Pass	
Aniline	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
b-BHC	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzyl chloride	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroethoxy)methane	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroisopropyl)ether	mg/kg	< 0.5			0.5	Pass	
Bis(2-ethylhexyl)phthalate	mg/kg	< 0.5			0.5	Pass	
Butyl benzyl phthalate	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
d-BHC	mg/kg	< 0.5			0.5	Pass	
Di-n-butyl phthalate	mg/kg	< 0.5			0.5	Pass	
Di-n-octyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.j)acridine	mg/kg	< 0.5			0.5	Pass	
Dibenzofuran	mg/kg	< 0.5			0.5	Pass	
Dieldrin	mg/kg	< 0.5			0.5	Pass	
Diethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethylaminoazobenzene	mg/kg	< 0.5			0.5	Pass	
Diphenylamine	mg/kg	< 0.5			0.5	Pass	
Endosulfan I	mg/kg	< 0.5			0.5	Pass	
Endosulfan II	mg/kg	< 0.5			0.5	Pass	
Endosulfan sulphate	mg/kg	< 0.5			0.5	Pass	
Endrin	mg/kg	< 0.5			0.5	Pass	
Endrin aldehyde	mg/kg	< 0.5			0.5	Pass	
Endrin ketone	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
g-BHC (Lindane)	mg/kg	< 0.5			0.5	Pass	
Heptachlor	mg/kg	< 0.5			0.5	Pass	
Heptachlor epoxide	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 0.5			0.5	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Methoxychlor	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodibutylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodipropylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosopiperidine	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachloronitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorophenol	mg/kg	< 1			1.0	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Pronamide	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Trifluralin	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Metals M13 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Arsenic	mg/kg	< 2			2	Pass	
Barium	mg/kg	< 10			10	Pass	
Beryllium	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Cobalt	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Manganese	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Vanadium	mg/kg	< 10			10	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	%	110			70-130	Pass	
LCS - % Recovery							
Volatile Organics USEPA 8260 - MGT 350A Volatile Organics by GCMS							
1.1-Dichloroethene	%	93			70-130	Pass	
1.1.1-Trichloroethane	%	92			70-130	Pass	
1.2-Dichloroethane	%	104			70-130	Pass	
Benzene	%	99			70-130	Pass	
Carbon Tetrachloride	%	87			70-130	Pass	
Ethylbenzene	%	110			70-130	Pass	
m&p-Xylenes	%	124			70-130	Pass	
Toluene	%	113			70-130	Pass	
Trichloroethene	%	88			70-130	Pass	
Xylenes - Total	%	123			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
TRH C6-C10	%	115			70-130	Pass	
LCS - % Recovery							
Semivolatile Organics USEPA 8270 Semivolatile Organics							
1.2.4-Trichlorobenzene	%	76			70-130	Pass	
2-Chlorophenol	%	87			30-130	Pass	
4-Chloro-3-methylphenol	%	78			30-130	Pass	
4-Nitrophenol	%	49			30-130	Pass	
Acenaphthene	%	81			70-130	Pass	
Pentachlorophenol	%	30			30-130	Pass	
Phenol	%	87			30-130	Pass	
Pyrene	%	79			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Metals M13 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Arsenic	%	87			80-120	Pass	
Barium	%	113			80-120	Pass	
Beryllium	%	103			80-120	Pass	
Cadmium	%	100			80-120	Pass	
Chromium	%	103			80-120	Pass	
Cobalt	%	100			80-120	Pass	
Copper	%	108			80-120	Pass	
Lead	%	102			80-120	Pass	
Manganese	%	105			80-120	Pass	
Mercury	%	105			75-125	Pass	
Nickel	%	102			80-120	Pass	
Vanadium	%	100			80-120	Pass	
Zinc	%	96			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M13-Ap17025	NCP	%	88			70-130	Pass	
TRH C10-C14	M13-Ap15903	NCP	%	125			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M13-Ap17025	NCP	%	94			70-130	Pass	
1.1.1-Trichloroethane	M13-Ap17025	NCP	%	91			70-130	Pass	
1.2-Dichlorobenzene	M13-Ap17025	NCP	%	108			70-130	Pass	
1.2-Dichloroethane	M13-Ap17025	NCP	%	98			70-130	Pass	
Benzene	M13-Ap17025	NCP	%	91			70-130	Pass	
Carbon Tetrachloride	M13-Ap17025	NCP	%	84			70-130	Pass	
Ethylbenzene	M13-Ap17025	NCP	%	79			70-130	Pass	
m&p-Xylenes	M13-Ap17025	NCP	%	94			70-130	Pass	
o-Xylene	M13-Ap17025	NCP	%	86			70-130	Pass	
Toluene	M13-Ap17025	NCP	%	85			70-130	Pass	
Trichloroethene	M13-Ap17025	NCP	%	80			70-130	Pass	
Xylenes - Total	M13-Ap17025	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1					
TRH C6-C10	M13-Ap17025	NCP	%	88			70-130	Pass	
TRH >C10-C16	M13-Ap15903	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Semivolatile Organics				Result 1					
1.2.4-Trichlorobenzene	M13-Ap12426	NCP	%	86			70-130	Pass	
1.4-Dichlorobenzene	M13-Ap12426	NCP	%	89			70-130	Pass	
2-Chlorophenol	M13-Ap12426	NCP	%	86			30-130	Pass	
2.4-Dinitrotoluene	M13-Ap12426	NCP	%	70			70-130	Pass	
4-Chloro-3-methylphenol	M13-Ap12426	NCP	%	75			30-130	Pass	
4-Nitrophenol	M13-Ap12426	NCP	%	43			30-130	Pass	
Acenaphthene	M13-Ap12426	NCP	%	91			70-130	Pass	
N-Nitrosodipropylamine	M13-Ap12426	NCP	%	82			70-130	Pass	
Pentachlorophenol	M13-Ap12426	NCP	%	67			30-130	Pass	
Phenol	M13-Ap12426	NCP	%	89			30-130	Pass	
Pyrene	M13-Ap12426	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Metals M13				Result 1					
Arsenic	M13-Ap15504	NCP	%	83			75-125	Pass	
Barium	M13-Ap15452	CP	%	94			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Beryllium	M13-Ap15452	CP	%	85			75-125	Pass	
Cadmium	M13-Ap15452	CP	%	87			75-125	Pass	
Chromium	M13-Ap15272	NCP	%	91			75-125	Pass	
Cobalt	M13-Ap15452	CP	%	80			75-125	Pass	
Copper	M13-Ap15452	CP	%	98			75-125	Pass	
Lead	M13-Ap15452	CP	%	87			75-125	Pass	
Manganese	M13-Ap15452	CP	%	85			75-125	Pass	
Mercury	M13-Ap15452	CP	%	91			70-130	Pass	
Nickel	M13-Ap12773	NCP	%	80			75-125	Pass	
Vanadium	M13-Ap15272	NCP	%	89			75-125	Pass	
Zinc	M13-Ap15272	NCP	%	111			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M13-Ap14893	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M13-Ap15903	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M13-Ap15903	NCP	mg/kg	520	460	13	30%	Pass	
TRH C29-C36	M13-Ap15903	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1-Dichloroethene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.1-Trichloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.2-Trichloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dibromoethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dichlorobenzene	M13-Ap14893	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
1.2-Dichloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dichloropropane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.3-Trichloropropane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.4-Trimethylbenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3-Dichlorobenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3-Dichloropropane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3.5-Trimethylbenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.4-Dichlorobenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
2-Butanone (MEK)	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
2-Propanone (Acetone)	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4-Chlorotoluene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Allyl chloride	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Benzene	M13-Ap14893	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromochloromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromodichloromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromoform	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromomethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Carbon disulfide	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Carbon Tetrachloride	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlorobenzene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloroethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloroform	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
cis-1.2-Dichloroethene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
cis-1.3-Dichloropropene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dibromochloromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dibromomethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dichlorodifluoromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Ethylbenzene	M13-Ap14893	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Isopropyl benzene (Cumene)	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
m&p-Xylenes	M13-Ap14893	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
o-Xylene	M13-Ap14893	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Styrene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Tetrachloroethene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toluene	M13-Ap14893	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
trans-1.3-Dichloropropene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Trichloroethene	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Trichlorofluoromethane	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Vinyl chloride	M13-Ap14893	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Xylenes - Total	M13-Ap14893	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M13-Ap14893	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M13-Ap14893	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M13-Ap15903	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M13-Ap15903	NCP	mg/kg	490	430	14	30%	Pass	
TRH >C34-C40	M13-Ap15903	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Semivolatile Organics				Result 1	Result 2	RPD			
2-Methyl-4.6-dinitrophenol	M13-Ap12426	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
1-Chloronaphthalene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Naphthylamine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3.4-Tetrachlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3.5-Tetrachlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4.5-Tetrachlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Chloronaphthalene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Chlorophenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Methylnaphthalene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M13-Ap12426	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Naphthylamine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitroaniline	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrophenol	M13-Ap12426	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Picoline	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.3.4.6-Tetrachlorophenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dimethylphenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M13-Ap12426	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2.4-Dinitrotoluene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M13-Ap12426	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Duplicate									
Semivolatile Organics				Result 1	Result 2	RPD			
2.4.6-Trichlorophenol	M13-Ap12426	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.6-Dinitrotoluene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M13-Ap12426	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
3-Methylcholanthrene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
3.3'-Dichlorobenzidine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Aminobiphenyl	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Bromophenyl phenyl ether	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M13-Ap12426	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chlorophenyl phenyl ether	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrophenol	M13-Ap12426	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
4.4'-DDD	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDE	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4.4'-DDT	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
7.12-Dimethylbenz(a)anthracene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
a-BHC	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acetophenone	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aldrin	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aniline	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
b-BHC	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzyl chloride	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bis(2-chloroethoxy)methane	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bis(2-chloroisopropyl)ether	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bis(2-ethylhexyl)phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Butyl benzyl phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
d-BHC	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Di-n-butyl phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Di-n-octyl phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.j)acridine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenzofuran	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dieldrin	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Diethyl phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dimethyl phthalate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dimethylaminoazobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Diphenylamine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan I	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan II	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endosulfan sulphate	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin aldehyde	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Endrin ketone	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
g-BHC (Lindane)	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Semivolatile Organics				Result 1	Result 2	RPD			
Heptachlor	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Heptachlor epoxide	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorobutadiene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachlorocyclopentadiene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexachloroethane	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methoxychlor	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
N-Nitrosodibutylamine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
N-Nitrosodipropylamine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
N-Nitrosopiperidine	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Nitrobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentachlorobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentachloronitrobenzene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentachlorophenol	M13-Ap12426	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Phenanthrene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenol	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pronamide	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trifluralin	M13-Ap12426	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Metals M13				Result 1	Result 2	RPD			
Arsenic	M13-Ap15452	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Barium	M13-Ap15452	CP	mg/kg	24	23	4.0	30%	Pass	
Beryllium	M13-Ap15452	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	M13-Ap15452	CP	mg/kg	0.9	0.8	22	30%	Pass	
Chromium	M13-Ap15452	CP	mg/kg	67	63	7.0	30%	Pass	
Cobalt	M13-Ap15452	CP	mg/kg	5.6	< 5	19	30%	Pass	
Copper	M13-Ap15452	CP	mg/kg	6.2	6.4	4.0	30%	Pass	
Lead	M13-Ap15452	CP	mg/kg	18	16	17	30%	Pass	
Manganese	M13-Ap15452	CP	mg/kg	61	51	17	30%	Pass	
Mercury	M13-Ap15452	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M13-Ap15452	CP	mg/kg	10	8.0	25	30%	Pass	
Vanadium	M13-Ap15452	CP	mg/kg	180	160	8.0	30%	Pass	
Zinc	M13-Ap15452	CP	mg/kg	7.3	7.2	2.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.

Authorised By

Natalie Krasselt	Client Services
Stacey Jenkins	Senior Analyst-Organic (VIC)
Carroll Lee	Senior Analyst-Volatile (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)

Glenn Jackson

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

Data Quality Review
Fire Training College, Fiskville, Vic

This appendix reviews the uality Assurance (A) and uality Control (C) documentation. uality Assurance encompasses the actions, procedures, checks and decisions undertaken to ensure sample integrity and representativeness, as well as the reliability and accuracy of analysis results. The A documentation should also include an indication of the Data uality Objectives sought in relation to each significant action, test or process involved in the assessment.

C activities measure the effectiveness of the A procedures by undertaking testing and comparing results to previously established objectives. C work will include the internal laboratory testing as well as results of C samples submitted such as trip blanks and duplicates. The quality of the information and/or data is deemed satisfactory when the C results demonstrate that agreed objectives have been met.

The A/ C is part of the data validation exercise. The findings are summarised below:

QA/QC Aspects	Evidence & Evaluation
QA Documentation	
Project uality Plan/Work Plan and Data uality Objectives	The buried drum investigation was carried out in accordance with the proposed scope of works, as documented in the proposal (212163.3Proposal01.1 and 212163.3Variation01.1) issued to the Client. A quality control program was implemented during the Investigation and the quality assurance procedures used have been documented in the report. In addition, a health and safety plan was also included as part of the report. The buried drum investigation was carried out in accordance with the Job Safety Analysis (JSA) and Occupational Health and Safety (OHS) plan for the site. A detailed work plan for the site assessment works was also provided, which included details of the soil validation phase of work. The Data uality Objectives were expressed in terms of the purpose of the assessment and the relevant assessment criteria.
Data Representativeness	
Use of Composites	No composites were used during the investigation.
Holding Times	Chain of custody and laboratory reports provided evidence of holding times. All holding times were in conformance with Table 4 in AS4482.1-2005.
Background samples	No offsite soil samples were collected, as the scope of the assessment was limited to targeted soil sampling.
Verification of field procedures	The methodology conducted during this investigation is documented in the body of the report, and was generally in conformance with the work plan and the requirements of the field work standard practice.

QA/QC Aspects	Evidence & Evaluation
Data Precision & Accuracy	
C Testing – Blind Replicates (Primary Lab)	***Soil*** • Acceptance Criteria: RPD 50% • Soil Samples Analysed: 35 • Blind Replicate Samples Analysed: 4 • Blind Replicate Analyte Pairs: 232 • Number of Analyte Pairs Exceeding Criteria: 0 • Percentage of Analyte Pairs Exceeding Criteria: 0 There were no RPD exceedances. RPD calculations were not calculated for a large number of analyte pairs as either or both of the pairs were less than the limit of reporting. The RPD calculations are present in Appendix B of the ESA.
C Testing – Split Replicates (Secondary Lab)	***Soil*** • Acceptance Criteria: RPD 50% • Soil Samples Analysed: 35 • Blind Replicate Samples Analysed: 1 • Blind Replicate Analyte Pairs: 135 • Number of Analyte Pairs Exceeding Criteria: 0 • Percentage of Analyte Pairs Exceeding Criteria: 0 There were no RPD exceedances. RPD calculations were not calculated for a large number of analyte pairs as either or both of the pairs were less than the limit of reporting. The RPD calculations are present in Appendix B of the ESA. Secondary samples for the first soil sampling event were not considered necessary as the primary purpose of this investigation was to gather visual evidence of the presence or absence of possible buried drums, therefore should not significantly affect the outcome of the buried drums investigation.
Trip Blanks	Five trip blanks were collected and placed on hold pending primary sample results. All soil samples analysed for SVOC and VOC were reported below LOR, indicating that no cross contamination occurred during transit.
Laboratory Internal C	Evidence of the laboratories' internal C testing is present and complete in the reports. ALS (Primary) and MGT (Secondary) performed internal C with adequate testing and satisfactory results. The A/ C program comprised of a total of 116 matrix spikes, 842 individual method blanks and 1112 laboratory duplicates, and 833 laboratory control spikes (LCS). All laboratory blanks reported below LOR. 6 analytes reported RPDs above the accepted 30% exceedance level. RPD exceedances are confined to metals (barium, manganese, nickel, zinc and beryllium) and 1-23-Dibromo-3-chloropropane. The level of exceedance is considered insignificant and probably related to sample heterogeneity and the low analyte concentrations of analyte pairs. 110 analytes reported recoveries outside the D I range for LCS of 70-130%. However out of the 110 analytes, 8 analytes (less than 1%) reported

QA/QC Aspects	Evidence & Evaluation
	LCS recoveries slightly outside the acceptable recovery range provided by the laboratories suggesting minimal analyte loss during analysis. 17 Matrix spikes reported recoveries outside the D I acceptable recovery range of 70-130%. However all matrix spikes fall within the Matrix spikes range provided by the laboratory. The exceedances do not significantly affect the outcome of the buried drums investigation due to minor concentration of contamination in the primary samples.
Laboratory Method Detection Limit	Laboratory reports indicate the method detection limits (LORs) were generally lower than the respective assessment criteria.
NATA endorsement of laboratory reports	Laboratory reports from ALS and MGT were stamped with the NATA endorsement stamp and signature.
Calibration of Field Equipment	All equipment used during the soil investigation was calibrated by the supplier prior to use. The equipment calibration certificates are provided in Appendix G.
Decontamination and Equipment Blanks	Six rinsate blanks were collected and put on hold. The rinsate blanks were not analysed given that soil samples were collected directly into sample jars from either from the disposable plastic push tubes or from the centre of the excavator bucket. Therefore the possibility of cross contamination was minimal.
Data Comparability	
Standard Procedures	Fieldwork procedures are detailed in the reports and are comparable for each phase of assessment.
ualified Personnel	The reports have indicated that the staff involved in managing and reviewing the project and those involved in fieldwork are qualified personnel.
Volatile Losses	There is no evidence of significant volatile losses, as there were no significant PID readings reported and laboratory reported no detectable concentrations of SVOC and VOC.
Sample Integrity	Field Chain of Custody/Laboratory request forms can be found in the reports.
Data Completeness	
Completeness of test program	The scope of work undertaken was generally consistent with that required to characterise the site as set out in the Work Plan. Field splits for the first soil sampling event were not considered to be required for the current scope of work and thus were not analysed.
Validity of Data Set	The data quality review indicates no significant systematic errors in the data collection process and therefore, the data set used as the basis of the assessment is considered valid and complete.

Appendix G
13 Pages

Fieldwork Record Sheets

Calibration Certificates

Fieldwork Daily Report

Gas Calibration Certificate

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument MX6
Serial No. 12041QS-006
Sensors OFCH

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
			Low	**High**	**TWA**	**STEL**
Sensor	Oxygen	✓	19.50%	23.50%	N/A	N/A
	LEL	✓	5.00%	10.00%	N/A	N/A
	CO	✓	90ppm	400ppm	30ppm	60ppm
	H2S	✓	30ppm	50ppm	10ppm	15ppm
		✓				
Alarms	Beeper	✓				
	Settings	✓				
Software	Version					
Datalogger	Operation					
Download	Operation					
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Diffusion mode Aspirated mode

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No	Instrument Reading
O2		20.90%	NATA	Fresh Air	20.90%
LEL		50% LEL Methane	NATA	1026ME	50% LEL Methane
CO		96 ppm	NATA	1026ME	96 ppm
H2S		26 ppm	NATA	1026ME	26 ppm

Calibrated by: **Gillian Cromie**

Calibration date: **31/07/2012**

Next calibration due: **27/01/2013**

HydroTerra

EQUIPMENT QUALITY REPORT
MiniRae 3000 PID: 373

The following equipment has been issued as follows:

☑ Equipment is clean and filters replaced ☑ Pump, lamp and battery voltage check

Calibration Results				
Parameter	Standard	Result	Alarm Settings	Cal Gas Expiry Date
Fresh Air	0ppm	60 ppm	Hi Alarm 100ppm	
Isobutylene	100ppm*	100 ppm	Lo Alarm 25ppm	August 2014
Correction				

Date: 03-09-2013
Calibrated by:

*For quality control purposes HydroTerra can supply gas calibration data

Please check that the following items are received and all items are returned. Please clean equipment before returning. **A minimum $20 service/repair charge applies to any unclean or damaged items.**

Item	HT Id No.	Sent	Returned
MiniRae 3000 PID (plus yellow rubber boot)	373	✓	
Quick guide sheet	N/A	✓	
Manual	N/A	✓	
Inlet probe	N/A	✓	
Spare water trap filter(s) Qty 2	N/A	✓	
Charger 240/110V to 12V 500mA	N/A	✓	
Spare alkaline battery compartment with batteries 5 6V's	N/A	✓	
Carry case	N/A	✓	
Test and tag requested		—	

☑ Equipment voltage ☑ Pre-delivery Calibration test Complete

Date: 03-09-2013
Checked by:

HT JOB NO: 1646 CLIENTS REF: P/O No: 212163.1

RETURN DATE: / / CONDITION ON RETURN:
TIME:
NOTES:

2 Wingrove Street • Alphington • VIC• 3078 • Australia
Telephone: 03 9490 1422 • Fax: 03 9490 1452
Email: info@hydroterra.com.au Internet: www.hydroterra.com.au

902

HydroTerra

EQUIPMENT QUALITY REPORT
MiniRae 3000 PID:

The following equipment has been issued as follows:

☑ Equipment is clean and filters replaced ☑ Pump, lamp and battery voltage check

Calibration Results				
Parameter	Standard	Result	Alarm Settings	Cal Gas Expiry Date
Fresh Air	0ppm	✓ ppm	Hi Alarm 100ppm ✓	
Isobutylene	100ppm*	100 ppm	Lo Alarm 25ppm ✓	May 2014
Correction				

Date: 19/9/12

Calibrated by: Kos

*For quality control purposes HydroTerra can supply gas calibration data

Please check that the following items are received and all items are returned. Please clean equipment before returning. **A minimum $20 service/repair charge applies to any unclean or damaged items.**

Item	HT Id No.	Sent	Returned
MiniRae 3000 PID (plus yellow rubber boot)	902	✓	
Quick guide sheet	N/A	✓	
Manual	N/A	✓	
Inlet probe	N/A	✓	
Spare water trap filter(s) Qty 1	N/A	✓	
Charger 240/110V to 12V 500mA	N/A	✓	
Spare alkaline battery compartment with batteries 6.30V's	N/A	✓	
Carry case	N/A	✓	
Test and tag requested		✓	

☑ Equipment voltage ☑ Pre-delivery Calibration test Complete

Date: 19/9/12

Checked by: Kos

HT JOB NO: 6739 CLIENTS REF: P/O No: 212163.3

RETURN DATE: / / CONDITION ON RETURN:

TIME:

NOTES:

2 Wingrove Street • Alphington • VIC• 3078 • Australia
Telephone: 03 9490 1422 • Fax: 03 9490 1452
Email: info@hydroterra.com.au Internet: www.hydroterra.com.au

ThermoFisher SCIENTIFIC

The world leader in serving science

RENTALS

Equipment Report - MINIRAE 2000 PID

This Gas Meter has been performance checked and calibrated as follows:

Lamp	Compound	Concentration	Zero	Span	Traceability Lot #	Pass?
10.6 eV	Isobutylene	106 ppm	0.0 ppm	105 ppm	60503	☑

Alarm Limits

High	100 ppm
Low	50 ppm

Bump Test

Date	Target Gas	Reading	Pass?
10/4/13	106 ppm	105 ppm	☑

☑ Battery Status _____
☑ 10 minutes test complete
☑ Spare battery status (Min 5.5 volts)
☑ Electrical Safety Tag attached (AS/NZS 3760)

☑ Performance check (pump, lamp, sensor)
☑ Data cleared
☑ Filters checked

Tag No: 008603

Valid to: 9/7/13.

Date: 10th April. 2013.

Signed: _____

Please check that the following items are received and that all items are cleaned and decontaminated before return. A minimum $30 cleaning / service / repair charge may be applied to any unclean or damaged items. Items not returned will be billed for at the full replacement cost.

Sent	Returned	Item
☑	☐	MiniRAE 2000 PID / Operational Check / Battery Status 5.5V
☑	☐	Lamp 10.6 eV, Compound Set to: Isobutylene C/factor: 1:1
☑	☐	Protective yellow rubber boot
☑	☐	Inlet probe (attached to PID)
☑	☐	Spare water trap filter(s) Qty 3
☑	☐	Charger 240V to 12V 500mA
☑	☐	Instruction Manual behind foam on the lid of case "
☑	☐	Quick Guide Sheet behind foam on the lid of case "
☑	☐	Spare Alkaline Battery Compartment with batteries
☑	☐	Inline Moisture trap Filter Guide Laminated
☐	☐	Calibration regulator & tubing (optional)
☐	☐	Data cable and Software CD (optional)
☑	☐	Carry Case
☐	☐	Check to confirm electrical safety (tag must be valid)

Date: 10/4/13.

Signed: _____

TFS Reference	34926.	Return Date:	/ /
Customer Reference	212163.3	Return Time:	
Equipment ID	PIDMINI2B	Condition on return:	
Equipment Serial No.			

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: Buried Drums and Target soil Investigation	Job Number: 212163.1
Site Address: 4549 Geelong Ballan Rd Fiskville	PP/PM: ALP/ LMR
Client Company/Contact: CFA	Date: 6/7/2012
Persons Present: MCD	Notes By: MCD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel		
Inspect or supervise bores/test pits/ observe sampling/ remediation works	✓	BURIED DRUMS LOCATION.
Audit fieldwork methods QA/QC		
Soil sampling - test pit / soil bore / soil grab	✓	3 soils samples each around 2 UST
Soil gas / LFG investigation		
Groundwater bore construction / GME / Groundwater levels / sampling		
Geotechnical Investigation		
Compaction Control Tests		
Field consumables used? (if so what?)		These must be charged via timesheet
Photographs (Digital)		
Supplementary notes attached		
Weather Conditions & Temperature	T: 17 °C	Strong winds, slight rain, cloudy

Notes / Sketch Plan:

N

- ARRIVED ON SITE @ 8:15.
- DMM AND COLE FROM CARDNO ALS ON SITE ALREADY
- BEN AND RAY FROM CARDNO ALS ARRIVE @ 8:30.
- SIGN IN TO RECEPTION.
- GO THROUGH INDUCTION, TOOLBOX MEETING AND JSA @ 8:40
- SEARCH FOR TURK AND MARTYN. NO FREEDOM ON SITE. SPEAK TO PAD / ASSESSOR FOR SITE ACCESS. SHOW ALS UST LOCATIONS AND DRUM LOCATION)
- START WORK @ 9:57 @ POSSIBLE DRUM LOCATION SITE NEAR HANGERS, ALS CLEARS SITE FOR SERVICES
- LUNCH @ 12:30.
- DMM LEAVES SITE @ 1:00
- CARDNO ALS LEAVE SITE @ 2:00

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: Buried Drums and Target soil Investigation	Job Number: 212163.1
Site Address: 4549 Geelong Ballan Rd Fiskville	PP/PM: ALP/ LMR
Client Company/Contact: CFA	Date: 5/09/2012
Persons Present: MCD, CARDNO AUS (RAY + BEN)	Notes By: MCD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel		
Inspect or supervise bores/test pits/ observe sampling/ remediation works	✓	
Audit fieldwork methods QA/QC		
Soil sampling - test pit / soil bore / soil grab	✓	
Soil gas / LFG investigation		
Groundwater bore construction / GME / Groundwater levels / sampling		
Geotechnical Investigation		
Compaction Control Tests		
Field consumables used? (if so what?)		These must be charged via timesheet
Photographs (Digital)		
Supplementary notes attached		
Weather Conditions & Temperature	T: 17 °C	Sunny. Windy

Notes / Sketch Plan:

N

- CARDNO AUS ARRIVED ON SITE @ 8:30
- TOOL BOX MEETING.
- STARTED @ 8:45 @ AREA 2 BURIED DRUMS. (NOD) BACK FILL AFTER TAKING PHOTOS & AND SAMPLES @ 0.4 m
- STARTED NDD @ UST 1 IN FRONT OF CLASS ROOM @ 11:00. DUG 3 POSSIBLE PUSH TUBE LOCATIONS 2 HOLES HAD ROCK UNABLE TO CONTINUE NDD. 3rd HOLE ENCOUNTERED WATER @ 0.7 m. UNABLE TO CONTINUE NDD PASTED 0.9 m., BACK FILL HOLES WITH SAND.
- STARTED CONCRETE COVERING AT UST 2 @ 12:00 CONCRETE 1 COMPLETED @ 12:15 STARTED 2 @ 12:16 FINISHED @ 12:30 - LUNCH FINISH @ 1:15 - 1:20 NDD UST 1 A FINISH @ 1.50

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: Buried Drums and Target soil Investigation	Job Number: 212163.1
Site Address: 4549 Geelong Ballan Rd Fiskville	PP/PM: ALP/ LMR
Client Company/Contact: CFA	Date: 7/9/2012
Persons Present: MCD and [redacted]	Notes By: MCD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel		
Inspect or supervise bores/test pits/ observe sampling/ remediation works	✓	
Audit fieldwork methods QA/QC		
Soil sampling - test pit / soil bore / soil grab	✓	
Soil gas / LFG investigation		
Groundwater bore construction / GME / Groundwater levels / sampling		
Geotechnical Investigation		
Compaction Control Tests		
Field consumables used? (if so what?)		These must be charged via timesheet
Photographs (Digital)	✓	
Supplementary notes attached		
Weather Conditions & Temperature	T: [redacted] °C	windy. Patchy rain.

Notes / Sketch Plan:

N

- Cardno has arrived @ Boq
- Begum @ site 2, 1 @ 8:40. After inspecting other site 1, 2 and 3 to see if excavator can reach locations.
- Contacted owner informed him of situation, Avg Stokes unable to enter site 3 with cat damaging grass. Unable to excavate site 1 due to location inundated with water by 15 - 20m of water.
- Finished site 1 TP1 @ 9:40. Backfill test 2 and 3
- Commenced site 1 3:00
- Finished site 1, 3 @ [redacted]
- Cardno Avg left @ 3:00.
- left site @ 3:30. returned to the office

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: CFA Fiskville	Job Number: 212163-3
Site Address: Fiskville	PP/PM: DMM/SD
Client Company/Contact: CFA	Date: 25/9/12
Persons Present: SD, Bob.K, Aus	Notes By: SD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel	—	
Inspect or supervise bores/test pits/ observe sampling/ remediation works	✓	
Audit fieldwork methods QA/QC	✓	
Soil sampling - test pit / soil bore / soil grab	✓	
Soil gas / LFG investigation	—	
Groundwater bore construction / GME / Groundwater levels / sampling	—	
Geotechnical Investigation	—	
Compaction Control Tests	—	
Field consumables used? (if so what?)	✓	These must be charged via timesheet
Photographs (Digital)	✓	
Supplementary notes attached	✓	
Weather Conditions & Temperature	T: 16 °C	

Notes / Sketch Plan:

N

Weather - Sunny, slightly windy & ~~cold~~. chilly.

→ Meet Aus, Bob (metal detector) onsite - 8:05am
→ wait at reception.

→ Aus - excavator driver onsite - 9:40 am

Excavate golf course and sample

Excavate near helicopter pad and sample

Left site at 4:10p.m.

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: CFA	Job Number: 212163.3
Site Address: Fishaville	PP/PM: LMR/[illegible]
Client Company/Contact: Martin	Date: 26/9/12
Persons Present: SD, Bob K, Aus	Notes By: SD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel	–	
Inspect or supervise bores/test pits/ observe sampling/ remediation works	✓	
Audit fieldwork methods QA/QC	–	
Soil sampling ~~test pit~~ / soil bore / soil grab	✓	
Soil gas / LFG investigation	–	
Groundwater bore construction / GME / Groundwater levels / sampling	–	
Geotechnical Investigation	–	
Compaction Control Tests	–	
Field consumables used? (if so what?)	✓	These must be charged via timesheet
Photographs (Digital)	✓	
Supplementary notes attached	✓	
Weather Conditions & Temperature	T: 22 °C	

Notes / Sketch Plan:

N

Weather - Sunny and windy

Arrival on site - 6:20am

Aus & Bob on site - 8:35am

Start at helicopter area - 8:55am

Move to area near road - 11:30 am

Left site at 2:00pm

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: Targeted soil Contamination Assessment , Fiskville	Job Number: 212163.3
Site Address: 4549 Geelong Ballan Road Fiskville	PP/PM: LJM/ DMM
Client Company/Contact: Ashurts	Date: 11/04/2013
Persons Present: MCD	Notes By: MCD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel		
Inspect or supervise bores/test pits/ observe sampling/ remediation works		
Audit fieldwork methods QA/QC		
Soil sampling - test pit / soil bore / soil grab	✓	Excavation of 25 Test pits
Soil gas / LFG investigation		
Groundwater bore construction / GME / Groundwater levels / sampling		
Geotechnical Investigation		
Compaction Control Tests		
Field consumables used? (if so what?)		These must be charged via timesheet
Photographs (Digital)		
Supplementary notes attached		
Weather Conditions & Temperature	T: 17°C	foggy, RAIN, COLD

Notes / Sketch Plan:

N

- Picked up metal detector @ 7:00 from Kennards.
- Arrived on site @ 8:57 Cardno AUS (COLE SCHEUERMANN and CHRIS DAY) and Excavator (CHRIS PURELL) already on site
- Signed in @ 9:04, rendevaus with Butch (CFA staff member @ 9:10 went through Induction, JSA and Attachment 1 (Buried drums investigation).
- FW brief with AUS and Excavator
- marked locations, AUS clears locations
- Surveyor pegs locations and starts surveying @ 9:30
- 11:20, COLE leaves site.
- 3:30 CHRIS DAY Leaves site
- Finish AT @ 4:30 move onto Golf course @ 4:40 (Comm excav packed - FINISHED TP-A3A-16 @ 5:40

QF3.01 – Fieldwork Daily Report

Project Details	
Project Name: Targeted soil Contamination Assessment , Fiskville	Job Number: 212163.3
Site Address: 4549 Geelong Ballan Road Fiskville	PP/PM: LJM/ DMM
Client Company/Contact: Ashurts	Date: 12/04/2013
Persons Present: MCD	Notes By: MCD

Site Activities	Yes	Comment/Details
PESA Site Inspection / Interview personnel		
Inspect or supervise bores/test pits/ observe sampling/ remediation works		
Audit fieldwork methods QA/QC		
Soil sampling - test pit / soil bore / soil grab	X	EXCCUCTION of test pits
Soil gas / LFG investigation		
Groundwater bore construction / GME / Groundwater levels / sampling		
Geotechnical Investigation		
Compaction Control Tests		
Field consumables used? (if so what?)		These must be charged via timesheet
Photographs (Digital)		
Supplementary notes attached		
Weather Conditions & Temperature	T: 19.°C	Sunny

Notes / Sketch Plan:

N

- GO THROUGH TOOL BOX MEETING @ 7:00 AM.
- START TP -A3G-16 @ 7:15 AM.
- CONTACT DMM @ 8:20, UPDATE OF FW
- LUNCH @ 12:30 pm.
- CONTINUE TESTPITTING @ 1:00
- FINISH TP @ 5:00, SPEAK TO SITE CONTACT (MARTIN) @ 5:10, WHILE EXCAVATOR PACKS UP.
- CONTACT DMM @ 5:15 TO INFORM HIM JOB COMLETION.
- LEAVE SITE @ 5:30
- BACK @ MELB @ 7:30.

13/04/13

- RETURN METAL DETECTOR @ KENNAROS.

QF3.01 – Quality Control Sample Register

Project Details	
Project Name: CFA – Buried Drum Investigation	Job Number: 212163-3
Site Address: Fiskville	PP/PM: & UMR/DMM
Client Company/Contact: CFA	Date: 26/9/12
Persons Present: SD, AUS, Bob (metal detector)	Notes By: SD

Quality Control Requirements	
Standard QC Sample Requirements (see Proposal for project specific details)	
Rinsate Blank:	1/day (even if only placed on hold)
DI Water Blank:	1/day (even if only placed on hold)
Blind Replicate (Primary List):	1 in 20 primary samples
Split Replicate (Secondary List):	1 in 20 primary samples
Labelling	
Samples to be labelled **QC##_date** where "**##**" is a numerical sequence commencing at **01** for each field event and **date** is the date of sampling in ddmmyyyy format (**e.g. QC01_03112010**)	

Quality Control Sample Register		
QC Sample *e.g. QC01_03112010*	***Primary Sample***	***Description***
QC1	TPA1/8-0.5	Duplicate
QC2	TPA1/8-0.5	Triplicate
QC3	TPA2/2-0.5	Duplicate
QC4	TPA2/2-0.5	Triplicate

QF3.01 – Quality Control Sample Register

Project Details	
Project Name: Targeted soil Contamination Assessment , Fiskville	Job Number: 212163.3
Site Address: 4549 Geelong Ballan Road Fiskville	PP/PM: LJM/ DMM
Client Company/Contact: Ashurts	Date: 11/04/2013
Persons Present: MCD	Notes By: MCD

Quality Control Requirements	
Standard QC Sample Requirements (see Proposal for project specific details)	
Rinsate Blank:	1/day (even if only placed on hold)
DI Water Blank:	1/day (even if only placed on hold)
Trip Blank:	1/day or 1/esky (if volatiles are suspected or present at site)
Blind Replicate (Primary List):	1 in 20 primary samples
Split Replicate (Secondary List):	1 in 20 primary samples
Labelling	
Samples to be labelled **QC##_date** where "**##**" is a numerical sequence commencing at **01** for each field event and **date** is the date of sampling in ddmmyyyy format (**e.g. QC01_03112010**)	

Quality Control Sample Register			
QC Sample *e.g. QC01_03112010*	***Primary Sample***	***Description***	***DI Water Batch Number***
QC01/ 110413	TP-A1-35/0.1	BLIND SAMPLE (SOIL)	
QC02/ 110413	TP-A1-35/0.1	SPLIT SAMPLE (SOIL)	
QC03/ 110413	TP-A1-36/0.1	BLIND SAMPLE (SOIL)	
QC04/ 110413	TP-A1-36/0.1	SPLIT SAMPLE (SOIL)	
QC05/ 120413	TP-A3a-10/0.1	BLIND SAMPLE (SOIL)	
QC06/ 120413	TP-A3a-10/0.1	SPLIT SAMPLE (SOIL)	
QC08/ 120413	TP-A3a-06/0.1	SPLIT SAMPLE (SOIL)	
QC09/ 110413		RINSATE	
QC10/ 120413		RINSATE	
QC11/ 110413		TRIP BLANK	
QC12/120413		TRIP BLANK	
QC13/120413		TRIP BLANK	
QC07/120413	TP-A3a-06/0.1	BLIND SAMPLE	
QC14/110413	TP-A1-06/0.1	BLIND SAMPLE (SOIL)	

Appendix H
3 Pages

Information About Environmental Reports

About Site Environmental Assessment Reports

1. Introduction

This document explains the Environmental Site Assessment (ESA) process and the context that applies to the use of Environmental Reports issued by Cardno Lane Piper.

2. What is an ESA?

Environmental Site Assessments (ESA) are undertaken for a range of purposes, specific to the brief issued by the client in each case. The scope may include one or a combination of any of the following:

- A factual report of the condition of a portion of the site or one aspect of an entire site.
- Assessment of the contamination levels in soil to be removed from a site – a waste classification assessment.
- Validation of the success of remediation of a site or a portion of a site.
- Provision of a professional opinion about the suitability of a site for one or more uses, in terms of its contamination status.

The scope of any ESA needs to be defined at the outset.

An ESA is not an Environmental Audit. Such audits are undertaken in accordance with the provisions of regulations enacted in various states of Australia, and are referred to as Site Audits in some jurisdictions. Statutory audits provide certification by EPA accredited auditors that a site is suitable for one or more uses. An ESA may provide similar advice but cannot be used in place of an audit if the latter is required by regulation in any instance. However in some circumstances and jurisdictions an ESA is sufficient to provide "environmental sign-off" of a site.

An ESA may be undertaken for due diligence purposes, to establish whether the site has been impacted to the extent that some beneficial uses of the site may be precluded. Due diligence audits in many cases may be completed as non-statutory Audits, although in some jurisdictions they can also be statutory audits, if defined as such at the outset.

3. The ESA Process

The Client generally initiates the ESA process by specifying a brief which identifies the specific objectives of the assessment. If not, it is the consultants' duty to so specify the ESA

In the case of an ESA to provide an opinion about the suitability of the site for use, it would be conducted in accordance with NEPM (Site Assessment). Such ESA would not commence until a thorough site history assessment (Phase 1 Assessment: to identify the potential for significant contamination at a site) is conducted. However, where the history is unclear, a broad screening of chemical parameters can be used to test environmental media. This normally includes a broad range of organic and inorganic compounds and elements, often referred to as an Environmental Screen.

(In the case of an ESA for a purpose other than to provide an opinion about the suitability of the site for use, it is not always necessary to undertake a Phase 1 assessment.)

The ESA requires sampling of soil at representative locations across the site. A NATA accredited laboratory performs the analysis of soil. It is impractical for all of the soil to be assessed. The ESA is often based on a statistical method of grid or random sampling, augmented by targeted sampling at locations known or suspected to be contaminated. Guidance on sampling strategy and density is provided in Australian Standard AS4482.1–2005. However, some considerable degree of judgement is still required in the application of any sampling and testing strategy. For example the blanket application of the "hot spot" method presented in this standard is often inappropriate given its limitations.

The field program also investigates the likelihood of contamination below the site surface. Field investigations must sample and test fill as well as the natural soils. If contamination is found then it is common for further work to be undertaken to characterise, to the extent practical, its vertical and horizontal extent. However, where fill is encountered and testing shows it to be uncontaminated, it must be realised that the heterogeneous nature of the material might mean that not all pockets of contaminated material can be detected using normal sampling regimes.

EPA guidelines for auditors, that may be relevant for an ESA, indicate the need in all cases to consider the potential for groundwater contamination in any site. This does not mean all sites need to be drilled to sample groundwater, but it is most often the case. Most hydrogeological settings and groundwater conditions are complex and vary in space and time. The condition of groundwater is investigated to identify if any beneficial use or environmental value of groundwater is precluded due to contamination.

As previously stated for soil, all groundwater at the site cannot be tested. The environmental investigations are conducted in accordance with industry standards and guidelines (e.g. EPA Vic Pub 668). This provides a level of confidence that a sufficiently comprehensive assessment of the groundwater at the site is achieved.

Where an investigation shows that groundwater is polluted, consideration should be given to assessing the risks and the need for and practicality of any clean up.

4. Environmental Assessment Report

The ESA Report details the findings of the ESA. It provides summary information on the site definition, the reasons for the assessment and other relevant facts. It reviews the scope and quality of the site investigations, laboratory testing and data analyses undertaken. These reports also present a review of the contamination status of the site, the need for any further clean up, and an opinion on the suitability of the site for a range of beneficial uses and land uses such as “residential – low density”, “commercial” etc, as appropriate.

However, as noted above, some ESA have a narrow scope such as for classification of waste soil for removal from site, and do not make conclusions on suitability of site for use.

The ESA Report generally includes copies of other documents and reports, necessary to support the assessment findings, presented as appendices. These can contain more detailed information than the body of the ESA Report. Care should be taken to also read the appended documents and the ESA report in full.

Cardno Lane Piper generally issues reports in electronic form (e-Report) on CD ROM. ESA Reports are issued in this format as Adobe Acrobat™ PDF files. However, a paper copy of the executive summary of the ESA Report is generally issued to the client, and others as required by the brief or by regulation.

5. Limitations of Environmental Assessment Report

The ESA Report is prepared in a manner that can be easily read by a lay person with a legitimate interest in the contamination status of the site, such as the site owner or occupier, EPA and Local Planning Authority. The ESA report is not intended for use by other parties or for other purposes. Anyone who uses the assessment report for purposes other than specified in the report, does so at their own risk.

The site should only be used for one or more of the beneficial uses and land uses identified in the ESA as suitable.

The conditions and qualifications may apply to the suitability of the site for use, and it is the responsibility of the Client to be cognizant of and accept these in accepting the report. Cardno Lane Piper are only responsible for the issuing of the ESA report but accepts no liability for the costs incurred in the implementation of ESA findings.

The ESA provides a “snapshot” of the site conditions at the time of the site investigation. Consequently, the report may not be valid at a later time if there has been any change to the contamination status of the site in that time. Verification of the status of the site may be required in cases where a significant time has elapsed, or site conditions have changed since the assessment and audit.

The ESA is necessarily limited by constraints such as time, cost and available information; although normal professional practice at the time has been applied with all due care to prepare the report. A necessary requirement of this process is the horizontal and vertical interpolation of data from discrete locations. However, site conditions are generally not homogenous and some discrepancies will occur between the actual and predicted results at locations not directly sampled. There is a risk that contamination may occur at the site and not be identified by a competent investigation and assessment. The approach adopted in sampling (a combination of statistically based grid and judgmental sampling) seeks to reduce, but cannot eliminate, this risk.

Where unexpected occurrences of contamination arise, subsequent to the issue of the ESA Report, Cardno Lane Piper should be permitted to make an interpretation of these facts in relation to the ESA Report findings. Consequently, the Client should inform Cardno Lane Piper and seek their opinion. Cardno Lane Piper accepts no liability for costs incurred due to such unexpected

occurrences, given the inherent uncertainties in the assessment process.

Cardno Lane Piper uses information provided by other parties as the basis for the ESA, and reliance on this information is at the discretion of Cardno Lane Piper. However, however Cardno Lane Piper cannot guarantee any of the facts, findings or conclusions presented by other parties. Cardno Lane piper will not be liable for the use of information, provided by others that is subsequently found to be intentionally misleading.

The ESA Report is not and does not purport to be anything other than a contaminated land ESA. It is not a geotechnical report and bore logs reproduced are for interpretation of the likely distribution of contamination. They are not intended for geotechnical interpretations and may not be adequate for this purpose.

The ESA Report is not intended to be a comprehensive analysis of the presence and associated risk of asbestos in buildings and services. Where asbestos in buildings and services is known or likely, the report may only caution that an appropriately qualified person be engaged to undertake demolition to avoid contamination of the site.

Cardno Lane Piper Pty Ltd
1 July 2011